

# **Reports and Research**

## **Table of Contents**

December 14, 2021 Board Meeting

#### By Covered California

- <u>Covered California Comments on the Proposed 2022 Benefit and Payment Parameters</u> – <u>Covered California</u> December 30, 2020
- <u>Statement from Peter V. Lee on the Administration's Latest Effort to Undercut Broader</u> <u>Coverage Through the Affordable Care Act</u> – Covered California November 25, 2020
- <u>Californians and COVID-19: Impacts, Responses and Reasons for Hope</u> Covered California November 24, 2020

#### Other Reports and Research

- <u>Winding Down Continuous Enrollment for Medicaid Beneficiaries When the Public</u> <u>Health Emergency Ends</u> – The Commonwealth Fund January 7, 2021
- <u>The Health Insurance Policy Simulation Model for 2020</u> **Urban Institute** December 22, 2020
- <u>5 Targeted Actions a Biden Administration Could Use to Expand Medicaid Coverage</u> Kaiser Family Foundation December 21, 2020
- <u>State Medicaid and CHIP Strategies to Protect Coverage during COVID-19</u> National Academy on State Health Policy December 18, 2020
- <u>In Major Victory for States, Supreme Court Clears the Way for State Health Reform</u> National Academy for State Health Policy December 15, 2020

- <u>Removing the Firewall Between Employer Insurance and the ACA Marketplaces: Who</u> <u>Could Benefit?</u> – The Commonwealth Fund December 15, 2020
- <u>Federal Insurance Rule Change Proposes an Insurer/Broker Alternative to State</u> <u>Exchanges</u> – National Academy for State Health Policy December 14, 2020
- <u>Summary of Provisions of HHS' Proposed 2022 Notice of Benefit and Payment</u> <u>Parameters and Other Key Regulations</u> – Wakely December 10, 2020
- <u>Achieving an equitable national health system for America</u> **Brookings Institute** December 9, 2020
- <u>How Has the Pandemic Affected Health Coverage in the U.S.?</u> Kaiser Family Foundation December 9, 2020
- <u>State Use of Patient-Centered Outcomes Research in Telehealth Policymaking</u> National Academy for State Health Policy December 7, 2020
- <u>Proposed 2022 Notice of Benefit & Payment Parameters: Implications for States</u> State Health and Value Strategies December 4, 2020
- <u>Millions of Uninsured Americans are Eligible for Free ACA Health Insurance</u> Kaiser Family Foundation November 24, 2020
- <u>Federal Policy Options to Realize the Potential of All-Payer Claims Databases</u> Brookings Institute November 23, 2020
- Insurer Participation on the ACA Marketplaces, 2014-2021 Kaiser Family Foundation November 23, 2020
- <u>NASHP Outlines Priorities for the Biden Transition Team to Improve Health Insurance</u> <u>Markets</u> – National Academy for State Health Policy November 23, 2020

- <u>Capping Prices or Creating a Public Option: How Would They Change What We Pay</u> <u>for Health Care?</u> – **Brookings Institute** November 19, 2020
- <u>American Medical Association Backs New Approaches to Cover More of the Uninsured</u> – <u>American Medical Association</u> November 17, 2020
- <u>Limited Access to Health Data on American Indian and Alaska Natives Impedes</u> <u>Population Health Insights</u> – UCLA Center for Health Policy Research November 16, 2020
- <u>The Implications of Eliminating Essential Health Benefits: An Update</u> Kaiser Family Foundation November 16, 2020
- <u>While the Supreme Court Appears Likely to Uphold the Affordable Care Act, States Still</u> <u>Face Uncertainty</u> – National Academy for State Health Policy November 16, 2020



December 30, 2020

Secretary Alex Azar Department of Health and Human Services Hubert H. Humphrey Building 200 Independence Avenue SW Washington, D.C. 20201

Re: Covered California Comments on Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2022 and Pharmacy Benefit Manager Standards; Updates to State Innovation Waiver (Section 1332 Waiver) Implementing Regulations; CMS-9914-P (RIN 0938-AU18)

Dear Secretary Azar,

Covered California is submitting comments in response to the proposed regulations CMS-9914-P. Attached you will find our detailed comments and concerns regarding the proposed policies addressing the new Exchange Direct Enrollment marketplace option, new direct enrollment (DE) standards, codifying 1332 waiver guidance, user fee reductions, special enrollment period changes, qualified health plan (QHP) audits, and the quality rating standards (QRS) hierarchy request for comments.

Covered California makes these comments based on our technical and market experience as a State-based Exchange (SBE) that has successfully expanded coverage, offered consumers both stability and choice through multiple competing health plans, fostered enrollment that has resulted in a healthier risk mix – leading to premiums that are about 20 percent lower than what they would have been if they had the risk mix in the federal marketplace states. Our comments are also based on our experience and analysis of what efforts are necessary to uphold the integrity of the Affordable Care Act (ACA) and its goal to provide quality, affordable care to Americans across all states.

In some cases our comments and questions are technical, but in three areas – the establishment of the user fees for the Federally-facilitated Exchange (FFE), codifying the 1332 Waiver Guidance and the creation of the new Direct Enrollment Exchanges - we have fundamental concerns that the proposed regulations would undercut the intent of the ACA, raise costs to consumers, and foster a return to the pre-

COVERED CALIFORNIA™	1601 EXPOSITION BOULEVARD, SACRAMENTO, CA 95815	WWW.COVEREDCA.COM
	×	

ACA days where consumers were at the mercy of unrestrained actions by health plans and perpetuate the current federal paradigm where consumers are not given critical information about coverage options, including the availability of federal subsidies.

We look forward to your consideration and response to the comments and concerns we raise in the attached detailed comments.

Sincerely,

VP-

Peter V. Lee Executive Director

cc: Covered California Board of Directors

Attachment: Covered California Comments on Notice of Benefit and Payment Parameters for 2022, December 30, 2020



#### Covered California Comments Notice of Benefit and Payment Parameters for 2022 and Pharmacy Benefit Manager Standards; Updates to State Innovation Waiver (Section 1332 Waiver) Implementing Regulations; CMS-9914-P (RIN 0938-AU18)

The Covered California's comments address the following six domains:

Α.	User Fee Reductions	1
В.	New Marketplace Option	17
	Reduced Consumer Protections Requirements for Web-Brokers	23
C.	1332 Guidance into Regulation	24
D.	Special Enrollment Changes	28
	Metal Level Change: Newly Ineligible for APTC	28
	Plan Selection Change for Enrollees Who Did Not Receive Timely Notice of	00
	I riggering Event	28
	Clarify Trigger for COBRA Coverage	29
	75% verification for SEP enrollments	30
E.	Qualified Health Plan (QHP) Audits	32
	Audit Activities	32
	Compliance Reviews	34
F.	QRS Levels of Hierarchy Comment Requests	35

### A. User Fee Reductions

The Patient Protection and Affordable Care Act (ACA) expressly prohibits the expenditure of federal funds for the continued operations of Exchanges after 2015. States are required to ensure Exchanges are self-sustaining, including allowing an Exchange to charge participating health insurance providers user fees to fund operations. Similarly, the federal government is required to collect the needed assessment to operate all elements of the Federally-facilitated Exchange (FFE). At 45 CFR 156.50(c) in this proposed regulation, HHS proposes to reduce the FFE user fee from 3.0 percent of total monthly premiums to 2.25 percent of total monthly premiums and to reduce the SBE-FP user fee from 2.5 percent of total monthly premiums to 1.75 percent of total monthly premiums.

HHS states it is proposing these changes "in order to reflect enrollment, premium and HHS contract estimates for the 2022 plan year."<sup>1</sup> HHS estimates that the proposed reductions will decrease user fee collections by approximately \$270 million in 2022. However, HHS also states that despite the lower user fee rate, they expect to have "sufficient funding available to fully fund user-fee eligible Exchange activities."<sup>2</sup>

HHS cites OMB Circular A-25, which establishes federal policy regarding user fees. As noted in the proposed regulation, user fees "will be assessed against each identifiable recipient of special benefit derived from federal activities beyond those received by the general public".<sup>3</sup> HHS identifies the following special benefits provided to issuers for the 2022 benefit year, which align with the legal and operational requirements for Exchanges that include:

- Provision of consumer assistance tools;
- Consumer outreach and education;
- Funding and management of a Navigator program;
- Regulation of agents and brokers;
- Eligibility determinations;
- Enrollment processes; and
- Certification and quality assurance processes for QHPs.

In the discussion that follows, these comments compare Covered California and the FFE's activities and resources applied to meet the requisite functions of a marketplace to meet the goals of ACA. Both the FFE and Covered California are large Exchanges serving millions of consumers, with multiple health plans providing services. (See, Figure 1: Comparison of the Federally-facilitated Exchange and Covered California – 2016 and 2020).

However, it is important to recognize that the FFE has changed dramatically over the past four years as the current administration has implemented policies that have reduced new enrollments and otherwise changed the scope and nature of who is and is not served by the FFE, with consumers being actively encouraged to enroll in non-ACA

<sup>&</sup>lt;sup>1</sup> 85 Fed. Reg. 78573 (Dec. 4, 2020) < https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf>

<sup>&</sup>lt;sup>2</sup> 85 Fed. Reg. 78630 (Dec. 4, 2020) < https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf>

<sup>&</sup>lt;sup>3</sup> 85 Fed. Reg. 78630 (Dec. 4, 2020) < https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf>

compliant plans outside of the FFE. The impact of these policies is evident in the decrease in new enrollment and total enrollment in the FFE in the period from 2017 to 2020, while in most cases enrollment in Covered California has either increased or remained constant.

	Federal	ly-facilitated Ex	change	Covered California				
	2017	2020	% Change	2017	2020	% Change		
New Enrollees OE Plan Selections	3,013,107	2,086,338	31% Decrease	368,368	418,052	13% Increase		
Renewing OE Plan Selections	6,188,698	6,200,533	.2% Increase	1,188,308	1,120,767	6% Decrease		
Total OE Plan Selections	9,201,805	8,286,871	10% Decrease	1,556,676	1,538,819	1% Increase		
Average Effectuated Enrollment	7,198,034	7,596,174	6% Increase	1,321,234	1,490,854	13% Increase		
Number of Issuers	149	159		11	11			
Gross Premiums	\$41B	\$54B		\$7.2B	\$10B			

Figure 1: Comparis	on of the Federa	lly-facilitated E	Exchange and	Covered Ca	alifornia – 2017	and 2020

Covered California is the largest State-based Exchange. Going into the 2021 Open Enrollment Covered California had 1.5 million consumers and eleven QHP issuers.<sup>4</sup> Also, going into 2021, there were an estimated 800,000 California consumers purchasing ACA compliant products in the off-Exchange individual market. The large number of unsubsidized consumers – consumers who are still able to afford coverage – is the product of Covered California's policies to promote a healthy risk mix, plan competition and products that provide meaningful value for consumers. The FFE has enrollment of 7.6 million going into the 2021 Open Enrollment, but in many states in the FFE, off-Exchange unsubsidized enrollment has almost disappeared as those not receiving subsidies have been priced out of coverage.

With regard to on-Exchange enrollment, going into 2021 the FFE had about five times as many consumers as Covered California – "simple math" would be to take Covered California's budget and multiply it by five. However, there may be some areas in which there are economies of scale in which the FFE can provide services more efficiently – such as for the operation of HealthCare.gov – and, there may be some areas in which the likely expenses of the FFE might actually be less efficient – such as what it's expenditures might be if marketing were done effectively, given different and diverse approaches that might be required to target different populations across the nation.

Nonetheless, the contrast provides an important frame of comparison that serve as one basis for considering whether the proposed changes in user fees are a reflection of "enrollment, premium and HHS contract estimates for the 2022 plan year"<sup>5</sup> or are due to the current administration choosing to not fund core functions of a marketplace leaving the next administration with few resources to actively fulfill its obligations under the ACA.

<sup>&</sup>lt;sup>4</sup>Covered California Begins Renewal of More Consumers Than Ever Before and Announces Final 2021 Rate Change at All-Time Low of 0.5 Percent. (Oct. 13, 2020). <<u>https://www.coveredca.com/newsroom/newsreleases/2020/10/13/covered-california-begins-renewal-of-more-consumers-than-ever-before-and-announces-final-2021-rate-change-at-all-time-low-of-0-5-percent/>
<sup>5</sup> 85 Fed. Reg. 78573 (Dec. 4, 2020) < <u>https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf</u>></u>

It is the policy of Covered California to maintain the lowest user fee possible, while fulfilling its mission and delivering on the legal and operational requirements of the ACA. Over the past 7 years, Covered California has lowered its assessment 3 times (See Figure 2: Covered California's Health Plan Assessment as Percentage of Premium). The initial assessment on QHPs, in 2014 was 3.8% percent of premium. That assessment was established based on a financial analysis of what was required to fulfill required functions and build an operating reserve.

Plan Year	User Fee Assessment*				
2014	\$13.95				
2015	\$13.95				
2016	\$13.95				
2017	4.00%				
2018	4.00%				
2019	3.75%				
2020	3.50%				
2021	3.25%				
* Beginning in 2017, Covered California changed the assessment from a flat per-member, per-month (PMPM) rate to a percentage of gross premiums paid.					

#### Figure 2: Covered California's Health Plan Assessment as Percentage of Premium

Covered California's budget for the current Fiscal Year of 2020-21 is about \$440 million, which is based on the current assessment of 3.25 percent. Covered California plans to end the fiscal year with an operating reserve of nearly \$362 million.<sup>6</sup> Covered California's budget is approved annually by its board of directors and subject to extensive public review. The detail provided in the approved budget describes staffing required to support each functional area, major contracts and direct expenses (see Figure 3. Covered California's FY 2020-21 Operating Budget – Distribution by Major Functional Area – \$440.2 Million – 1,419 Authorized Staff). For the Fiscal Year 2020-21 budget, the Covered California board specifically included a one-year additional expenditure of \$40 million to do even more outreach and promotion due to the COVID-19 pandemic and the large losses of insurance coverage that require more extensive outreach efforts.

<sup>&</sup>lt;sup>6</sup> Covered California Annual Report and Fiscal Year 2020-21 Budget – Final. (July 16, 2020). <<u>https://hbex.coveredca.com/financial-reports/PDFs/2020/fy-2020-21-annual-report-final.pdf</u>>

Figure 3: Covered California's Proposed FY 2020-21 Operating Budget – Distribution by Major Functional Area – \$440.2 Million – 1,419 Authorized Staff (Dollars in Millions)



In contrast, the HHS' Centers for Medicare & Medicaid Services' (CMS) Fiscal Year 2021 performance budget provides an indication of the nature and scope of potential changes in spending that raise grave concerns about the ability of the FFE to adequately meet its required obligations under the ACA (see Figure 4. HHS Health Insurance Exchanges Transparency Table for the FFE<sup>7</sup>).

To provide a framework for comparison of Covered California and that of the FFE provides, Figure 5. FFE Spending Assuming All User Fee Revenue is Allocated to FFE Operations and Same Funding Proportions and Same Funding Level as Covered California – provides a frame of reference for what would be spent by the FFE if it were spending the same proportion of health care premium.

<sup>&</sup>lt;sup>7</sup> U.S. Department of Health and Human Services Centers for Medicare & Medicaid Services, Fiscal Year 2020 Justification of Estimates for Appropriations Committees. (Mar. 1, 2020). <<u>https://www.cms.gov/files/document/fy2020-cms-congressional-justification-estimates-appropriations-committees.pdf</u>>

Figure 4: HHS Health Insurance Exchanges Transparency Table for Costs in the FFE (Dollars in Thousands)<sup>8</sup>

Activity	FY 2010 Actual	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Enacted	FY 2020 President s Budget
Health Plan Bid Review, Management and Oversight	\$-	\$300	\$21,936	\$40,595	\$33,497	\$43,960	\$40,520	\$39,846	\$37,910	\$40,914	\$16,500
Payment and Financial Management	\$ -	\$1,698	\$24,998	\$25,832	\$49,615	\$43,733	\$51,325	\$47,640	\$45,141	\$51,463	\$41,567
Eligibility and Enrollment 1/	\$ -	\$2,218	\$3,433	\$275,501	\$339,754	\$363,768	\$445,249	\$484,144	\$392,660	\$369,682	\$310,053
Consumer Information and Outreach	\$ -	\$2,427	\$32,610	\$701,075	\$704,136	\$753,238	\$805,833	\$640,232	\$591,948	\$572,319	\$306,550
Call Center (non-add)	\$-	\$-	\$22,000	\$505,446	\$545,600	\$566,178	\$563,638	\$540,197	\$525,326	\$496,525	\$240,400
Navigators Grants & Enrollment Assisters (non-add)	\$-	\$-	\$-	\$107,513	\$97,152	\$75,996	\$99,677	\$51,166	\$12,720	\$10,000	\$10,000
Consumer Education and Outreach (non-add)	\$-	\$-	\$7,043	\$77,436	\$49,334	\$54,897	\$101,048	\$16,599	\$10,744	\$10,000	\$10,000
Information Technology	\$2,346	\$92,672	\$166,455	\$402,553	\$770,957	\$798,648	\$664,083	\$710,867	\$767,413	\$603,084	\$520,819
Quality	\$	\$	\$-	\$	\$17,189	\$15,634	\$11,736	\$7,301	\$7,240	\$7,338	\$5,000
SHOP and Employer Activities	\$-	\$366	\$18,479	\$25,076	\$30,541	\$42,717	\$34,520	\$16,500	\$4,418	\$2,500	\$2,000
Other Exchange	\$1,879	\$14,906	\$13,738	\$4,400	\$6,728	\$3,614	\$12,032	\$49,584	\$31,196	\$52,948	\$27,117
Federal Payroll and Other Administrative Activities	\$429	\$10,805	\$43,493	\$68,429	\$80,000	\$80,000	\$85,000	\$79,602	\$70,892	\$77,750	\$50,000
Total	\$4,654	\$125,392	\$325,142	\$ 1,543,461	\$ 2,032,418	\$ 2,145,312	\$ 2,150,297	\$ 2,075,714	\$ 1,948,818	\$ 1,777,999	\$ 1,279,605

8. Funding for Enrollment Assisters ended in FY 2017.

NOTE: Fiscal years 2010 through 2019 include obligations as of September 30 of each year. NOTE: Before the Exchanges were transferred to CMS, \$4.7 million and \$66.3 million in obligations were incurred in FY 2010 and FY 2011, respectively. NOTE: The FY 2020 Enacted level is an estimate as of January 2020.

<sup>&</sup>lt;sup>8</sup> U.S. Department of Health and Human Services Centers for Medicare & Medicaid Services, Fiscal Year 2020 Justification of Estimates for Appropriations Committees. (Mar. 1, 2020). <https://www.cms.gov/files/document/fy2020-cms-congressional-justification-estimates-appropriations-committees.pdf>

Figure 5: FFE Spending Assuming All User Fee Revenue is Allocated to FFE Operations and Same Funding Proportions and Same Funding Level as Covered California

-		Scenario 1.		Scenario 2.			
	Assumes All User Fee Funds are Allocated to FFE Operations, and Budget Spending Aligns Proportionally with Covered California by Expense Group					ortionally with and was ding Levels	
Sources of Funds	FFE Spending (in millions)	% of Total Appropriation	РМРМ	FFE Spending (in millions)	% of Total Appropriation	PMPM	
User Fees	\$1.479.7	100%	17.38	\$1,847.9	100%	\$21.70	
Discretionary Fund							
Total Appropriation Request	\$1.479.7	100%	17.38	\$1,847.9	100%	\$21.70	
Use of Funds							
Health Plan Review, Bid Management, Oversight, and Quality	\$47.4	3%	\$0.56	\$59.2	3%	\$0.70	
Payment and Financial Management	\$38.8	3%	\$0.46	\$48.4	3%	\$0.57	
Eligibility and Enrollment	\$464.8	31%	\$5.46	\$580.5	31%	\$6.82	
Consumer Information, Outreach, Call Center	\$497.5	34%	\$5.84	\$621.3	34%	\$7.30	
Information Technology	\$277.5	19%	\$3.26	\$346.6	19%	\$4.07	
Program Integrity	\$30.2	2%	\$0.35	\$37.7	2%	\$0.44	
Planning and Performance	\$14.0	1%	\$0.16	\$17.5	1%	\$0.21	
Administration and Staffing	\$109.4	7%	\$1.28	\$136.6	7%	\$1.60	
Total Expenses	\$1,479.7	100%	\$17.38	\$1,847.9	100%	\$21.70	

Covered California and independent researchers have documented the fact that it's spending on marketing and related policies – such as requiring its QHP issuers to offer standard patient-centered designs, it's active negotiating on behalf of consumers, fostering a competitive market environment where price-sensitive consumers hold QHP issuers accountable by their choices – contribute to the state having higher enrollment which results in a healthier risk mix in the on and off-Exchange individual market and premiums that are an estimated 20 percent lower than they would have been if California had the same risk mix as that seen in the FFE.<sup>9</sup>

While HHS seems to claim "success" in proposing to lower the user fee by .75 percent, it appears that this recommendation is based on HHS not understanding or not considering that additional spending to promote enrollment not only fosters the very purpose of the ACA – to expand meaningful coverage for Americans – additional spending to promote enrollment would actually have the direct effect of lowering health care premiums by far more than the .75 percent user fee savings. In its 2017 report, Marketing Matters: Lessons from California to Promote Stability and Lower Costs in National and State Individual Insurance Markets,<sup>10</sup> Covered California estimated that its marketing and outreach efforts generated a return on investment of between of about three-to-one – meaning that every dollar spent on marketing resulted in a \$3 reduction in health care premium.

The positive impact of reducing premiums is felt most directly by unsubsidized consumers who bear the full amount of health care premium increases. Subsidized consumers are largely shielded from the impact of premium increases since subsidies increase to offset premium increases. The result of this dynamic has been that in the FFE, subsidized enrollment has been relatively constant, but unsubsidized enrollment in the FFE has plummeted – as unsubsidized consumers have been priced out of coverage by recent federal decisions, such as prioritizing lowering the user fee rather than promoting enrollment.

Other than accounting for the transition of a small handful of states to a lower-cost model (e.g., from an FFE to an SBE), HHS provides virtually no information for the public to understand how the estimated user fee collection reduction of \$270 million will impact the FFE's ability to adequately fulfill its required Exchange functions. HHS notes that the proposed reductions reflect enrollment, premium and contract estimates for the 2022 plan year.

Without this information, Covered California is greatly concerned that the proposal to reduce the user fee would kneecap the ability of the FFE to meet its obligations under the ACA, would result in fewer Americans receiving health care coverage and mean the Qualified Health Plan issuers would not be held accountable to consumer protection requirements.

<sup>&</sup>lt;sup>9</sup> National vs. California Comparison: Detailed Data Help Explain The Risk Differences Which Drive Covered California's Success. (July 11, 2018). <<u>https://www.healthaffairs.org/do/10.1377/hblog20180710.459445/full</u>>
<sup>10</sup> Marketing Matters: Lessons from California to Promote Stability and Lower Costs in National and State Individual Insurance

Markets. September 2017. https://hbex.coveredca.com/data-research/library/CoveredCA Marketing Matters 9-17.pdf

This proposed reduction in the user fee should not be finalized unless HHS can clearly demonstrate how the proposed fee is adequate for the FFE to meet its statutory requirements under the ACA. To that end, Covered California makes the following comments and seeks clarification from HHS on the following points:

A.1. **Navigator Program Inadequacy and Underfunding.** The proposed reduction in the user fee appears to be based on a plan to continue the policy to fund the ACA required Navigator program at greatly reduced levels (funding of the ACA required Navigator program has decreased from a previous level of \$100 million in 2016 to a proposed level of \$13.5 million for plan year 2021). If that is the case, this level of funding would mean that Navigator services would be inadequate overall and would be particularly inadequate in supporting outreach and promotion for communities of color, those living in rural areas, non-English speakers and other underserved communities. The insufficient funding level is exacerbated by the current administration's policy of directing Navigators to direct consumers to non-ACA compliant insurance products – which can result in both a worsening of the risk pool and in consumers enrolling in products that are lower cost because they do not include ACA protections regarding scope of coverage, and pre-existing condition protections.<sup>11</sup>

A.1.1. The proposed user fee reduction, which appears to be recommending a continued low funding of Navigator programs, is being considered without conducting or making public any analysis on the impact of reduced Navigator funding with regards to:

A.1.1.1. Lower enrollment into subsidized insurance;

A.1.1.2. Lower enrollment of targeted communities that evidence has shown may particularly benefit from Navigator programs, such as communities of color; those living in rural areas; non-English speakers; and members of the LGBTQ community; and

A.1.1.3. Consumers that do enroll being more likely to enroll in lower value plans (Note: Covered California has documented that consumers receiving assistance in enrolling – whether from a Navigator, Agent or Call Center – are more likely to choose a higher value health plan with Cost-Sharing Reduction Subsidies).

A.2. **Marketing and Outreach Inadequacy and Underfunding.** The proposed reduction in the user fee appears to also be based on a plan to continue the current policy to fund marketing, advertising and outreach programs at greatly reduced levels (it appears funding of Consumer Education and Outreach has decreased from a previous level of \$101 million in 2016 to the proposed level of \$13.5 million for FY 2021). The direct result of cutting marketing is lower enrollment – which is evident in the reduction of new enrollment by about 1.9 million Americans from 2016 to 2021. In the absence of HHS providing any data or evidence supporting the policy of gutting marketing and outreach spending,

<sup>&</sup>lt;sup>11</sup> Cooperative Agreement to Support Navigators in Federally-facilitated Exchanges. July 10, 2018. https://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Marketplaces/Downloads/2018-Navigator-FOA.PDF

the only conclusion that can be made is that the spending reduction is a conscious effort to subvert the ACA and decrease enrollment of eligible individuals in programs to which they are entitled. Likewise, without data to support HHS not adequately allocating funds for marketing, generating earned media or supporting agents and other outreach efforts, the only reasonable conclusion is that the reduction in spending is having the intended effect – lower enrollment and attendant higher premiums due to worse risk mix, with the costs of that higher premium being born by the federal government and unsubsidized consumers.

A.2.1. To the extent the Fiscal Year 2021 President's Budget for Consumer Education and Outreach is the basis for this user fee proposal, there is no supporting analysis or assessment of the impact on enrollment caused by reducing Marketing and Advertising expenditures to nearly zero.

A.2.2. Within the Consumer Education and Outreach budget, there is no description of the proposed or budgeted amount for other outreach activities, and what types of those activities would be possible under this user fee proposal. Absent such descriptions it is impossible to assess the adequacy of such efforts.

A.2.3. Within the Consumer Education and Outreach budget – or in other budgeted areas in the HHS budget – there is no description of efforts to generate earned media that will promote enrollment. Absent such descriptions it appears HHS is making no effort to generate media coverage that would promote enrollment – while there is substantial evidence that earned media reinforces paid advertising to promote enrollment.

A.2.4. HHS appears to be making the recommendation to eliminate Marketing and Advertising without conducting or making public any analysis regarding the impact of cutting Marketing and Advertising on:

A.2.4.1. Enrollment into subsidized insurance;

A.2.4.2. Assessment of the impact on marketing to promote enrollment;

A.2.4.3. Assessment of the return on investment of marketing expenditures based on the healthier risk mix of the marginal enrollment being healthier than those who would otherwise enroll;

A.2.4.4. Assessment of the impact on premiums of unsubsidized consumers.

A.2.5. HHS appears to be making the recommendation to virtually eliminate non-marketing Outreach activities with no analysis on the impact this will have on:

A.2.5.1. Enrollment into subsidized insurance;

A.2.5.2. Non-marketing outreach activities to promote enrollment;

A.2.5.3. Investment of non-marketing outreach expenditures based on the healthier risk mix of the marginal enrollment being healthier than those who would otherwise enroll;

A.2.5.4. Premiums of unsubsidized consumers.

A.2.6. HHS appears to be proposing a budget and user fee without conducting or making public any analysis on the impact of proposed spending on efforts to promoted earned media – such as generating media coverage -- activities with regards to:

A.2.6.1. Enrollment into subsidized insurance;

A.2.6.2. The impact on earned media activities to promote enrollment;

A.2.6.3. The return on investment of earned media activities based on the healthier risk mix of the marginal enrollment being healthier than those who would otherwise enroll;

A.2.6.4. Premiums for unsubsidized consumers.

A.3. **Health Plan Oversight Inadequacy and Underfunding.** The proposed reduction in the user fee appears to also be based on a plan to drastically reduce spending on "Health Plan Bid Review, Management and Oversight" and "Quality" (the Fiscal Year 2021 President's Budget for these two areas is \$28 million, a decrease of \$25 million from the FY 2020 Budget amount of \$52.2 million). This means that the FFE is spending approximately \$175,000 to select, review and oversee quality and accountability for each of the 159 QHP issuers.

Covered California has a budget for Fiscal Year 2020-21 for Plan Management/Research of \$28 million to conduct QHP selection, management, oversight and ensure consumers are receiving quality care. Among its staff are clinical staff, including physicians, an actuary, staff dedicated to QHP issuer oversight and a team focused on health care disparities and health equity. This means that Covered California spends about \$2.5 million per each QHP issuer carrier it contracts with to assure consumers receive quality care and QHP issuers are complying with federal requirements. This means that based on dividing program costs across its QHP issuers, Covered California is spending approximately 14 times as much as the FFE for QHP issuer oversight.

In the absence of any description of how HHS is meeting its obligations to select and oversee QHP issuers, it appears that the large reduction in spending can mean that HHS has little resources to provide oversight of its QHP issuers, which collectively provide services to almost 7.5 million Americans; HHS does not conduct independent claims analysis to assess quality; HHS does not provide actuarial information to QHP issuers to help them "price right" for the actual and anticipated risk mix to promote stability; HHS does not have requisite clinical staff to oversee QHP issuers; and HHS is not addressing health disparities and health equity.

A.3.1. To the extent the Fiscal Year 2021 President's Budget for Health Plan Oversight and Quality is the basis for this user fee proposal, it appears that HHS conducted no analysis on the impact of reducing funding for QHP oversight and quality by almost half on consumers and on the ability to effectively oversee QHP issuers.

A.3.2. Having trained and qualified individuals to oversee the quality functions of QHP issuers requires clinical staff and the capacity to independently assess the reports and activities of QHP issuers. It appears that under the proposed budget and user fee, HHS has made little or no assessment of the staffing and contractual requirements needed to conduct effective oversight, including:

A.3.2.1 Having adequate dedicated staff with requisite skills to oversee QHP certification and quality.

A.3.2.2 Having adequate numbers of physicians and other clinical professionals applying their clinical expertise are on staff to support effective oversight of QHP issuer quality (e.g., physicians, pharmacists; behavioral health professionals). (Note: Covered California employs a Chief Medical Officer and other clinical staff, and contracts with multiple clinical experts.) It appears that HHS has no dedicated lead physician responsible for overseeing health care quality in the QHPs serving over 7.5 million Americans. To the extent HHS engages in contracted services to support oversight of QHP issuers, it appears to be inadequate.

A.3.2.3 Understanding and addressing health care disparities and health equity should be a core function of quality oversight. It appears that under this proposed budget and user fee there are no resources or staff dedicated to addressing health care disparities and establishing the expectation to which QHP issuers are held accountable. (Note: Covered California has a dedicated Health Equity Officer and a team that assesses gaps and oversees efforts of QHPs to address health care disparities and health equity.)

A.3.3. For virtually all large purchasers of health care services, a core element of assuring health care quality and understanding the care being provided to their consumers is to collect, maintain and analyze claims-based data on all services provided. Covered California follows this practice by compiling and analyzing the claims and care experience of all Covered California enrollees across all of its contracted QHP issuers, with the core contract for these services costing about \$2.1 million annually.

A.3.3.1. The Fiscal Year 2021 President's Budget for Health Plan Oversight and Quality and the proposed user fee do not appear to include any funding to conduct claims-based analysis of services provided. The absence of such analysis suggests that the FFE is not conducting independent analysis and assessment of how QHP issuers are delivering quality care to Americans.

A.3.4. In its role in promoting the lowest and most accurate proposed premiums as possible, Covered California provides detailed information to QHPs in advance of their rate submissions regarding the current and anticipated risk mix of the covered lives in the individual market. This information is supported by contracts with actuaries, researchers and academics and has resulted in QHPs in California not having the wild variation in prices seen in much of the nation and stability in their participation in the marketplace. This information can be provided independent of a marketplace "actively negotiating" with QHP issuers but would give all QHPs better information from which to their QHPs.

A.3.4.1. The User Fee does not appear to reflect HHS incurring actuarial research or the development of data that could enable QHP issuers developing pricing in the FFE to price as accurately as possible based on their understanding the risk mix of the covered population and potential changes in that risk mix.

A.4. **Call Center and Consumer Appeals Inadequacy and Underfunding**. The proposed reduction in the user fee appears to be based on a plan to reduce spending on "Call Center" services (the Fiscal Year 2021 President's Budget for this area is \$292 million, a decrease of \$66 million from the Fiscal Year 2020 Enacted Budget amount of \$359 million; and a decrease of \$192 million from the actual expenditures in Fiscal Year 2017 of \$484 million). Covered California's budget for Fiscal Year 2020-21 for its Service Center is \$135 million, to support enrollment and customer service for eleven QHP issuers. In serving its consumers, both for new enrollment and servicing existing consumers, Covered California budgets for about 800 permanent staff and with temporary contracted staff that range from 250 to 1,000 staff (meaning at "peak" open enrollment and renewal functions).

In the absence of any description of how HHS is meeting its obligations to operate a Call Center, it appears that the large reduction in spending can only be attributed to HHS either planning for low enrollment or for those who seek services from the Call Center receiving inadequate assistance – resulting in lower enrollment and higher premiums. In the absence of any analysis it is impossible to ascertain if the lower Call Center budget is the product of HHS neglecting its obligations to support consumers, including those filing appeals and seeking resolution of problems.

A.4.1. To the extent the Fiscal Year 2021 President's Budget for Call Center is the basis for this user fee proposal, the reduction in funding calls to question the capacity of the user fee to meet consumers service needs under the ACA-required Call Center. A.4.2. The reduction of the user fee appears to be based on significantly lower staffing to support new enrollees and servicing existing enrollees, which would be inadequate to meet consumers' needs.

A.4.3. The reduction of the user fee appears to be reducing staff from the peak open enrollment period of 2016 and 2017, based on service demands seen recently that have been the result of calculated decisions to decrease consumer inquiries and enrollment. The user fee should be based on meeting consumer demands based on adequate promotion, not based on the recent history of no promotion.

A.4.3.1. HHS does not appear to have analyzed the extent to which the change is based on a decrease in incoming calls (in change in number of calls and in percentage change).

A.4.3.2. HHS does not appear to have analyzed the extent to which the change in user fee is based on the increase in the use of technology, such as Integrated Voice Response (IVR) systems (note: for 2010, Covered California projects that about 2.2 million consumers will be served through its Integrated Voice Response system, while 2.1 will receive personal assistance) and the efficacy of IVR type systems employed.

A.4.4. The proposed budget and user fee appear to be based on a dramatic reduction in Call Center capacity – with a reduction of Call Center funding by half of what it was in 2017 – with no analysis of the implications of that reduction of funding. HHS does not appear to have conducted the analysis required to make deliberate adjustments to Call Center capacity, including:

A.4.4.1. HHS projections for utilization of the Call Center in the coming year will be at levels of new enrollment as seen in the most recent year versus new enrollment as seen in 2016 (when FFE new enrollment during the open enrollment period was 1.9 million higher). If that is the case, HHS is establishing a user fee that would restrain the ability of the Call Center to meet "normal" higher demand for services.

A.4.4.2. Impact on service levels and consumer satisfaction on new enrollment.

A.4.4.3. Impact on service levels and consumer satisfaction on retention of enrolled individuals.

A.4.4.4. Cost benefit analysis of levels and types of call center staffing on either performance metrics (e.g., calls answered, service levels or abandonment rates) or outcomes (e.g., enrollment and retention).

A.4.5. It appears that under this budget proposal and user fee, the FFE may experience poor performance in serving consumers – with many consumers waiting to have calls answered and many giving up rather than

waiting to have their calls answered. The impact of poor Call Center service is lower enrollment and likely higher premiums as it is likely that healthier individuals are more likely to abandon a call to enroll than would an individual with an active health condition.

The proposed user fee and budget do not appear to reflect analysis of the following:

A.4.5.1. Changes in expectations of service levels for consumers (e.g., the percentage of consumers having calls answered within 30 seconds of calling).

A.4.5.2. Changes in expectations of abandonment rates for consumers (e.g., the percentage of consumers who "give up" waiting and drop their call without getting assistance).

A.4.5.3. The impact on enrollment and the risk mix of those enrolling due to lower service levels in the Call Center.

A.4.5.3. Impact on the ability to address the needs of consumers who speak languages other than English. In particular, there is no data for each of the elements below, for 2016 versus the proposed year for which the user fee is intended to support consumers, which is critical as budgeting should not assume service demands based on the low enrollment and service needs over the past four years. (Note: Covered California seeks to maximize the ability of non-English speakers to be directly served by a customer service representative who speaks their language both in its hiring and in contractual requirements on the vendor that provides temporary/surge support. Even with these efforts, in the current year it has an interpreter service budget of about \$2.3 million.). The proposed budget and user fee do not appear to reflect analysis of the following:

A.4.5.3.1 The number and percentage of calls that are from non-English speaking consumers.

A.4.5.3.2 The service levels and abandonment rates for non-English speakers compared to English-speakers.

A.4.5.3.3 The number and percentage of non-English calls that are handled by Call Center staff without the need for Interpreter Services.

A.4.5.3.4 The number and percentage of non-English speaking calls that are handled with assistance of Interpreter Services, the budget for such services and the adequacy of the user fees to support these services.

A.4.5.3.5. The extent to which services for non-English speaking callers has declined since 2016 with the drop-off in marketing in Spanish and other languages.

A.4.5.3.6 The extent to which non-English speakers have different service levels and abandonment rates than English speakers.

A.4.6. The proposed budget and user fee does not appear to be adequate to support for resolving consumer complaints in an efficient, fair, and timely manner. (Note: Covered California seeks to resolve all consumer problems at the lowest possible level. Its budget includes \$9 million for handling of appeals through an interagency agreement with the California Department of Social Services and having an internal Ombuds Program funded at \$2.1 million to provide consumers with objective unbiased assistance when other channels have been exhausted, and to identify systemic issues that can be addressed.)

A.4.6.1. To what extent does the proposed user fee and budget reflect resources to provide Ombuds-like support to consumers in the FFE?

A.5. **Information Technology Inadequacy and Underfunding.** The proposed reduction in the user fee appears to be based on a plan to reduce spending on "Information Technology" (the Fiscal Year 2021 President's Budget for this area is \$431 million, a decrease of \$181 million from the Fiscal Year 2020 Enacted Budget amount of \$612 million). In the absence of any description of how HHS is meeting its obligations to service consumers, hold health plans accountable, or have the capacity to analyze and improve service, it is impossible to assess the impacts of these dramatic reductions in Information Technology expenditures.

A.5.1. To the extent the Fiscal Year 2021 President's Budget for Information Technology is the basis for this user fee proposal, it does not appear HHS conducted any analysis as to the impact of reducing funding will have on Information Technology.

A.6. **Inadequate Funding Based on Assuming Continued Low Enrollment.** It is possible that some portion of a reduction in the user fee would be based on increases in enrollment. The just closed 2021 FFE enrollment shows: (1) a decrease in new enrollment of 5.4 percent compared to 2020 and a 58 percent decrease in new enrollment compared to 2016 (1.9 million fewer new enrollees); and (2) a net change of total enrollment of 6.6 percent compared to 2020.

A.6.1. It appears that HHS is projecting continued low enrollment – reflecting the enrollment over the past three years – which could have major implications both for the user fee generated and the levels of service that need to be provided. HHS should make public the enrollment assumptions that support the changes in the user fee.

A.7. **Inadequate Funding to Support Small Employer Efforts.** The proposed regulation is silent on the extent to which the FFE will support the Small Employer Health Option Program (SHOP), and the proposed reduction in the user fee appears to be based on a plan to maintain the action of basically zeroing out support for SHOP (Fiscal Year 2021 President's Budget for this area is \$200,000,<sup>12</sup> following the same amount for Fiscal Year 2020, down from \$34.5 million in Fiscal Year 2016). California's SHOP program – Covered California for Small Business – which has approximately 63,590 members enrolled as of November 16, 2020, through 7,756 employers – is supported by administrative service contracts of about \$16.5 million and a marketing budget of \$1.3 million.

A.7.1. To what extent does this user fee reflect the FFE based on a continued policy of not supporting enrollment in SHOP programs in FFE states?

A.8. Inadequate Funding to Address Capacity to Respond to Economic **Declines Increasing Need for ACA Safety Net Programs.** The proposed regulation is silent on the extent to which, if any, the reduced user fee will allow the FFE to respond to the needs of Americans during the COVID-19 pandemic and resulting economic crisis. Covered California dedicated an additional \$40 million to outreach and promotion efforts for the current year based on the millions of Californians potentially losing job-based coverage needing to understand how to access affordable health care through Exchanges and Medicaid. The public health and economic effects of COVID-19 are expected to extend into at least 2022.

A.8.1. The proposed user fee does not appear to reflect the FFE planning to have the capacity to provide resources to make the availability of subsidized marketplace coverage or Medicaid coverage known to eligible Americans who may need services in event of a continued recession.

A.9. Potentially Inaccurate Analysis of Premium Increases that Serve as Basis of User Fees. The proposed reduction in the user fee may be based on assumptions that in 2021 there would be a significant increase in premiums. CMS recently reported declining average benchmark plan premiums over the last several years – which in 2020 appear to actually have been driven by health plans correcting over-pricing in 2019; and in 2021 health plans having far lower health care expenses due to reduced non-COVID services.

A.9.1. HHS should make public the premium assumptions that are reflected in the user fee proposal for 2022.

<sup>&</sup>lt;sup>12</sup> President's Budget for Fiscal Year 2021, Department of Health and Human Services. <u>https://www.whitehouse.gov/wp-content/uploads/2020/02/hhs\_fy21.pdf</u>.

#### B. New Marketplace Option

The current definition for "Exchange" is a governmental agency or non-profit entity that meets part 155 applicable standards and makes QHPs available to gualified individuals and/or employers.<sup>13</sup> HHS proposes a new interpretation of the definition in 45 CFR 155.20 to collectively refer to State-based Exchanges (SBEs), FFEs, State-based Exchanges on the Federal Platform (SBE-FPs), and newly proposed Direct Enrollment (DE) Exchanges. In making this proposal, HHS does not propose amending the definition "Exchange" to reflect this proposed interpretation into regulatory text. Instead, even with no apparent regulatory action that would support expanding the definition of what it means to be an Exchange, HHS proposes an option for states to elect the Exchange Direct Enrollment (EDE), thereby ceding to private sector entities the ability to operate the enrollment pathways through which consumers can apply for coverage, receive an eligibility determination for advanced payments of premium tax credits (APTC) and cost-sharing reductions (CSRs), and purchase a QHP that is offered through the Exchange. While the Exchange Direct Enrollment would still be nominally "established and operated" by a state or HHS, the state or HHS would turn over nearly all Exchange functions to the new private-sector entity and allow this private entity to operate in any of the public Exchanges.

B.1. As proposed, a state adopting this provision could choose to eliminate HealthCare.gov as an enrollment option for consumers, many consumers would have no source of consistent standard information to inform their selection of health plans.

B.2. This proposal is very similar to Georgia's recently approved 1332 waiver application. As proposed, this regulation, if adopted, it would mean that any state could implement similar policies in that state without seeking a waiver with no assessment by HHS as to whether the policies adopted by the state are consistent with the stated intent of the ACA.

Today, the FFE allows two types of entities to assist consumers with enrollment in QHPs, Direct Enrollment (DE) and Enhanced Direct Enrollment (EDE). Direct Enrollment allows insurers and brokers (including web-brokers) to use their own websites to screen consumers for eligibility for ACA subsidies. If the consumer appears to be eligible for ACA subsidies, they are directed to the Exchange to complete their application and receive their eligibility determination. Once the consumer receives their eligibility determination, they return to the DE website to select and enroll in a QHP (or non-QHP as they are marketed and sold by brokers). These approved private sector entities have historically operated side-by-side with the HealthCare.gov application. Alternatively, EDE allows issuers and brokers to assist consumers with the entire application process, eliminating any direct contact between consumers and the Exchange. These issuers and brokers are explicitly certified to assist consumers in completing their application and enrollment, including ACA subsidy eligibility.

The proposed new option appears to take additional policy steps to privatize the ACA Exchange model, reducing consumer protections and allowing private brokers to

<sup>13 45</sup> C.F.R. § 155.20 (2012).

promote non-ACA compliant products resulting in both increased costs to the individual common risk pool and potential harm and confusion to consumers. HHS is proposing at 45 CFR 155.220 to allow states to delegate all front-end Exchange functions to approved private entities operating in the DE and EDE pathway. Under this proposal, states that adopt this flexibility would support back-end functions for these non-Exchange websites operated by private sector entities. Eliminating the need for a centralized enrollment website, these states would instead make available a basic website providing minimal QHP information for comparison and a listing, with links, to approved partner websites for consumer shopping, plan selection, and enrollment activities.

This proposal appears to be directly at odds with the ACA, which created Health Insurance Exchanges (Exchanges) under 1311(b) as a mechanism for organizing the health insurance marketplace to help consumers and small businesses shop for coverage in a way that permits easy comparison of available plan options based on price, benefits and services, and quality.<sup>14</sup> By doing so, the ACA created an opportunity for consumers to go to one place to search for health coverage options while obtaining easy to read and standardized information on QHP's available to them.<sup>15</sup>

As established by the ACA, Exchanges are required to do more than present QHPs and determine eligibility for consumers.<sup>16</sup> Section 1311 of the ACA details the intent and responsibilities of Exchanges which includes the whole spectrum of responsibilities for the education, shopping, and eligibility and enrollment process. Exchanges must perform a variety of functions including operating a telephone service center, certifying QHPs, providing a website where consumers can view standardized information regarding QHPs, development of an online calculator for consumers to better understand the costs of coverage, and establishment of a navigator program to provide fair and impartial assistance to consumers. In addition to mandating procedural functions for Exchanges, the ACA includes specific consumer protections.

B.3. This proposed regulation fails to ensure that an Exchange meets all of the functional requirements detailed in Section 1311 of the ACA. The proposed regulation contains no justification for how all the statutory responsibilities imposed on Exchanges would be met.

In some areas, the proposed regulations appear directly at odds with the ACA. For example, Section 1311(d) of the ACA requires, among other things, Exchanges to only make QHPs available for purchase and to present these QHPs in a standardized format.

B.4. Allowing private Exchanges to sell non-ACA compliant products is inconsistent with section 1311. Fostering enrollment in non-ACA compliant products would have the impact of encouraging consumers to enroll in products that may be lower cost specifically because they continue to apply exclusion

 <sup>&</sup>lt;sup>14</sup> U.S. Department of Health and Human Services, Center for Consumer Information and Insurance Oversight, Initial Guidance to States on Exchanges (Nov. 8, 2010) <<u>https://www.cms.gov/CCIIO/Resources/Files/guidance\_to\_states\_on\_exchanges</u>
 <sup>15</sup> <u>https://www.cdc.gov/aca/marketplace/index.html</u>

<sup>&</sup>lt;sup>16</sup> Sec. 1311. Pub. L. (March 23, 2010) 111-148 Stat. 119

policies for those with pre-existing conditions, do not offer the Essential Health Benefits, or annual and lifetime limit protections of the ACA.

In its proposal, HHS directly contradicts Section 1311(d)(4)(F) which requires Exchanges to provide streamlined access to health coverage and to promote continuity of care. By allowing states to cease utilization of ACA Exchanges that provide one simple location to shop for, apply for, and enroll in QHPs with premium tax credits and cost-sharing reductions, HHS is unnecessarily creating roadblocks for consumers to access health coverage or easily transition between health coverage. By forcing consumers to purchase health coverage through third-party entities that offer non-ACA compliant coverage, HHS is creating confusion for consumers which will result in consumers not enrolling in coverage, consumers enrolling in non-ACA compliant coverage, and consumers not being made aware of their eligibility for zero-premium Medicaid coverage.

B.5. In direct contradiction of the requirements of the ACA of assuring consumers who are eligible for streamlined access to Medicaid programs in their state, what safeguards or requirements will HHS employ to ensure that third-party entities do not steer potential Medicaid eligible consumers away from zero-premium Medicaid coverage and toward non-ACA compliant coverage?

At 45 CFR 156.50(c)(3), HHS proposes to entice states to make this sudden shift to the Exchange Direct Enrollment pathway by charging a user fee (1.5 percent) that guarantees little or no Exchange support beyond IT services.<sup>17</sup> This proposal allows private entities to be the sole source for consumers to educate themselves on health coverage, while also being able to steer consumers away from QHPs or zero-premium Medicaid where eligible, and into lower-cost, less comprehensive plans.

B.6. The proposed regulation provides no analysis of the potential impact on total premiums – including the potential impact of premiums being reduced more by effective implementation of the core Exchange functions than by lowering the user fee – and the impact on consumers of providing fewer services or less effective services. In particular, it appears that no analysis was done regarding the impact on total premiums of:

(1) Migration of healthier consumers to non-ACA compliant plans resulting in a deterioration of the risk pool for the common ACA individual market;

(2) The extent to which consumers that would have been eligible for Medicaid in a state adopting the Direct Enrollment Exchange would be less likely to find and enroll in Medicaid coverage for which they are eligible?

Covered California believes in the value and support found in utilizing agents, but we are concerned that this proposed Exchange Direct Enrollment pathway is based on the belief that enrollment through the EDE pathway would be optimized because it would rely on the agents operating those sites to market and promote enrollment. Since 2016, the last year in which enrollment marketing promotion was not impacted by the current administration's efforts to reduce almost to zero marketing, there has been a 45 percent

<sup>&</sup>lt;sup>17</sup> Jeff Wu, Deputy Director for Policy, Centers for Medicare and Medicaid Services, SBE CEO Call. December 14, 2020

decline in new unsubsidized enrollment<sup>18</sup> (a drop of about 1.9 million). During this same period, CMS has embarked on an increased reliance on EDE enrollment.

B.7. HHS does not appear to have analyzed the impact on marketing done by brokers compared to marketing done by HHS in 2016 and the impact of the reduction in federal spending on marketing since 2017. This analysis is critical to understand the implications of expended EDE options and their relation to FFE direct marketing expenditures.

Covered California is concerned about the negative consumer impacts from states or the federal government abdicating the public role of protecting consumers from looselygoverned third party entities who may be ill-equipped, ill-prepared, or misaligned in providing accurate and timely guidance and support. Currently, Exchanges are the only place consumers can go to receive complete, standardized information about plans and products that meet minimum essential coverage requirements (QHPs).

B.8. HHS does not appear to have evaluated the potential effects on consumers of eliminating ACA Exchanges and the implications of those effects on the required elements of the ACA. In particular, it does not appear that HHS assessed the potential impact in:

- (1) lowering enrollment into subsidized insurance;
- (2) increasing enrollment in non-ACA compliant plans that may have gaps in coverage;
- (3) consumers seeking non-ACA compliant plans but being deemed ineligible due to pre-existing conditions?

Additionally, Section 1311 of the ACA states that Exchanges are required to maintain an internet website where enrollees of QHPs could find standardized comparative information on QHPs.

B.9. To the extent the only Exchange options in a state are private agents, HHS has not demonstrated how the ACA requirement for standardized comparative information would be met.

In addition to the comments detailed above, Covered California asks HHS to address the comments below that are associated with specific proposals to create an Exchange Direct Enrollment Pathway:

B.10. Section 1311 and subsequent regulations (45 CFR 155.20) clearly defines "Exchanges." As proposed, HHS is reinterpreting the definition of an "Exchange" to include the new Direct Enrollment Exchanges. How is this not in direct conflict with the statutory requirements of Section 1311 of the ACA? HHS cannot change

<sup>&</sup>lt;sup>18</sup> <u>Unsubsidized Enrollment on the Individual Market Dropped 45 Percent from 2016 to 2019.</u> CMS.gov (Oct. 9, 2020)

the definition of an Exchange without amending current regulations (45 CFR 155.20).

B.11. The proposal to end reliance on ACA Exchanges for enrollment appears to be in direct contradiction with the requirement in Section 1311(i) to establish and operate a navigator program that works to enroll consumers through the Exchange.

B.12. HHS does not appear to have conducted any analysis to determine the impact and implications of removing the possibility for consumers to shop for and enroll in coverage through an Exchange that would seek to increase consumer protections and positively impact the consumer shopping experience versus a private EDE seeking to maximize its commissions.

B.13. HHS does not appear to have conducted any analysis on the implications for enrollment or consumer experience from removing the enrollment pathway, HealthCare.gov, which 66 percent of enrollees used in 2019, and the impact of a change on consumer experience and maintain or improve consumer protections.

B.14. Requiring consumers to shop and enroll via third-party websites appears to be in direct conflict with Section 1311(e)(1)(B), which requires Exchanges to avoid adverse selection on behalf of consumers when third-party entities are allowed to market and offer non-ACA compliant coverage. HHS has not appeared to conduct any analysis in the implications of adverse selection in the common risk pool individual market.

B.15. HHS has not provided an explanation for how the proposed Exchange Direct Enrollment Pathway would fulfill the spirit of the requirement that Exchanges must make available QHPs in the interests of qualified individuals.

B.16. The "skinny" Exchanges do not appear to meet the requirements in Section 1311(d)(7) for Exchanges to ensure public accountability in areas such as objective information on the performance of plans; availability of automated comparison functions to inform consumer choice; fair and impartial treatment of consumers, plans and other partners; and prohibitions on conflict of interest.

B.17. As proposed, consumers may be forced to enroll through third-party websites that will not have a standardized display of information and may show non-ACA compliant plans, potentially leading to choice error. HHS does not reconcile this proposal with Section 1311(d)(4)(F) which requires Exchanges to streamline access for consumers while promoting seamless access for applicants for other health programs beyond coverage through Exchanges.

B.18. HHS does not appear to have conducted any analysis or research to anticipate how the risk pool would be affected, given that choice error will likely occur, and some health consumers would select cheaper non-ACA compliant coverage.

B.19. HHS has not fully described what requirements would be placed on Exchange Direct Enrollment entities to ensure that they are providing consumers

with access to ACA-compliant plans and Medicaid plans should they be eligible, before presenting non-ACA compliant plans to them.

B.20. HHS does not adequately describe what requirements would be placed on Exchange Direct Enrollment entities to avoid directing consumers toward non-ACA-compliant plans or away from zero-premium Medicaid (e.g. misleading website text listing "Health Insurance" or "Obamacare Insurance").

#### Reduced Consumer Protections Requirements for Web-Brokers

For states that choose not to eliminate reliance on their ACA Exchange, HHS makes several proposals to eliminate consumer protections in these states. Current regulations require EDE entities, such as QHP issuers and web-brokers, to translate website content into any non-English language that is spoken by a limited English proficient (LEP) population that makes up 10 percent or more of the total population of the relevant state. Web-brokers are currently required to translate website content within one year of registering with the Exchange, while QHP issuers are currently required to translate website content beginning no later than the first day of the individual market open enrollment period.

Citing the need to incentivize these entities to enter and test the ACA market, HHS proposes at 45 CFR 155.205(c)(2)(iv)(B) and (C) to give QHP issuers and web-brokers 12 months from the date the QHP issuer or web-broker begins operating its FFE-approved EDE website in the relevant state to comply with website content translation requirements as a condition of participation in the FFE-EDE program.

HHS also proposes at 45 CFR 155.220 to allow assisters in the FFE and in SBE-FP states to use web-broker non-Exchange websites for classic DE and EDE under certain conditions. If a web-broker non-Exchange website does not facilitate enrollment in all available QHPs in the state, it would be required to identify for consumers the QHPs, if any, for which the web-broker website does not facilitate enrollment by prominently displaying a standardized disclaimer provided by the Exchange. This disclaimer would state that the consumer can enroll in such QHPs through the Exchange-operated website and would display a link to the Exchange website. HHS would issue guidance on the form and manner in which the disclaimer should be displayed. HHS is creating another unnecessary roadblock for consumers getting coverage when they need it. Under this option, if a web-broker does not facilitate enrollment in all available QHPs, a consumer would need to navigate multiple websites in order to fully compare all available QHPs.

Current regulations do not allow non-Exchange QHPs to be displayed on the same website pages as comparable non-QHP individual coverage. However, DE entities are allowed to display both Exchange and non-Exchange QHPs on the same website pages, as long as the DE entity's website makes clear that APTC and CSRs are only available for Exchange QHPs. HHS now proposes at 45 CFR 155.221(b)(1) that DE entities be required to display and market health plans in three different categories – that would now expressly allow for promotion of non-ACA compliant products:

- 1. QHPs offered through the Exchange. These products must be isolated from the other categories of products to distinguish for consumers the products for which APTC and CSRs are available.
- Individual health insurance coverage offered outside the Exchange (including QHPs and non-QHPs other than excepted benefits). These products are subject to ACA market-wide requirements as QHPs, but not available with APTC and CSRs.
- 3. All other products, such as excepted benefits. These products are not subject to ACA market-wide rules, nor are APTC and CSRs available with such products,

and therefore they are substantially different from the plans that fall into the first two categories. While this is being proposed to limit consumer confusion, HHS does not propose further requirements on the order or manner in which consumers are presented these three different pages. Covered California is concerned DE entities promote non-ACA compliant plans to the detriment of QHPs – leading to consumers making poor choices and higher costs for consumers purchasing ACA compliant products due to risk selection impacts.

HHS should address the issues below that are associated with the specific proposal to allow assisters to utilize web-brokers' non-Exchange websites and changing display requirements for DE and EDE entities:

B.21. HHS does not reconcile their proposal to give EDE entities 12 months to

comply with website translation requirements to become an EDE with the core of the ACA. In particular, allowing EDE entities to limit the services provided to limited English proficiency consumers in the name of "testing the market" does not meet the clear legal requirements or support intent of the ACA to foster broad enrollment of all eligible individuals.

B.22. The proposed regulation to allow Navigators to utilize non-Exchange webbroker websites does not comply with Section 1311(i), which requires Exchanges to establish a Navigator program to conduct public education activities to raise awareness of QHP availability and facilitate enrollment in QHPs.

B.23. HHS does not reconcile allowing Navigators to utilize non-Exchange webbroker websites with Section 1311(i)(3)(B), which requires Navigators to distribute fair and impartial information concerning enrollment in QHPs --- when those broker entities can and will promote non-ACA compliant products. HHS does not appear to have conducted any analysis or research to test how the visibility of cheaper, non-ACA compliant plans would affect enrollment in QHPs.

### C. 1332 Guidance into Regulation

Section 1332 of the ACA permits states to apply for State Innovation Waivers (1332 waivers) to pursue innovative strategies for providing residents with access to quality, affordable health insurance while retaining the basic protections of the ACA. Although many of the law's market reforms and consumer protections cannot be waived, section 1332 of the ACA permits states to seek waivers of requirements related to (1) QHPs, including Essential Health Benefits (EHBs), metal tier coverage, and cost-sharing limits; (2) the premium tax credit, and (3) cost-sharing reductions, and the individual and employer mandates. Section 1332(b)(1) lists the criteria under which a 1332 waiver may be granted. In addition to complying with procedural requirements, a 1332 waiver proposal must also meet the substantive criteria (or guardrails) and show that the waiver proposal will:

1. Provide coverage at least as comprehensive as the current EHBs offered through Exchanges,

- 2. Provide coverage and cost-sharing protections against excessive out-of-pocket spending that are at least as affordable as it would be absent the waiver,
- 3. Provide coverage to at least a comparable number of residents of the state as it would absent the waiver, and
- 4. Not increase the federal deficit.

In 2015, HHS and the Department of the Treasury (the Departments) released guidance that took a strict interpretation of the statutory guardrails, reaffirming important consumer protections in the ACA.<sup>19</sup> The Departments defined "coverage" as minimum essential coverage (MEC) which would not allow states to consider non-ACA compliant coverages like short-term, limited-duration insurance in their coverage estimates toward satisfying the coverage guardrail. Additionally, a 1332 waiver application would only be approved if just as many, if not more, consumers were projected to be enrolled in coverage that is at least as comprehensive as the state's EHB benchmark plan. The 2015 guidance also placed strict measures on the affordability guardrail, ensuring that consumers would not face increased spending on premiums, cost-sharing, or out-of-pocket costs relative to their income. Finally, this guidance required that waivers could not reduce the number of people with coverage meeting the 60% actuarial value. Despite this strict adherence to the statutory text, eight states were granted 1332 waivers.

In 2018, the Departments released new guidance that attempted to undercut consumer protections put in place by the ACA and prior guidance.<sup>20</sup> First, the Departments encouraged 1332 waiver proposals that advance one or more of the five principles outlined in the new guidance:

- 1. Provide increased access to affordable market coverage (e.g. short-term, limitedduration insurance, Association Health Plans) over public programs and increase issuer participation and promote competition;
- Encourage sustainable spending growth by promoting more cost-effective coverage, restraining federal spending, and eliminating state regulations that limit market choice and competition (e.g. waivers should not drive new enrollment in ACA-compliant coverage and should instead direct consumers to non-ACA compliant coverage);
- 3. Foster state innovation;
- 4. Support and empower those in need, especially those who are low-income or have high health care costs and may need financial assistance; and
- 5. Promote consumer-driven healthcare.

This new guidance also introduced new, less restrictive interpretations of the requirements to meet the statutory guardrails listed in section 1332 of the ACA. Specifically, the Departments now interpret the coverage, affordability, and comprehensiveness guardrails to mean:

1. States no longer need to ensure that a 1332 waiver provides coverage that qualifies as MEC as the Departments now consider any health insurance

<sup>&</sup>lt;sup>19</sup> See Waivers for State Innovation (44 Fed. Reg. 78131 et seq. (Dec. 16, 2015) <<u>https://www.gpo.gov/fdsys/pkg/FR-2015-12-16/pdf/2015-31563.pdf</u>>

<sup>&</sup>lt;sup>20</sup> See State Relief and Empowerment Waivers (83 Fed. Reg. 53575 et seq. (Oct. 24, 2018) <a href="https://www.govinfo.gov/content/pkg/FR-2018-10-24/pdf/2018-23182.pdf">https://www.govinfo.gov/content/pkg/FR-2018-10-24/pdf/2018-23182.pdf</a>

coverage<sup>21</sup> as acceptable forms of coverage when assessing the coverage guardrail, including group health insurance individual health insurance short-term, limited-duration insurance, and Association Health Plans.

- 1332 waivers do not need to demonstrate that as many consumers will be enrolled in comprehensive and affordable coverage. States may now simply demonstrate that comprehensive and affordable coverage is available for consumers to choose from, while also offering and promoting less comprehensive and affordable plans without failing to meet the coverage and affordability guardrails.
- 3. The Departments specified that the comprehensiveness and affordability findings would focus on the aggregate effects of the 1332 waiver. Under the 2015 guidance, the Departments explicitly accounted for effects across different groups of state residents, namely vulnerable residents including the elderly, low income, and those with serious health issues. Under the new guidance, a state could meet the comprehensiveness and affordability guardrails by meeting the statutory guardrails as a whole, even if particular groups within a state would lose comprehensive or affordable coverage.
- 4. When evaluating the comprehensiveness of coverage available under the 1332 waiver proposal, the Departments will continue to look to the EHB requirements. However, the Departments will now allow a state to compare access to coverage under the 1332 waiver to the state-selected EHB benchmark plan, any other state's EHB benchmark plan, or any other plan selected by the state that could become its EHB benchmark plan.

The new 2018 waiver guidance went into immediate effect. The Departments gave the public 60 days to comment but never publicly responded to any comments received as would be required under the normal rulemaking process. Additionally, the new 1332 waiver guidance changed the Departments' position without giving a reasoned explanation for the change. An agency reversing a prior policy "must show that there are good reasons for the new policy" and provide "a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy."<sup>22</sup>

HHS should address the issues below that are associated with specific proposals at 31 CFR 33.108, 33.120, 33.128, and 45 CFR 155.1308, 155.1320, 155.1328 to codify the 1332 waiver guidance from 2018:

C.1. Given that this proposed regulation specifically calls for allowing an Exchange to promote coverage in plans that may have very high deductibles, not cover many services required under the ACA, have annual or lifetime limits, and a range of coverage exclusions, this proposal is not consistent with section 1332(b)(1)(B) of the ACA which requires the state waiver to "provide coverage and cost-sharing protections against excessive out-of-pocket spending that are at least as affordable."

<sup>&</sup>lt;sup>21</sup> 45 C.F.R. § 144.103

<sup>&</sup>lt;sup>22</sup> FCC v. Fox Television Stations, Inc., 556 U.S. 502, 515–16 (2009).

C.2. The proposed regulation is inconstant with the intent of the ACA to promote actual coverage by having a policy under which section 1332(b)(3) would only be met if state's residents <u>actually will have coverage under the waiver</u> as they would absent the waiver yet 1332(b)(1)(A) and (b)(1)(B) would be <u>met if affordable and comprehensive coverage is simply available</u> to state residents, whether or not they are actually covered.

C.3. Including non-ACA compliant coverage in the comprehensive coverage guardrail does not align with the requirement under section 1332(b)(1)(A) that a state must show that it will provide coverage "at least as comprehensive as the coverage defined in [the EHB provisions] as offered through Exchanges."

C.4. Expanding the definition of "coverage" to include short-term, limitedduration insurance does not comply with the section 1332 statutory guardrails when short-term, limited-duration coverage are exempt from the ACA's consumer protections, does not qualify as MEC, and is not included in the statutory definition of "individual health insurance coverage" under 42 U.S.C. § 300gg-91(b)(5).

C.5. The 2018 interpretation of the 1332 waiver guardrails does not fulfill the overall goals of the ACA to provide quality, affordable health care for all Americans.

C.6. It does not appear that HHS conducted any analysis on how this specific proposal, if adopted, could have the following potential results:

- a. More consumers enrolling in lower premium non-ACA compliant plans;
- b. Consumers seeking enrollment in non-ACA compliant plans being denied coverage due to having pre-existing conditions;
- c. The extent to which consumers enrolling in non-ACA compliant plans would experience financial responsibility for care that cost more than ACA limits on annual or lifetime costs;
- d. The extent to which consumers enrolling in non-ACA compliant plans would need services that are Essential Health Benefit not covered by the non-ACA compliant plans;
- e. The health impacts on consumers enrolling in non-ACA compliant plans;
- f. The impact on the ACA common risk pool based on enrollment in non-ACA compliant plans and the attendant impact on premiums;
- g. The extent to which premium changes in the ACA common risk pools are born by unsubsidized consumers, the federal government, and/or subsidized consumers.

#### **D. Special Enrollment Changes**

#### Metal Level Change: Newly Ineligible for APTC

HHS is proposing to add new language in 45 CFR 155.420(a)(4)(ii)(C) to allow current Exchange enrollees and their dependents to enroll in a QHP of a lower metal level if they qualify for a special enrollment period (SEP) upon becoming newly ineligible for Advanced Premium Tax Credits (APTC). Covered California supports HHS' proposal to provide additional flexibility for current Exchange enrollees and their dependents and has already incorporated and exceeded this level of flexibility in state regulations.<sup>23</sup> Covered California currently provides an SEP for enrollees without restriction to movement in metal level. The following comments are provided to request further review of the alternatives reviewed and elicit clarification on the regulation as proposed.

Existing federal regulations<sup>24</sup> prevent certain individuals that are eligible for an SEP from changing to a different level of coverage unless their level is no longer offered, in which case they can move up or down one metal level. This restriction can leave some consumers with no choice but to terminate their coverage because they cannot afford that premium payment. This proposed regulation will give consumers an opportunity to change metal level with the loss of eligibility to financial assistance, but it does not account for those who experience other qualifying life events.

D.1. Covered California encourages that HHS consider "additional flexibility to allow enrollees and their dependents who become newly eligible for APTC in accordance with paragraph (d)(6)(i) or (ii) to change to a QHP of a higher metal level" and remove the metal level change restrictions altogether.

#### <u>Plan Selection Change for Enrollees Who Did Not Receive Timely Notice of</u> <u>Triggering Event</u>

HHS proposes to add 45 CFR § 155.420(b)(5) and § 155.420(c)(5) to allow individuals who did not receive timely notice of a triggering event (and were otherwise unaware that a triggering event occurred) to select a new plan within 60 days from the date they became aware or reasonably should have known about the triggering event. Additionally, changes to the effective date regulations would allow these consumers to choose the earliest effective date that would have been available had they received timely notice of the triggering event or select a prospective effective date. Covered California is generally in support of the proposed regulation as written, aside from clarifications requested.

Currently, and in most cases, when an individual enrolls in a QHP, their enrollment start date is prospective. This reduces administrative burden for both the Exchanges and QHP Issuers and prevents potentially costly consumer liabilities. Under federal regulations, when a consumer enrolls retroactively, they must pay all past due premiums to become current on their enrollment. If they are unable to do so, the consumer is prospectively enrolled in coverage. This could lead to the gap in coverage this proposed regulation is trying to eliminate.

<sup>23</sup> Cal. Code Regs., tit. 10 §6504 (a)(7)

<sup>&</sup>lt;sup>24</sup> 45 CFR 155.420(a)(4)(iii)(A)

D.2. Covered California asks that HHS clarify if additional options will be available to consumers who will experience a large gap in coverage if they are unable to pay all premiums at once.

Covered California agrees that several scenarios could occur where consumers miss the opportunity to take advantage of their SEP. Reducing gaps in coverage and allowing consumers flexibility when situations arise through no fault of their own makes sense. However, this change could result in an administrative burden for Covered California and possible consumer confusion.

D.3. Covered California requests that HHS further define "reasonably should have known". We believe leaving this decision to those providing enrollment assistance would be burdensome on Exchange operations and would require escalations processes to individually guide consumers to the date that they "reasonably should have known".

D.4. Covered California also seeks clarification on the limitation of how far back a consumer can request enrollment. We propose that HHS make it clear in their final regulations that this SEP is not available across benefit years as it would be administratively burdensome to implement.

#### Clarify Trigger for COBRA Coverage

Covered California strongly supports clarifying that either complete cessation or reduction of employer contributions toward the cost of COBRA coverage would trigger an SEP for Exchange coverage. As is the case with federal regulations, Covered California regulations <sup>25</sup> note "exhaustion of COBRA continuation coverage" as a qualifying life event, with no detail regarding employer contribution. We welcome the opportunity to clarify that either a complete cessation or reduction of the employer contribution would allow an SEP.

D.5. Regarding a potential threshold for employer contribution reduction, we recommend <u>not</u> specifying a threshold.

Because of the administrative burden on the Exchange to track and update a threshold year-to-year, the confusion it would cause consumers to accurately identify and calculate a qualifying reduction, the potential of employer gaming to reduce contribution just above the qualifying threshold, and the wide range of plan costs and employer contribution levels, we believe it is more efficient to not specify a reduction threshold and instead accept any reduction as a trigger for special enrollment.

As with the federal Exchange, an SEP due to exhaustion of COBRA coverage has already been available to individuals enrolling in a QHP on Covered California. Our regulations do not speak to employer contribution level as a factor to qualify for special enrollment. Nonetheless, loss of COBRA coverage is a very infrequently used qualifying life event, representing only 39 enrollments in the 2019 coverage year at Covered

<sup>25</sup> Cal. Code Regs., tit. 10 § 6504(b)

California. Given this low number, we do not anticipate that these amendments would have a negative impact on the risk pool, nor would they increase costs for enrollment partners. In the interests of consumer fairness and aligning risk, we support the proposed implementation of these amendments in both the Exchange and off-Exchange markets.

#### 75% verification for SEP enrollments

Under the proposed regulation, HHS generally expands to SBE the SEP pre-enrollment verification requirements for the FFE and SBE-FPs issued under the 2017 Market Stabilization final regulation.<sup>26</sup> This expansion under the proposed 45 CFR 155.420 added paragraph (f), would require SBEs, unless granted a modification from HHS, to conduct SEP verification for at least 75 percent of new enrollments through SEPs granted to consumers not already enrolled through the applicable Exchange.<sup>27</sup> If an SBE were unable to verify eligibility for an individual newly enrolling in Exchange coverage through an SEP for which it requires verification, either electronically using available data sources or through submitted supporting documentation, then the individual would be ineligible for coverage. This requirement would be effective beginning with plan year 2024.

Covered California believes that HHS has failed to provide clear and compelling reasoning, supported by evidence, to justify imposing this administrative burden on SBEs. The preamble to the proposed regulation states that "… all State Exchanges now conduct either pre-or post-enrollment verification of at least one special enrollment type, and most State Exchanges have implemented a process to verify the vast majority of special enrollment periods requested by consumers." It also notes that HHS "anticipates" a positive outcome on program integrity but concedes that since most SBEs already conduct SEP verification, any positive premium impact would be minimal.<sup>28</sup> We believe these statements expose the proposed regulation as an arbitrary exercise of regulatory authority that will only add cost to current operational practices in SBEs without producing an offsetting positive policy outcome in the form of reduced premiums for consumers or reduced premium tax credit expenditures born by taxpayers.

Further, we have serious concerns that successful SEP verification strategies implemented by SBEs could be jeopardized by imposition of this proposed regulation. While HHS states that they will provide a process for modifications by SBEs, it seems unlikely that SBEs would be able to continue their current practices without changes. To the extent federally required changes deter young and healthy individuals from enrolling in coverage, premiums could become more expensive. Brookings Institution researchers have noted that "both economic theory and empirical evidence imply that the sickest individuals will be the most motivated to bear the burdens required to enroll, while healthier individuals will be most likely to be deterred."<sup>29</sup> Covered California believes that states are best positioned to design implementation strategies that

<sup>&</sup>lt;sup>26</sup> 82 Fed. Reg. 18346 (Apr. 18, 2017) <<u>https://www.govinfo.gov/content/pkg/FR-2017-04-18/pdf/2017-07712.pdf</u>>

<sup>&</sup>lt;sup>27</sup> 85 Fed. Reg. 78572 (Dec. 4, 2020) p. 78663. <<u>https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf</u>>

 <sup>&</sup>lt;sup>28</sup> 85 Fed. Reg. 78572 (Dec. 4, 2020) p. 78663. <<u>https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf</u>
 <sup>29</sup> The Brookings Institution: <u>Trump administration's proposed change to ACA special enrollment periods could backfire</u>. M. Fiedler,
successfully balance program integrity and consumer experience to ensure maximum uptake by all eligible individuals.

California has one of the healthiest risk mixes in the nation: the health status of those enrolled in California being about 21 percent healthier than the rest of the nation in 2019.<sup>30</sup> Covered California has estimated that our healthier risk mix has resulted in savings of approximately \$2.5 billion per year for enrollees and the U.S. Treasury, totaling \$12.5 billion from 2014 to 2018.<sup>31</sup> This healthier risk mix has also helped keep premiums down for consumers, with premium rates increasing by less than one percent for plan years 2020 and 2021. Covered California has achieved these results under the existing regulatory regime which allows for state flexibility in designing SEP verification approaches.

The preamble states that the proposals in the regulation "would provide states with additional flexibilities, reduce unnecessary regulatory burdens on stakeholders, empower consumers, ensure program integrity, and improve affordability."<sup>32</sup>

As we struggle to understand how *imposing a regulation* would reduce regulatory burden and how *minimal premium impact* would improve affordability, we request the following information and clarification about the proposed regulation:

D.6. Data showing how the SEP verification policy impacted the risk mix and premiums in FFE states;

D.7. The policy rationale for setting a required percentage and data showing how the 75 percent threshold was determined as the appropriate amount;

D.8. Data demonstrating an SEP program integrity issue within SBEs;

D.9. Analysis conducted or used to demonstrate that vulnerable populations would not be disproportionally impacted by this proposed regulation; and

D.10. Covered California asks for further clarification about the process and timeline to be granted a modification to the requirement and under what circumstances a modification will be issued.

Finally, we believe it is disingenuous for HHS to claim that the proposed SEP verification requirement supports enrollment in full-year coverage<sup>33</sup> given the lack of evidence and analysis supporting this new regulation. HHS has many other mechanisms to support year-round coverage, such as marketing and promoting coverage options for millions of Americans during the COVID crisis and limiting short-term junk plans and other non-ACA compliant plans.

<sup>&</sup>lt;sup>30</sup> U.S. Department of Health and Human Services, Center for Consumer Information and Insurance Oversight, Premium Stabilization Programs <a href="https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs-">https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs-</a> <sup>31</sup> <u>Covered California's First Five Years: Improving Access, Affordability, and Accountability</u>. (Dec. 2019).

<sup>&</sup>lt;a href="https://hbex.coveredca.com/data-research/library/Chart\_Pack-First\_Five\_Years\_Dec2019.pdf">https://hbex.coveredca.com/data-research/library/Chart\_Pack-First\_Five\_Years\_Dec2019.pdf</a>

 <sup>&</sup>lt;sup>32</sup> 85 Fed. Reg. 78572 (Dec. 4, 2020) p. 78573. < <u>https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf</u>
<sup>33</sup> 85 Fed. Reg. 78572 (Dec. 4, 2020) p. 78628. < <u>https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26534.pdf</u>

### E. Qualified Health Plan (QHP) Issuer Audits

HHS is proposing modifications to current audit activities at 45 CFR 156.480 including non-compliance issues with QHP issuers and compliance reviews. Covered California supports HHS' efforts to conduct audits and compliance activities to ensure that the FFE, SBE, and QHP issuers comply with federal mandates regarding APTC and CSR payments received on behalf of millions of consumers. We appreciate that the proposed language provides more clarity regarding the details of the audit process and expectations from auditees.

### Audit Activities

In the preamble, HHS solicits feedback regarding how they can engage and coordinate with SBEs and federal authorities to address non-compliance issues with QHP issuers. This will be accomplished by HHS conducting routine audits and additional compliance reviews.

Most aspects of the preamble and the proposed regulations primarily focuses on the QHP issuers as the auditee. While HHS provides more details about the HHS audit process, the proposed regulations do not make direct reference regarding any HHS' coordination efforts with SBEs. Covered California recommends that HHS re-consider the SBEs role (with respect to the QHP issuer) and revise the issuer requirements and the audit process accordingly. This is necessary since SBEs contract with QHP issuers and manage and monitor the issuers' performance and compliance. In addition, it appears that HHS intends to apply the same auditing process to all Exchanges (regardless of Exchange type). The auditing process should not be a "one size fits all," since states have implemented different processes related to federal reporting of APTC and CSR data to HHS. Some states rely on their QHP issuers to submit the federal reports to HHS to obtain federal payments for subsidies. However,

for other states, the SBEs themselves prepare and submit the federal report directly to HHS.

Specifically, in California, our records are determined as the single source of truth for all eligibility determinations (e.g. APTC and CSR)). Federal payment of the APTC and CSR are based on Covered California's submission of the federal report (and not the QHP issuers' submission). Therefore, it is important that the audit process differentiates the uniqueness of each state and does not apply a uniform approach for all Exchange types. The preamble and/or proposed federal language should distinguish this difference.

The preamble and proposed regulations specify that HHS may recoup any federal subsidy payments identified as not adequately substantiated by the QHP issuers. The HHS recoupment process also applies when the issuer fails to respond or cooperate with the audit process. HHS may recoup up to 100 percent of federal subsidies made to an issuer for the benefit year(s) that are subject to the audit if the debt is not paid by the issuers. Covered California submits the following questions and comments for response:

E.1. Rather than relying on the issuers to remit payment directly to HHS due to any audit findings, HHS should leverage its existing process. For example, HHS makes monthly federal subsidy payments to QHP issuers who participate in the Exchanges from the Policy Based Payment reporting process. Covered California recommends that HHS applies any debt owed by an issuer to the monthly payment process by making the appropriate adjustments. This would allow for HHS expedient recovery of debts owed by the QHP issuers. As a result, HHS would not be required to recoup up to 100 percent of federal subsidies for the benefit year(s) being audited.

E. 2. Covered California recommends that HHS consider another approach rather than defaulting to a full 100 percent in the event HHS is unable to recoup payment. The 100 percent appears to be excessive and unreasonable, particularly in situations where the debt owed by the QHP issuers are substantially lower. Covered California recommends that this recoupment be lowered to the actual calculated non-compliance amount, rather than the 100 percent.

E. 3. The proposed regulations specify that HHS will provide at least 15 calendar days advance notice of their intent to conduct an audit, letters, and inquires, including requests for supplemental or supporting information. Audit activities require a lot of resource planning and coordination for Exchanges and QHP issuers. Therefore, Covered California recommends that at least 30 calendar days advance notice be considered.

E. 4. The proposed regulations specify the requirement "to submit complete and accurate data to HHS or its designees that is necessary to complete the audit, in the format and manner specified by HHS, no later than 30 calendar days after the initial deadline communicated and established by HHS at the entrance conference." Based on Covered California's role over the QHP issuers, audit planning and coordination is required. Therefore, Covered California recommends at least 45 calendar days to meet the requirement.

E. 5. The proposed regulations specify that a written extension request is required to be submitted within the applicable timeframe of 15 calendar days. Covered California recommends at least 30 calendar days, considering the additional coordination required as the State Exchange responsible for managing and monitoring the QHP issuer.

E. 6. The proposed regulations specify that HHS would share its preliminary audit findings with the issuer and further proposes that the QHP issuer would then have 30 calendar days to respond to such findings in the format and manner as specified by HHS. Covered California contends that the State Exchange is bypassed, and there is no direct reference to its role. Therefore, Covered California recommends at least 60 calendar days to provide for the additional coordination required as the State Exchange responsible for managing and monitoring the QHP issuer and to allow for the State Exchange's due diligence and verification of the issuer's response to the findings.

E.7. Further, the proposed regulations specify how HHS will capture audit results for inclusion in the final audit report, and the proposed plan for corrective actions and response time of 30 calendar days. Covered California recommends at least 60 calendar days to provide for the additional coordination required as the State Exchange responsible for managing and monitoring the QHP issuer, and to allow for the SBEs due diligence and verification of the QHP issuer's corrective actions.

### Compliance Reviews

The proposed regulations specify several, substantial modifications to HHS' Oversight of the Administration of the Advance Payments of the Premium Tax Credit (APTC) and Cost-sharing Reductions (CSR), and user fee programs (§ 156.480). Beyond the traditional audits, the proposal seeks to expand the oversight tools available to HHS to also conduct compliance reviews on QHP issuer's compliance with the applicable federal APTC, CSR, and user fee standards. The proposal also specifies consequences of not complying with the audit and oversight activities. Further, these added oversight tools are to be applied to all Exchange types. Therefore, Covered California questions the reasoning for applying the "one size fits all" audit <u>and</u> compliance approach to unique Exchange models.

The proposed regulations specify HHS' enforcement actions, including imposing civil monetary penalties (CMPs), in situations where state authorities fail to substantially enforce those standards of the applicable federal APTC, CSR, and user fee standards with respect to the QHP issuers participating in SBEs. Covered California recommends that HHS clearly define their criteria as to when and how HHS determines "state authorities fail to substantially enforce those standards." As discussed above, in the proposed regulations, HHS does not make direct reference regarding any HHS' coordination efforts with SBEs who manage and monitor the QHP issuers.

E. 8. HHS should consider developing collaborative oversight and balanced enforcement efforts in coordination with the responsible SBE. Additionally, HHS should consider implementing well-defined monitoring processes such as the review and monitoring of the state's remediation efforts to address and enforce QHP issuer non-compliance, before imposing civil monetary penalties.

The proposed regulations rename 45 CFR § 156.480(c) to "Audits and Compliance Reviews" and clarifies the authority would apply to audits and the proposed HHS compliance reviews. As stated in part, "HHS or designee may audit and perform compliance reviews." Further, *"a compliance review may be targeted at a specific potential error and conducted on an ad hoc basis. For example. HHS may require an issuer to submit data pertaining to specific data submissions. We believe this flexibility is necessary and appropriate to provide HHS a mechanism to address situations in which a systematic error or issue is identified during the random and targeted auditing of a sample of QHP issuers, and HHS suspects similarly situated issuers may have experienced the same systematic error or issue but were not selected for audit in the year in question." While HHS believes that flexibility is necessary and appropriate, Covered California contends that the proposed ad hoc nature of these compliance reviews may place an added administrative burden on both the QHP issuers and the* 

SBEs, who manage and monitor the QHPs. These potential ad hoc compliance reviews, in addition to the scheduled audits, may shift resources away from the main mission of Covered California.

### F. QRS Levels of Hierarchy Comment Requests

Since the establishment of the ACA, HHS continues to establish standards and requirements related to QHP issuer data collection and public reporting of quality rating information in all Exchanges. During the 2020 QRS and QHP Enrollee Survey Call Letter process, HHS received many comments requesting removing levels of the quality rating system (QRS) hierarchy to streamline and improve consumer understanding. As part of this regulation, HHS requests comments on the possible removal of one or more levels of the QRS hierarchy to simplify the QRS hierarchy and improve the overall quality of QRS data collection at 45 CFR 156.1120 and 156.1125.

Covered California agrees with the interest in simplifying the QRS hierarchy if such work will:

- (1) Improve QHP scores' reliability to better distinguish true performance differences
- (2) Ensure that the measures and domains' contribution to the Global and Summary Indicator Ratings are based on weights that are proportionate to their importance.

The hierarchy's composite level is a candidate to eliminate as there is not a compelling interest to report performance at the composite level and the composite level is not needed to ensure appropriate weighing of the QRS measures and domains.

Covered California agrees with the proposed release of the full QHP Enrollee Survey results to the public. However, the most pressing enrollee survey issue is the declining enrollee response rate. The generalizability and utility of the survey results are in jeopardy as response rates fall well below 20% for certain QHPs. The looming fall-off in reportable survey scores also complicates the efforts to improve the QRS measures hierarchy.





Media Line: (916) 206-7777

Twitter: @CoveredCANews

Email: media@covered.ca.gov

FOR IMMEDIATE RELEASE Nov. 25, 2020

# Statement from Peter V. Lee on the Administration's Latest Effort to Undercut Broader Coverage Through the Affordable Care Act

SACRAMENTO, Calif. — Covered California Executive Director Peter V. Lee released the following statement on a proposed rule from the Centers for Medicare and Medicaid Services that would allow states to eliminate <u>www.Healthcare.gov</u> and undercut the Affordable Care Act.

#### Click here to see the proposed rule.

"The proposed rule builds on years of actions by the outgoing administration to undercut the Affordable Care Act. Instead of marketing and promoting coverage options for millions of Americans, as they should during a pandemic, this proposed rule undermines efforts to get insurance coverage to those most in need.

The rationale for the proposed reduction of user fees is to "allow issuers to then pass on the savings to consumers," which belies the reality that multiple policies enacted by this administration have resulted in premiums throughout much of the nation being far higher than they should be. These actions have priced millions of unsubsidized Americans out of coverage. Proclaiming that a reduction of user fees leads to a reduction of premiums flies in the face of the reality that wellspent marketing dollars by this administration would have had a five-to-one return on lowering health care costs for Americans.

Further, the policies of the outgoing administration have had nothing to do with lower premiums in the individual market. In 2020, premiums were lower in much of the nation due to a rebound from overpricing by health plans, while 2021 rates dipped across the nation because millions of Americans delayed and deferred care amidst the COVID-19 pandemic. Better profits for health plans should not be the marker of an effective marketplace.

The user fees can and should be well spent to make sure health plans are held accountable for delivering high-quality care and addressing health disparities. This proposal serves to reduce resources for ensuring more Americans know about and secure more affordable health coverage options for themselves and their families.

Now is a time when we should be leaning in and assuring health plans put consumers first, not running in the opposite direction. Fortunately, the new administration will have the opportunity to consider this proposal and respond in a way that best addresses the needs of Americans."

#### About Covered California

Covered California is the state's health insurance marketplace, where Californians can find affordable, high-quality insurance from top insurance companies. Covered California is the only place where individuals who qualify can get financial assistance on a sliding scale to reduce premium costs. Consumers can then compare health insurance plans and choose the plan that works best for their health needs and budget. Depending on their income, some consumers may qualify for the low-cost or no-cost Medi-Cal program.

Covered California is an independent part of the state government whose job is to make the health insurance marketplace work for California's consumers. It is overseen by a five-member board appointed by the governor and the Legislature. For more information about Covered California, please visit <u>www.CoveredCA.com</u>.





# Californians and COVID-19: Impacts, Responses and Reasons for Hope

# A Study on the Impact of COVID-19 on Californians

11/23/2020





## The Study

Covered California commissioned <u>Greenberg, a Material+ Company</u>, to conduct a survey assessing the "state of health" in California. This 20-minute survey of a representative sample of Californians aged 18-64 (N=3,017) was conducted from October 28, 2020 through November 11, 2020.<sup>1</sup> Key findings from this study are reported below.

### **Key Findings**

- 1. COVID-19 has impacted virtually all Californians, and disproportionately lower income and Latino Californians: COVID-19-related financial hardship as well as COVID-19 itself have had the greatest impact on these communities.
- 2. Financial adversity from COVID-19 worries Californians as much as its health risks--and more than health risks among lower income Californians, for whom the financial impacts are often more immediate.
- 3. Fear for the health of loved ones outweighs fear for one's own health, and virtually all Californians are following safety guidelines to help protect the community.
- 4. Fear and stress are broadly felt impacts of COVID-19: most Californians feel unsafe engaging in regular activities, and Californians without health insurance are especially concerned about seeing friends or having access to the care they'd need if they contracted the disease.
- 5. COVID-19 has led to broad reductions in the use of healthcare services such as preventative care, declining satisfaction with accessible healthcare, and, among uninsured Californians, declining opinions of the California healthcare system overall. White Californians are the only ethnic group among whom a clear majority feel confident they'd have access to the care they need if they contracted COVID-19.
- 6. Telehealth has served as a satisfactory alternative healthcare source—for those who have accessed it. While the telehealth-using population of California has more than doubled, and the majority of telehealth users say it compares favorably to in-person care, access to telehealth varies dramatically by insurance status, with three-fifths of insured Californians but only one-quarter of the uninsured accessing this type of care.

More detailed elaboration of each of these findings appears on the pages that follow.

<sup>&</sup>lt;sup>1</sup> Further details on sample and survey methodology can be found in the Appendix to this document.





# The Universal Impact of COVID-19

**COVID-19 has impacted virtually all Californians (96%)**, and a majority (52%) say COVID-19 has impacted them a lot or a great deal. **Latinos** overall (58% impacted a lot or a great deal), especially **Spanish Dominant Californians** (64%), and the **least affluent Californians** (56% among those at 400% of the FPL or below vs. 47% among those above 400% of the FPL) report the strongest overall impact.

While new safety regulations are the most broadly felt top-of-mind impact of COVID-19 (23%), **job loss and income reduction closely follow as a top-of-mind pandemic effects (20%).** Overall, when initially asked how COVID-19 has impacted them, 34% of Californians mention financial impacts, while fewer (18%) mention impacts on physical health. For many, these **impacts are linked**: lockdowns lead to lifestyle changes that impact health, healthcare costs impact financial security, and so on.

#### Health Impacts

"I have a blood clotting disorder that I should be getting tested for regularly but I've been avoiding appointments because of Covid. Also, the stay at home lockdown has prevented me from my normal activities, and I've been eating and drinking too much, causing a substantial weight gain." - White, Insured

"A good friend is moving to another state, and I don't feel safe seeing her before she leaves, and I don't know if I'll ever see her again. My best friend's husband got covid, and I was afraid for them. Another friend, who is in her 70's, was sick for months with covid, I was afraid she would die, she doesn't know yet if she'll have lasting health problems. I have friends who have lost family and friends to this. " - White, Insured

### Financial Impacts

*"I lost about \$1,200 in my monthly income. I am behind in my rent and I don't see how to make up the payments, continue paying my regular rent, and feed my family at the same time." - Latino, Insured* 

"I am concerned with not having enough to pay all my bills. I worry that I will not have enough money for both my bills and food for my children to eat. With times getting tighter it is hard to have any money saved away just in case." -Latino, Insured

"Job insecurity has made me wonder whether I can afford to cover our mortgage, healthcare costs, etc. My wife lost her job, so we are down to single income with one child." - Asian, Insured greenberg



Critically, both the financial and physical hardships resulting from COVID-19 are most acutely felt among Latino and low income Californians:

### **Financial Impacts**

Three-fifths (62%) of Californians report experiencing job/hours/income reduction either personally or within their household as a result of COVID-19.

- 71% among Latinos overall (83% among Spanish Dominant)
- 72% among Californians at 400% of the FPL or below

Californians at the lowest end of the income spectrum are also the most likely to have migrated into a lower income bracket.

- 40% of those making between \$25-\$35k in 2019 have migrated down
- 27% of those who made \$35-\$50k
- $\circ~$  15% of those who made \$50k

#### Nearly half (47%) of Californians have had trouble paying some kind of bill as a result of COVID-19.

 57% among Latinos (67% among Spanish Dominant)

#### Nearly half (46%) of Californians have dipped into personal savings to support themselves and their families through the crisis.

- 47% among Latinos (54% among Spanish Dominant)
- o 52% among Asian-Americans

#### A majority (56%) of Californians say they need another stimulus relief fund to make ends meet.

- 61% among Latinos (55% among Spanish Dominant)
- o 64% among African-Americans

### Health Impacts of COVID-19

Many Californians have been exposed to COVID-19, at least via people they know:

- Two-fifths (42%) of Californians personally know someone who has <u>tested positive</u> for COVID-19.
- 40% know someone who has <u>quarantined</u> due to a positive test.
- 36% know someone who has <u>quarantined</u> <u>due to being in contact</u> with someone who has tested positive.
- One-fourth (28%) know someone who has been <u>hospitalized</u> due to COVID-19.

More than a quarter (28%) of Californians, 33% of Latinos, and 36% of Spanish Dominant Californians personally know someone has died of COVID-19.

Direct personal experience with COVID-19 (at the time the survey fielded) was more limited but still significant. 1 in 20 (6%) Californians report having personally contracted COVID-19 and 1 in 10 (11%) having gone into quarantine due to close contact with someone else who tested positive. greenberg



## Financial vs. Health Risks

In the midst of pandemic and shutdowns, Californians at large are **as concerned about their financial health as their physical health**: 33% are most concerned about their personal finances vs. 33% for physical health and 23% for mental health. Overall, two-thirds of Californians are more concerned with their financial health (66%) and physical health (67%) as a result of COVID-19, and three-fifths also report increased concerns with their mental health (60%).

- Lower income Californians tend to be most concerned with the financial implications of COVID-19 on their household income (41% among those at 400% of the FPL or below vs. 32% among those above 400% of the FPL); conversely, more affluent Californians tend to be more concerned about the health risks of COVID-19 (49% among those above 400% of the FPL vs. 35% among those 400% of the FPL or below).
- Likely as a result of their lower income levels, uninsured Californians and Californians enrolled with Covered California are more likely to be concerned about the financial impacts of COVID-19 (42% vs. 19% for physical health among those uninsured, 44% vs. 27% among those insured through Covered California).

"My husband lost a really great paying job due to COVID shutdowns. We've been living on unemployment since June. He just got another job but it's the only offer he has had since June and it is 60% less than his previous job. I am looking for a job in retail, hopefully I can at least get some seasonal work at the mall for the holidays. We are thinking about selling my car but that will limit where I can work. These are all problems we have directly because of Covid-19." - White, Uninsured

"I got laid off in March due to COVID and here we are at the end of October and I still have no job and unemployment will run out in 2 months. My creditors are now asking for money and i have no idea how I will pay my bill, put food on the table and pay my rent." - White, Uninsured

"Work has been closed due to covid. Kids are home now so no way to get a daytime job to help with bills, unemployment going to run out soon. Bills are piling up." - Latino, Uninsured





### **Communal Concerns and Safety Measures**

Thinking about the risks of COVID-19, Californians are particularly concerned with potential impacts on their loved ones: by over a 3:1 ratio, Californians say they are more concerned about their families getting COVID-19 (61%) vs. themselves personally (17%). Greater concern for family over personal health spans across income, ethnicity, and insurance status.

*"I do not want to catch [COVID-19] and later on spread it to my family members. Also, I do not want to get sick in general." - White, Insured* 

"My family has asked me to stop driving for Uber since I sometimes come in contact with my 90 year old grandmother and her companion. It has been very hard trying to pay bills..." - Latino Asian, Insured

Perhaps because of concerns with the health of others as well as their own, **Californians are broadly following core COVID-19 safety guidelines**, especially mask wearing (90%), more frequent handwashing (81%), using hand sanitizer (80%), and social distancing (79%).

 Asian-Americans, Chinese-Americans, and Filipino-Americans in particular are outperforming the other ethnic groups in following the safety guidelines (14% above average among Asian-Americans overall, 12% among Chinese-Americans, and 16% among Filipino-Americans).

Table 1. Public safety guidelines followed by majority of Californians				
Mask wearing	90%			
Frequent handwashing	81%			
Using hand sanitizer	80%			
Social distancing	79%			
Avoiding handshakes	74%			
Clean and disinfect surfaces	68%			
Avoid indoor public spaces	60%			
Avoid public transportation and ride sharing	58%			





# COVID-19, Safety, and Fear

One of the most broadly felt impacts of COVID-19 is fear or concern. In addition to the large number of Californians concerned about the impacts of COVID-19 on their physical, financial, and mental health, as a result of COVID-19, **majorities of Californians feel unsafe doing regular activities** such as using public transportation (62%), exercising at a gym (61%), and eating at restaurants (54%). 2 in 5 also feel unsafe allowing their children to attend school in person (43%), voting in-person (41%), seeing friends (41%), and allowing kids to participate in out-of-school activities (40%.)

 Asian-Americans and Spanish Dominant Californians tend to report the highest level of concern conducting a variety of regular activities. For example, Asian-Americans feel especially unsafe using public transportation (73% vs. 62% overall) and exercising at a gym (73% vs. 61% overall), while Spanish Dominant Californians feel especially unsafe engaging in social and professional activities such as seeing friends (55% vs. 43% among all Latinos and 41% among all Californians), seeing family outside their household (51% vs. 39% among all Latino and 38% among all Californians), and going to their workplace (45% vs. 35% among all Latino and 33% among all Californians).

**Californians without health insurance express special concern.** Twice (30%) as likely to have suffered job losses as insured Californians (14%), uninsured Californians are especially concerned with the financial risks of COVID-19 (48% vs. 37% among Californians at large) in part because of their experience to date, and in part because of the potential cost of care, should they contract COVID-19:

"Before as long as i took care of myself i thought i'd be okay, and since health was just something I couldn't afford with my other bills I decided not to have it it...and I was fine But now if something happens to me, and I can't control if this covid 19 ultimately reaches me, I will need help, professional health and that will just put me more in debt with not having insurance and all that will just add to the current financial rut I am in." - Latino, Uninsured

Very few uninsured Californians feel confident they'd have access to the care they need should they contract COVID-19 (21% vs. 52% among those insured), and only 1-in-4 (26%) uninsured Californians are confident in having health insurance over the next year (vs. 66% for insured Californians).

This high-risk context has a direct impact on these Californians' daily lives. For example, **nearly half of uninsured Californians say they don't feel safe seeing friends** in light of COVID-19 (47% vs. 40% among those insured).





# Accessing Health Care Through COVID-19

COVID-19 has led to widespread reductions in healthcare access: over two-thirds (69%) of Californians report lower use of some type of healthcare service as a result of COVID-19, and a majority (57%) say that either they or their provider have cancelled, delayed, or not scheduled some sort of medical care.

 Reduced use of healthcare services is especially prevalent among Spanish Dominant Californians (80% vs. 73% among Latinos overall, 65% among Whites, 68% among African-Americans, 69% among Asian-Americans).

Californians are **especially likely to be postponing preventative care services** such as routine care (39%), follow-up visits for non-urgent problems (36%), and dental cleaning (48%) decisions which may seem safer in the short term but could have dangerous longer-term consequences.

*"I'm too scared to take any of my family to the doctors because of COVID-19 . I really feel like there is more of a chance to contract the virus if we go" - Latino, Insured* 

Although insured Californians, who tend to have a higher baseline level of care, are more likely to report reductions in their use of health care services (70% vs. 55% among the uninsured), **uninsured Californians have by far the lowest satisfaction with the healthcare to which they currently have access** (15% vs. 38% among insured Californians), and they are significantly more likely than insured Californians to say that **COVID-19 has hurt their impression of the Californian medical system** (37% vs. 24% among insured Californians).

 In contrast, 40% of those insured through independent purchases (34% Covered CA, 47% Off-Exchange) say that COVID-19 has improved their perception of California's healthcare system (vs. only 24% among the uninsured).

Still, across the board, due to declining access to care, **satisfaction with accessible** healthcare has likewise declined.

- Prior to COVID-19, half (52%) of Californians were satisfied with the healthcare to which they had access; in contrast, just over a third (37%) are satisfied with the healthcare they've had access to during COVID-19, a -15% drop.
- White Californians were the most satisfied with their healthcare access both pre-COVID (60%) and during (43%), their satisfaction dipped by a magnitude similar to Californians at large.
- Californians who lowered their use of healthcare services report a sharper decline (-18% drop) in satisfaction with the health care to which they have access than those who didn't reduce their use of healthcare services (-6% drop), illustrating the relationship between reduced use and growing dissatisfaction with accessible care.

[See table for detailed healthcare satisfaction numbers.]





Table 2. Satisfied with healthcare to which they have access						
	Pre-COVID-19 During Drop COVID-19 Duri					
	Total Californians	52%	37%	-15%		
Ethnicity	Whites	60%	43%	-17%		
	African-Americans	54%	38%	-16%		
	Latinos overall	47%	34%	-13%		
	Spanish Dominant	43%	34%	-9%		
	Asian-Americans	42%	29%	-13%		
Insurance	Employment Based	58%	42%	-16%		
Source	Individual Market (Covered CA/Off- Exchange)	60%	45%	-15%		
	Off-Exchange	72%	54%	-18%		
	Covered California	51%	37%	-14%		
	Medi-Cal	41%	29%	-12%		
	Uninsured	25%	15%	-10%		

White and African-Americans are the only ethnic groups among whom a majority are confident they'd have the access to healthcare they need if they were diagnosed with COVID-19 (59% among Whites, 46% among Latinos overall, 46% among Spanish Dominant Californians, 51% among African-Americans, 41% among Asian-Americans).

 Confidence in access to the healthcare one would need if diagnosed with COVID-19 is also correlated with household income: only 38% of Medi-Cal eligible Californians are confident, compared to 42% among Lower Subsidy Eligible, 45% among Higher Subsidy Eligible, 55% among New Subsidy Eligible, and 63% among non-Subsidy Eligible Californians.

*"I need to be on health insurance just in case something happens, but I don't have the financial means of getting it." - White, Uninsured* 





Consistent with the disparate financial and health impacts of COVID-19 on this population, **Spanish Dominant Californians are also the most likely to have had trouble paying medical expenses as a result of COVID-19** (21% vs. 13% among Latinos overall, 10% among Whites, 12% among African-Americans, 5% among Asian-Americans).

### **Telehealth: Momentum, Satisfaction, and Access**

While traditional healthcare use has declined, **the share of Californians using telehealth expanded dramatically as a result of COVID-19**, from 22% to 57%. Over a third (35%) of Californians started using telehealth for the first time during COVID-19.

- While Californians across insurance sources increased their use of telehealth during COVID-19, access to telehealth has varied dramatically by insurance status: 60% of insured Californians say they have now used telehealth, compared to only 25% of the uninsured, and insured Californians as twice as likely to have used telehealth for the first time during COVID-19, as compared to the uninsured (36% vs. 17%).
- White Californians are the most likely to have used telehealth during COVID-19 (63%), Asian-Americans the least (51%).

For Californians who have used it, **telehealth has been an effective alternative to inperson care**. In fact, nearly three-fifths (59%) of Californians who used telehealth during COVID-19 are very or extremely satisfied with the quality of care they have received compared to in-person visits with a doctor. Telehealth users also report higher satisfaction with the health care to which they've had access during COVID-19, as compared to non-telehealth users (41% vs. 31% satisfied).

Of new users who started using telehealth during COVID-19, nearly half (46%) plan to continue using telehealth post-COVID-19. This would result in a near doubling of the long-term telehealth usage for the population of California.

Table 3. Experience with Telehealth (Among all Californians)	
Already used telehealth pre COVID-19	22%
Started using telehealth during COVID-19 and plan to continue	16%
Started using telehealth during COVID-19 and don't plan to continue	19%
Have never used telehealth	43%





## Methodological Details

In order to understand Californians' "state of health" during COVID-19, Greenberg conducted a 20-minute online survey of 3,017 Californians aged between 18-64 between October 28, 2020 and November 11, 2020. The survey was offered in English and Spanish.

### **Timeline of Events**

- October 2, 2020: Donald Trump tested positive for COVID-19
- October 28, 2020: Greenberg started fielding this study
  - o COVID-19 national total was at 8.7 million infections and 227K deaths
- November 7, 2020: The Associated Press declares Joe Biden the winner of the 2020 presidential contest
- November 9, 2020: Pfizer's vaccine candidate was found to be more than 90% effective in preventing COVID-19 in participants without evidence of prior SARS-CoV-2 infection in the first interim efficacy analysis
- November 11, 2020: Greenberg completed fielding for this study
  - o COVID-19 national total is at 10.5 million infections and 242K deaths

|--|

AUDIENCES	TOTAL N SIZE ( <u>UNWEIGHTED</u> )*	WEIGHTED DISTRIBUTION
Total Californians	N=3017	N=3017
	·	
Gender		
Male	N=1311	49.5%
Female	N=1687	49.5%
Non-binary/Prefer not to answer	N=19	1%
	•	•

<sup>&</sup>lt;sup>2</sup> Survey data was weighted to the known demographic distribution of California, based on the U.S. Census.







DMAs				
San Francisco	N=524	17%		
San Diego	N=268	8%		
Sacramento	N=211	6%		
LA	N=1595	47%		
Other DMA	N=419	22%		
Age				
18-24	N=480	15%		
25-34	N=746	22%		
35-44	N=693	22%		
45-64	N=1098	41%		
Income				
Less than \$25,000	N=516	14.5%		
\$25,000 to \$49,999	N=578	16.5%		
\$50,000 to \$74,999	N=530	14.5%		
\$75,000 to \$99,999	N=427	12.5%		
\$100,000 to \$149,999	N=452	16.5%		
\$150,000 or more	N=412	22.5%		
Prefer not to disclose	N=102	3%		
Insurance source				
Employer coverage	N=1608	53%		







Medi-Cal	N=779	29%
Covered California	N=163	4.3%
Off-exchange	N=109	3.6%
Other coverage	N=120	3.9%
Uninsured	N=238	6.1%
Ethnicity		
White, non-Latino	N=1214	36%
Latino	N=1115	39%
Spanish Dominant	N=265	21.8%
African-Americans	N=243	8%
Asian-Americans	N=430	16%
Chinese	N=155	37.3%
Vietnamese	N=58	10.6%
Filipino	N=77	9.7%
Korean	N=43	9.7%
Other Asian	N=189	42.2%
Other Ethnicity	N=194	4%

1% of survey respondents self-identified as non-legal residents of California or declined to confirm legal residency in California.



# Winding Down Continuous Enrollment for Medicaid Beneficiaries When the Public Health Emergency Ends

January 7, 2021 | Sara Rosenbaum, Morgan Handley, and Rebecca Morris



# ABSTRACT

- Issue: The Families First Coronavirus Response Act (FFCRA) provides enhanced federal Medicaid funding to states meeting certain conditions, including continuous beneficiary enrollment throughout the public health emergency period regardless of changes that might otherwise affect eligibility. Even when continuous enrollment ends, millions of current beneficiaries will remain eligible for Medicaid, elevating the importance of a wind-down process that adheres to important safeguards against erroneous termination of benefits. New federal guidance gives states broad options for returning to normal operations but a constrained timeframe for doing so.
- **Goals:** Assess significance, impact, and ultimate implications of winding down the FFCRA continuous enrollment protection.

- **Methods:** Analysis of legislation, regulations and guidance, and federal and state Medicaid enrollment data.
- Key Findings: Erroneous disenrollment could affect tens of millions of Medicaid enrollees protected by FFCRA continuous enrollment, while new guidance on resumption of the normal application and enrollment process could affect millions more. Among more than 68 million beneficiaries enrolled as of July 2020, 44 percent were children, 56 percent were adults, 14 percent were beneficiaries with disabilities, and 9 percent were age 65 and older. State enrollment composition varied significantly, but all states have large numbers of high-need enrollees who depend on continuous care.
- **Conclusions:** The end of the public health emergency will restore the normal Medicaid enrollment and eligibility redetermination process. Averting erroneous enrollment terminations and lengthy application delays requires detailed guidance, with enhanced federal funding throughout the wind-down period.

# Background

To help states address surging health care needs during the COVID-19 pandemic,<sup>1</sup> the Families First Coronavirus Response Act (FFCRA) temporarily increases federal Medicaid payments.<sup>2</sup> This funding enhancement (6.2 percentage points over the normal state rate) stops at the end of the calendar quarter in which the public health emergency declaration ends. The Secretary of Health and Human Services (HHS) last extended the declaration on October 23, 2020, meaning that the current period will end on January 23, 2021.<sup>3</sup> Were this to happen, the funding enhancement would end the last day of March 2021.

All states are receiving the FFCRA Medicaid enhancement and must satisfy certain conditions that accompany it.<sup>4</sup> These conditions bar restrictions on "eligibility standards, methodologies and procedures" beyond January 1, 2020, levels; premium increases beyond January 1, 2020, levels; and cost-sharing for Medicaid COVID-19 testing and treatment benefits, including vaccines.<sup>5</sup> The FFCRA conditions also mandate continuous enrollment throughout the federal pandemic public health emergency period for people enrolled in Medicaid on or after the date of enactment (March 18, 2020). This final condition effectively suspends Medicaid's regular eligibility renewal and redetermination process, which ordinarily happens routinely throughout the year or whenever a state receives information that could affect eligibility. FFCRA allows states to end continuous enrollment only in the case of beneficiaries who voluntarily disenroll or move out of state. However, Trump administration regulations that took effect in November apply this protection only to beneficiaries considered "validly enrolled" in Medicaid, not those enrolled ostensibly as a result of agency error or conviction for fraud.<sup>6</sup> On December 22, 2020, the Centers for Medicare and Medicaid Services (CMS) published guidance for resuming normal eligibility and enrollment operations once the emergency ends.<sup>Z</sup> Noting the challenges involved in returning to normal, the guidance encourages states to develop a post-COVID eligibility and enrollment operational plan, clarifies that normal safeguards against erroneous denials or coverage continue to apply, and provides states with a broad menu of strategies. This menu includes, among other actions, prioritizing the review process, slowing down application and enrollment timeframes, adopting eligibility and enrollment simplification options, and using older information when processing redeterminations and renewals.

While the guidance provides flexibility and options, it also provides a short timeframe for states to restore normal enrollment and renewal activities. CMS is clear that it expects states to prioritize removing people "likely to be no longer eligible" and who "no longer meet eligibility criteria." Additionally, FFCRA provides no funding enhancement during the disaster recovery phase.

# Significance of the Continuous Enrollment Protection

FFCRA continuous enrollment guards against coverage interruptions that affect access to care. Coverage interruptions are common in Medicaid, even among people who remain eligible for assistance. Indeed, when the continuous enrollment period does end, millions of beneficiaries likely will remain eligible, either under the eligibility group to which they belong or another category because their circumstances may have changed only modestly.<sup>8</sup>

Medicaid has more than two dozen eligibility categories, each governed by strict rules. Even small changes in life circumstances can end eligibility entirely or cause the category to change.

For example, a small pay increase can cause working parents to lose Medicaid for themselves, while shifting their children from Medicaid to the Children's Health Insurance Program (CHIP), which uses more generous eligibility rules.<sup>9</sup> Similarly, at the end of a 60-day postpartum period, women may shift into the ACA low-income adult expansion group or qualify for more limited coverage under a state's family-planning eligibility option. A 64-year-old with low income who is receiving full Medicaid coverage through the ACA expansion may, when qualifying for Medicare at age 65, lose full Medicaid, remaining eligible only for Medicaid help with Medicare premiums and cost-sharing. Among beneficiaries whose basis of eligibility is tied to disability or age, changes in health status or financial circumstances can necessitate an eligibility redetermination.

The FFCRA continuous enrollment protection is designed to avert coverage interruption. While modified by the recent rule (which also allows states to move protected enrollees from a more generous to a more narrow coverage category in certain situations, like when they turn 65), the FFCRA protection remains a critical check on disenrollment in the middle of a pandemic.

# MEDICAID'S LONG-STANDING PROTECTIONS AGAINST ERRONEOUS DISENROLLMENT AND BENEFIT DENIALS

The FFCRA reforms effectively sit atop long-standing provisions of federal Medicaid law, among the most important of which is bedrock protections aimed at avoiding erroneous reduction or loss of benefits.<sup>10</sup> Long-standing protections also require states to carefully review applications for new coverage, critical during a period of heightened health care need. These rules are a permanent feature of Medicaid and remain in place during the pandemic. The protections against the wrongful termination of coverage have their basis in federal constitutional due process principles, articulated by the United States Supreme Court in its 1970 landmark case *Goldberg v. Kelly*, which concluded that the "brutal need" of the poorest Americans outweighs a state's desire to ensure that people no longer eligible do not receive benefits.<sup>11</sup>

To guard against erroneous Medicaid termination, states must first conduct a careful review. If changes have occurred that implicate ongoing eligibility under one coverage category, other coverage categories also must be assessed. The results of the review must be communicated through advance written notice and, if a beneficiary asks for one, an impartial hearing prior to a reduction or termination of benefits. FFCRA effectively suspends coverage reductions or terminations during the emergency, but nothing in FFCRA alters the *Goldberg* protections once the redetermination process resumes.

# How Many People Depend on Safeguards Against Erroneous Disenrollment?

Using the most recent Medicaid monthly enrollment information, we sought to gauge the magnitude of the FFCRA continuous enrollment protection in terms of the size of the protected population both nationally and by state. In the case of FFCRA, the protected population equates to the entire enrolled Medicaid beneficiary population, since all beneficiaries depend on the proper functioning of erroneous disenrollment safeguards.

Monthly Medicaid enrollment data available through the Centers for Medicare and Medicaid Services (CMS) are reported nationwide and are further sorted into numbers of enrollees who are children or adults. Drawing from Kaiser Family Foundation estimates based on 2014 Medicaid enrollment data, we estimated the percentage of enrollees who are children and adults with disabilities or adults age 65 and older (these percentages are not reported in the monthly data) — and thus especially dependent on FFCRA continuous enrollment and *Goldberg* safeguards.<sup>12</sup>

### **PROTECTED MEDICAID ENROLLMENT POPULATION: NATIONAL, JULY 2020**

CMS reports preliminary data that show that in July 2020, 68,826,573 children and adults were enrolled in Medicaid and thus protected by the FFCRA continuous enrollment policy. (Children whose CHIP coverage is through a Medicaid expansion — approximately 7 million — are excluded from this figure.) The July 2020 enrolled population represents a 4.3 million increase over July 2019 enrollment levels, reflecting a pandemic-related enrollment surge.<sup>13</sup> Within the July 2020 population, CMS reports that nearly 30 million (44%) were children and nearly 39 million (56%) were adults (Exhibit 1). We estimate that, within the national enrollment population, there were about 9.6 million children and adults with disabilities (14% of total enrollment) and 6.2 million adults age 65 and older (9% of total enrollment).



Source: Sara Rosenbaum, Morgan Handley, and Rebecca Morris, Winding Down Continuous Enrollment for Medicaid Beneficiaries When the Public Health Emergency Ends (Commonwealth Fund, Jan. 2021). https://doi.org/10.26099/bw1x-3r88

# PROTECTED ENROLLMENT POPULATION BY STATE: JULY 2020

Exhibit 2 below shows the size of each state's Medicaid population protected by the FFCRA continuous enrollment policy. According to CMS, between February 2020 (before the pandemic emergency was declared) and July 2020, all states experienced combined Medicaid/CHIP enrollment growth.<sup>14</sup>

Exhibit 2

# Medicaid Enrollment by State, July 2020

United States64.326.573445624149Albahm791.3776436192111Albahm791.3776436121371Alsaka131.4873961321372Alcora1.756.418NANA28118Albahma10.615.79234672988Colorado1.284.231406025128Colorado1.284.231406025128Detitical320.6594258231271Dittical3.716.7476436211513Consecticul35.35376323891Havati332.515376323128Indina1.51.170485227178Indina1.51.170485227178Indina1.51.1704852132091Kentucky1.371.401366434188Louidana1.474.310406023128Indina1.274.5014067199113Marshall1.474.310406023128Indina1.474.310406023128Indina1.275.553961241991 <tr< th=""><th>State</th><th>Total Medicaid enrollment (july 2020) [1]</th><th>Percent of children enrolled (July 2020) [1]</th><th>Percent of adults enroiled (July 2020) [1]</th><th>Percent of insured population in Medicaid [2]</th><th>Percent of Medicaid population disabled (2014) [3]</th><th>Percent of Medicaid population age 65+ (2014) [3]</th></tr<>	State	Total Medicaid enrollment (july 2020) [1]	Percent of children enrolled (July 2020) [1]	Percent of adults enroiled (July 2020) [1]	Percent of insured population in Medicaid [2]	Percent of Medicaid population disabled (2014) [3]	Percent of Medicaid population age 65+ (2014) [3]
Akabara791,3776436192111Alasha218,487396132137Akarona17,4867NANA28118Akarona10,615,78234602988Califormi10,615,782346025128Califormi1284,231406025128Cenvencicu85,4953763271014Delaware230,850425825127Columba3,115,7476436211513Georgia1,72,931663419169Hawat332,515376323128Indian1,516,170485227178Indian1,516,170485721137Kanas34,293643613209Kanas34,293643613209Kanas34,293643613209Kanas34,293643613209Kanas34,293643613209Kanas34,293643613209Kanas34,293643613209Kanas34,2936436132013Kanas1,374,0164<	United States	68,826,573	44	56	24	14	9
Akasa218,487396132137Artenas030,192NANA28118California10,615,79234662988California12,64591406025127Connecticu63,6393763271014Delware23,659425825127Ciclombia23,269NANA7179Finda37,174643621167Geogle17,28,937632589Hawai32,51537632589Idsha17,54,917645227178Idsha15,170485227178Idsha15,170485227178Idsha15,170495227178Idsha15,170495221178Idsha12,14152211399Kansa32,03435721139Idsha144,140406023128Idsha144,1404062231616Marka12,4501612418916Marka14,45016223161616Marka14,450163241616 <td>Alabama</td> <td>791,377</td> <td>64</td> <td>36</td> <td>19</td> <td>21</td> <td>11</td>	Alabama	791,377	64	36	19	21	11
Atzana1,754,618NANA28118Atanas803,192435729188Calorado1,284,231406025128Connecticut85,49337632777Delavare230,659425825127Delavare230,6594258211513Connecticut87,1726436211513Georgia1,728,931663419169Haval332,51537632589Idaho319,045495121167Illindia1,51170485227178Indiana1,51170485227137Kanzas342,994357192218Luidan1,74,417406036199Maine222,5474357192218Kanzas1,44,1403466221661Maryand1,45,019386223128Maschaustis1,44,1403466221661Maryand1,45,019366124169Maschaustis1,44,1403466221662Maschaustis1,44,1403466221662Mascha	Alaska	218,487	39	61	32	13	7
AkanasaB03.1924.35792188Califond10.615,782346025128Conracticut856,495376.3271014Delawar20.059425825127Delawar32.069A25825127Delawar32.059A25825127Delawar32.059A2643419169Howai33.51537632589Hindia151.170485227178Indiana151.170485227178Indiana151.170485227178Indiana151.170485227178Indiana151.170485227178Indiana151.170486434188Indiana151.170486434188Indiana151.170406023128Indiana174.401366434188Indiana174.401366434188Indiana174.601366128128Indiana174.601366221119Maschuetti144.001303722166Indiana16	Arizona	1,754,618	NA	NA	28	11	8
California10.615.72234662988Colarado1.284.231406025128Connecticut656.495376327127Districtor232.860NANA37179Florida3.716.74764362.11513Georgia1.729.93164362.1169Havail332.51537632.589Illinds2.725.19540602.3128Illinds1.516.17048562.72137Kansa342.993643633209Kansa1.275.195406036199Illinds1.516.1704866222.110Kansa342.993646434188Lousiana1.474.310406036199Maine1.245.01138622.2166Mayand1.045.11538622.1119Minesota1.097.04505112812Missispi1.097.04561512810Newlark1.56.0796337221310Nessispi1.54.17046561981010Nerback1.597.9163372.412 <td< td=""><td>Arkansas</td><td>803,192</td><td>43</td><td>57</td><td>29</td><td>18</td><td>8</td></td<>	Arkansas	803,192	43	57	29	18	8
Coloradicul1.24.231406025128Connecticul85.0593763271014Detaricul32.059425825127Districul32.250NANA37179Florida3.716,7476436211513Georgia1.729,931663499169Hawait33.2515376323128Idaba3.19,045495121167Illinois2.725,185406023128Indana1.516,170485721137Kansa3.4293643613209Kanka1.474,310406023128Mayhant1.245,011406023128Mayhant1.244,014462223166Minschuetts1.440,1403466221310Misshipi55,079635712128Misshipi55,07963532413910Newashuett55,0796354241310Newashuett55,079635324128Newashuett55,079645524128Newashuett55,079635324128<	California	10,615,782	34	66	29	8	8
Connecticut653,4953763271014Delaware230,659425825127Bericka323,659425825179Bericka37,16,47643419169Hawali332,51537632589Idaho319,045495121167Itiliois27,25,185406023128Iowa628,203435721137Kanasa1,47,410466036199Kanasa1,47,410466023128Louislan1,47,410406023128Louislan1,47,410406023128Marke222,5474366222110Marke1,245,001406023128Mayfand1,440,1403466222110Minesta1,440,1403466222110Minesta1,97,704505021119Minesta1,97,704505021119Minesta1,54,801455524128Minesta1,54,801455524128Minesta1,54,7014555241210Nethage1	Colorado	1,284,231	40	60	25	12	8
Delware230.659425825127District of Countable323.860NANA37179Florida3.716.74764362.11513Georgla17.074764362.1169Hawall332.51537632.58.09Idaho3.90.4549512.1167Illinds2.72.51840602.3128Iowa628.0343572.1137Kanasa342.993643613209Kanasa1.474.31046662.2128Luidana1.474.31040662.2128Maryon1.440.4040662.2136Maschustt1.440.40462.2136Maschustt1.440.40462.2149Maschustt1.240.5139612.2166Maschustt1.697.70450502.1119Maschustt1.697.70450502.1119Maschustt1.697.70450502.1119Maschustt1.697.70450502.1119Maschustt1.697.70450502.1119Maschustt1.697.7045050121110<	Connecticut	865,495	37	63	27	10	14
Dictional Georgia32.360NANA37179Florida3.716,7476436211513Georgia1.729,931663419169Hawaii332,515406023128Illinois2.725,185406023128Indiana1.516,170485227178Illinois2.725,185406023137Karsas342,993643613209Kertucky1.371,401366434188Luulana1.474,310406023128Maryand1.245,001406023128Masachusets1.444,1043466222110Masachusets1.444,1043466222312Masachusets1.441,1043466222312Missingh550,0746337222312Missingh550,0746337222312Nevada647,300455524128Mortan225,055396124128Nevada647,300455524128Nevada647,300455524128Nev Metico1.44,8449111111 <td>Delaware</td> <td>230,659</td> <td>42</td> <td>58</td> <td>25</td> <td>12</td> <td>7</td>	Delaware	230,659	42	58	25	12	7
Finda3.716,7476436211513Georgia1.726,931663419169Idaho332,515406023128Idaha1.516,170485227178Indiana1.516,170485227178Idaha1.516,170485227178Kansas342,93643613209Kantak1.374,01366434188Lauislana1.474,310406023128Maryand1.245,001406023128Maryand1.245,00140662221100Minescia1.097,07505021119Masshapl55,00763372223128Mortana225,05539612419010Newada65,50043552412810Newada65,50043561512810New York575,0176356141210New York65,750445615128New York575,017465415128New York575,017465415128New York575,01746541512	District of Columbia	232,860	NA	NA	37	17	9
Georgia1,72,931663419169Hawaii332,51537632589Hawaii319,045496121167Illinois2,725,185406023128Indiana1,516,170485227178Iowa628,203435721137Kensas342,93646434188Louislana1,474,310406036199Maine222,5474357192218Mayahad1,245,01406623128Minsstapi2,410,103466222110Missispi59,0796337222312Missispi59,0796337222312Missispi59,0796337241930Netraka224,24613916198Netraka24,242613916128Netraka24,242613916128Netraka24,242613916128Netraka24,242615524128Netraka24,2426159411011Netraka24,2426159128Netraka59,076314	Florida	3,716,747	64	36	21	15	13
Hawaii322.51537632589Idaho319.045495121167Ilaha2.725.185406023128Indiana1.516.170485227178Iowa628.203435721137Kansas32.093643613209Louisiana1.474.310406036199Maine222.5474357192218Masachusts1.440.406023128Masachusts1.440.10406023128Masachusts1.440.144066222110Masachusts1.440.14505021119Masachusts1.440.14505021119Masachusts1.400.14505021119Missouri900.426139131710Netaska224.22615524128Newale657.500455524128Newale575.813261191210New Maxico742.1655941171810New Maxico742.1655941171810New Maxico74.1655941171810New Maxico	Georgia	1,729,931	66	34	19	16	9
Idaho319.045495121167Illinois2,725,185406023128Iowa628,203435721137Kansas342,993643613209Kentucky1,371,401366434188Louislana1,474,310406036199Maine222,5474357192218Maryand1,474,300406023128Maryand1,446,0103466221610Michigan2,410,5193866221610Missaspipi550,0796337222312Missauri9,004,2613916198Northara22,0553961241910Netzaska224,2426139131710Newada657,500455524128New Marko7,42,165445615128New Marko7,52,8123261191210New Marko7,52,8123961171810New Marko7,52,812396125147New Marko7,52,812682514710New Marko7,52,812682812810	Hawaii	332,515	37	63	25	8	9
Illinois2.725,185406023128Indiana1.516,170485227178Kansa642,023435713209Kansa342,993646434188Louislan1.747,110366436199Maine222,5474357192218Mayland1.245,001406623128Massachusetts1.440,1403466222110Michigan2.410,519386225166Minesota1.097,704505021119Misissipi559,0776337222312Missouri900,442613916198Montana225,0553961241910Newada657,500455524128Newder1.548,484396119210New Jersey1.548,4843961191111North Dakota96,231465415128New York5,750,8123268311111North Dakota96,2313657242836New Jersey1.548,484396123137Oklahoma680,4016357242836 </td <td>Idaho</td> <td>319,045</td> <td>49</td> <td>51</td> <td>21</td> <td>16</td> <td>7</td>	Idaho	319,045	49	51	21	16	7
Indiana1.516.70485227178lowa628.03435721137Kansas342.993643613209Kansas1.371.016636199Maine225.5474357192218Mayland1.474.310406023128Maryland1.440.01406623119Michigan2.410.519386225166Minsschusts1.409.704505021119Missispl550.0796337222312Missachusts1.097.704505021119Missispl550.0796337222312Missachust1.097.704505021119Missispl550.0796337222312Missispl550.079633722810Netraska224.2426139131710Netraska12.44.2436119121010Newlacio742.165415940128Newlacio1.546.8433961191210North Carolia1.586.625363721137North Carolia1.586.62536251473 <t< td=""><td>Illinois</td><td>2,725,185</td><td>40</td><td>60</td><td>23</td><td>12</td><td>8</td></t<>	Illinois	2,725,185	40	60	23	12	8
lowa628,03435721137Kansa342,993643613009Kentucky1,371,401366436199Malne222,5474357192218Maryland1,474,101406023128Masschusetts1,440,1403466222110Masschusetts1,440,14034662221119Masschusetts1,400,1705050211191212Misslappi559,079633722231213131313Montana225,0553961241981014 <t< td=""><td>Indiana</td><td>1,516,170</td><td>48</td><td>52</td><td>27</td><td>17</td><td>8</td></t<>	Indiana	1,516,170	48	52	27	17	8
Kanas     342,993     64     36     13     20     9       Kentucky     1,371,401     36     64     34     18     8       Louislana     1,474,310     40     60     36     19     9       Maryland     1,245,001     40     60     23     12     8       Massachusetts     1,440,140     34     66     22     21     100       Minsachusetts     1,440,140     34     66     22     21     10       Mississipi     59,079     63     37     22     23     12     8       Mississipi     59,079     63     37     22     13     10     10       Netsaka     224,242     61     39     16     19     8     10       Newdac     657,500     45     55     24     12     8     11     11       Newdac     742,165     41     56     15     12     8     10     11     11 <t< td=""><td>lowa</td><td>628,203</td><td>43</td><td>57</td><td>21</td><td>13</td><td>7</td></t<>	lowa	628,203	43	57	21	13	7
Kentucky     1,371,401     36     64     34     18     8       Louisian     1,474,310     40     60     36     19     9       Maine     222,547     43     57     19     22     18       Massachusetts     1,440,140     34     66     23     12     10       Michigan     2,410,519     38     62     25     16     6       Minnesto     1,097,704     50     50     21     11     9       Mississipi     590,79     63     37     22     23     12       Missuri     900,442     61     39     16     19     8       Missuri     900,442     61     39     13     17     10       Netraska     224,242     61     39     40     12     8       New fork     15,500     45     55     24     12     8       New fork     5,5012     32     68     31     11     11	Kansas	342,993	64	36	13	20	9
Louisiana     1,474,310     40     60     36     19     9       Maine     2,25,47     43     57     19     22     18       Maryland     1,245,001     40     60     23     12     8       Massachusets     1,440,140     34     66     22     16     6       Minssachusets     1,097,704     50     50     21     11     9       Mississippi     559,079     63     37     22     23     12       Mississippi     559,079     63     37     22     13     70       Missachusets     242,42     61     39     16     19     8       Nethraska     242,42     61     39     13     71     00       Newlersey     15,48,484     39     61     19     12     8       New Mexico     742,165     41     59     40     12     8       New Texpe     1,586,625     59     41     77     18     <	Kentucky	1,371,401	36	64	34	18	8
Maine222,5474357192218Maryland1,245,001406023128Massachusetts1,440,1403466222110Michigan2,410,519386225166Minnesota1,097,704505021119Missisippi559,0796337222312Missouri900,442613916198Mortana225,0553961241900Netraska224,2426139131700Nevada657,500455524128Newada181,735445615128New fork7,50,8123268311111North Carolina1,586,625594179228Ohic2,62,6131396125147Ortgon935,537326825107Pennsylvania2,914,4564357242800Rode Island99,12663421158South Dakota99,12663412169Tennessee1,380,73524811124Vermont158,338376327149Utah305,573524811124<	Louisiana	1,474,310	40	60	36	19	9
Maryland 1,245,001 40 60 23 12 8   Massachusetts 1,40,140 34 66 22 21 10   Michigan 2,410,519 38 62 25 16 6   Minnesota 1,097,704 50 50 21 111 9   Mississipi 559,079 63 37 22 23 12   Missouri 900,442 61 39 16 19 8   Montana 225,055 39 61 24 19 10   Nebraska 224,242 61 39 13 17 10   Netraska 224,242 61 39 13 12 8   New Asico 657,500 45 55 24 12 8   New Mexico 742,165 41 59 40 12 8   New Mexico 742,165 41 59 40 12 8   New Mexico 742,165 41 59 40 12 8   North Catolina 1,586,625 59 45 11 1 10   North Datota 96,231 46 57 <td< td=""><td>Maine</td><td>222,547</td><td>43</td><td>57</td><td>19</td><td>22</td><td>18</td></td<>	Maine	222,547	43	57	19	22	18
Massachusetts   1,440,140   34   66   22   21   10     Michigan   2,410,519   38   62   25   16   6     Minnesota   1,097,704   50   50   21   11   9     Mississippi   559,079   63   37   22   23   12     Missouri   900,442   61   39   16   19   8     Montana   225,055   39   61   24   19   10     Netwada   657,500   45   55   24   12   8     Newada   657,500   45   56   15   12   8     New Mesco   742,165   41   59   40   12   8     New Mesco   742,165   41   59   40   12   8     New York   5,750,812   32   68   31   11   11     North Dakota   96,231   46   54   15   12   8     Ohio   2,264,31   39   61   25   14   7	Maryland	1,245,001	40	60	23	12	8
Michigan 2,410,519 38 62 25 16 6   Minnesota 1,097,704 50 50 21 11 9   Mississipil 559,079 63 37 22 23 12   Missouri 900,442 61 39 16 19 10   Nebraska 224,242 61 39 13 17 10   Nevada 657,500 45 55 24 12 8   New Mexico 742,165 44 56 15 12 8   New Merico 742,165 41 59 40 12 8   New Merico 742,165 41 59 40 12 8   New Merico 742,165 41 59 40 12 8   North Carolina 1,586,625 59 41 17 18 10   North Dakota 96,231 46 54 15 12 8   Ohio 2,626,131 39 61 25 14 7   Okahoma 680,401 63 37 24 28 10   Rode Island 279,162 32 68 25 <td>Massachusetts</td> <td>1,440,140</td> <td>34</td> <td>66</td> <td>22</td> <td>21</td> <td>10</td>	Massachusetts	1,440,140	34	66	22	21	10
Minesota 1,097,704 50 50 21 11 9   Mississippi 559,079 63 37 22 23 12   Missoiri 900,442 61 39 16 19 8   Montana 225,055 39 61 24 19 10   Nebraska 224,242 61 39 13 17 0   Nevada 657,500 45 55 24 12 8   Newada 181,735 44 56 15 12 8   New Jersey 1,548,484 39 61 19 12 10   New Mexico 742,165 41 59 40 12 8   New York 5,750,812 32 68 31 11 11   North Dakota 96,231 46 54 15 12 8   Ohio 2,626,131 39 61 25 14 7   Oklahoma 660,401 63 37 21 13 7   Oregon 95,537 32 68 28 12 8   South Carolina 96,5018 58 42 21 15 </td <td>Michigan</td> <td>2,410,519</td> <td>38</td> <td>62</td> <td>25</td> <td>16</td> <td>6</td>	Michigan	2,410,519	38	62	25	16	6
Mississippi559,0796337222312Missouri900,442613916198Montana225,0553961241910Nebraska224,2426139131710Nevada657,500455524128New Ada657,500455524128New Ampshire181,735445615128New Mexico742,165415940128New York5,750,8123268311111North Dakota96,231465415128Ohio2,626,131396125147Orgaon95,537326828128South Carolina9,912663412158South Carolina9,6315347231910Rende Island279,162326828128South Carolina96,518584221158South Carolina99,912663412159Tennessee1,380,7435347231910Texas3,931,15075251714911Vermont158,3383763271211Verdintan16,639461666 <t< td=""><td>Minnesota</td><td>1,097,704</td><td>50</td><td>50</td><td>21</td><td>11</td><td>9</td></t<>	Minnesota	1,097,704	50	50	21	11	9
Missouri900,442613916198Montana225,0553961241910Nebraska224,2426139131710Nevada657,500455524128New Adampshire181,735445615128New Jersey1,548,4843961191210New Mexico742,165415940128New York5,750,8123268311111North Carolina1,586,6255941171810North Dakota96,231465415128Ohio2,626,131396125147Oregon935,537326825107Pennsylvania2,914,4564357242810Rode Island279,162326828128South Carolina965,018584221159Tennessee1,380,7435347231910Texas3,931,150752517149Utah305,573524811124Vermont158,3383763271211Virgina1,041,6396454161714	Mississippi	559,079	63	37	22	23	12
Montana     225,055     39     61     24     19     10       Nebraska     224,242     61     39     13     17     10       Newada     657,500     45     55     24     12     8       New Mampshire     181,735     44     56     15     12     8       New Jersey     1,548,484     39     61     19     12     10       New Mexico     742,165     41     59     40     12     8       New York     5,750,812     32     68     31     11     11       North Carolina     1,586,625     59     41     17     18     10       North Dakota     96,231     46     54     15     12     8       Ohio     2,626,131     39     61     25     14     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10 <td>Missouri</td> <td>900,442</td> <td>61</td> <td>39</td> <td>16</td> <td>19</td> <td>8</td>	Missouri	900,442	61	39	16	19	8
Nebraska     224,242     61     39     13     17     10       Newada     657,500     45     55     24     12     8       New Jersey     181,735     44     56     15     12     8       New Jersey     1,548,484     39     61     19     12     10       New Mexico     742,165     41     59     40     12     8       New York     5,750,812     32     68     31     11     11       North Carolina     1,586,625     59     41     17     18     10       North Dakota     96,231     46     54     15     12     8       Ohio     2,626,131     39     61     25     14     7       Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     28     10     7       Pennsylvania     2,914,456     43     57     24     28     10	Montana	225,055	39	61	24	19	10
Nevada657,500455524128New Hampshire181,735445615128New Jersey1,548,4843961191210New Mexico742,165415940128New York5,750,8123268311111North Carolina1,586,6255941171810North Dakota96,231465415128Ohio2,626,131396125147Oklahoma680,401633721137Oregon935,537326825107Pennsylvania2,914,4564357242810South Carolina965,018584221158South Carolina99,912663412159Tennessee1,380,7435347231910Texas3,931,150752517149Utah305,573524811124Vermont158,3383763271211Virginia1,361,63944562611 $4$	Nebraska	224,242	61	39	13	17	10
HampshireNo. 11SoNo.No.New Jersey1,548,4843961191210New Mexico742,165415940128New York5,750,8123268311111North Carolina1,586,6255941171810North Dakota96,231465415128Ohio2,626,131396125147Oklahoma680,401633721137Oregon935,537326825107Pennsylvania2,914,4564357242810Rhode Island279,162326828128South Carolina965,018584221159Tennessee1,380,7435347231910Texas3,931,150752517149Utah305,573524811124Vermont158,3383763271211Virginia1,361,6394654181711	Nevada New	657,500	45	55	24	12	8
New Jersey     1,548,484     39     61     19     12     10       New Mexico     742,165     41     59     40     12     8       New York     5,750,812     32     68     31     11     11       North Carolina     1,586,625     59     41     17     18     10       North Dakota     96,231     46     54     15     12     8       Ohio     2,626,131     39     61     25     14     7       Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     79,162     32     68     28     12     8       South Carolina     96,5018     58     42     21     15     9       Tennessee     1,380,743     53     47     23     19	Hampshire	101,755		50	15	12	0
New Mexico     742,165     41     59     40     12     8       New York     5,750,812     32     68     31     11     11       North Carolina     1,586,625     59     41     17     18     10       North Dakota     96,231     46     54     15     12     8       Ohio     2,626,131     39     61     25     14     7       Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Utah     305,573     52     48     11     12     4	New Jersey	1,548,484	39	61	19	12	10
New York     5,750,812     32     68     31     11     11       North Carolina     1,586,625     59     41     17     18     10       North Dakota     96,231     46     54     15     12     8       Ohio     2,626,131     39     61     25     14     7       Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Carolina     965,018     58     42     21     15     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Utah     305,573     52     17     14     9     4 </td <td>New Mexico</td> <td>742,165</td> <td>41</td> <td>59</td> <td>40</td> <td>12</td> <td>8</td>	New Mexico	742,165	41	59	40	12	8
North Carolina     1,586,625     59     41     17     18     10       North Dakota     96,231     46     54     15     12     8       Ohio     2,626,131     39     61     25     14     7       Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Carolina     965,018     58     42     21     15     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11 <td>New York</td> <td>5,750,812</td> <td>32</td> <td>68</td> <td>31</td> <td>11</td> <td>11</td>	New York	5,750,812	32	68	31	11	11
North Dakota     96,231     46     54     15     12     8       Ohio     2,626,131     39     61     25     14     7       Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Carolina     965,018     58     42     21     15     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11 <td>North Carolina</td> <td>1,586,625</td> <td>59</td> <td>41</td> <td>17</td> <td>18</td> <td>10</td>	North Carolina	1,586,625	59	41	17	18	10
Ohio     2,626,131     39     61     25     14     7       Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Carolina     965,018     58     42     21     15     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     56     26     11     4	North Dakota	96,231	46	54	15	12	8
Oklahoma     680,401     63     37     21     13     7       Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Carolina     965,018     58     42     21     15     8       South Carolina     965,018     58     42     21     15     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     56     26     11     4	Ohio	2,626,131	39	61	25	14	7
Oregon     935,537     32     68     25     10     7       Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Carolina     965,018     58     42     21     15     8       South Carolina     965,018     58     42     21     15     9       Tennessee     1,380,743     53     47     23     19     10       Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     54     18     17     11	Oklahoma	680,401	63	37	21	13	7
Pennsylvania     2,914,456     43     57     24     28     10       Rhode Island     279,162     32     68     28     12     8       South Carolina     965,018     58     42     21     15     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     54     18     17     11	Oregon	935,537	32	68	25	10	7
Rhode Island 279,162 32 68 28 12 8   South Carolina 965,018 58 42 21 15 8   South Dakota 99,912 66 34 12 15 9   Tennessee 1,380,743 53 47 23 19 10   Texas 3,931,150 75 25 17 14 9   Utah 305,573 52 48 11 12 4   Vermont 158,338 37 63 27 12 11   Virginia 1,361,639 46 54 18 17 11	Pennsylvania	2,914,456	43	57	24	28	10
South Carolina     965,018     58     42     21     15     8       South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     54     18     17     11	Rhode Island	279,162	32	68	28	12	8
South Dakota     99,912     66     34     12     15     9       Tennessee     1,380,743     53     47     23     19     10       Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     54     18     17     11	South Carolina	965,018	58	42	21	15	8
Tennessee 1,380,743 53 47 23 19 10   Texas 3,931,150 75 25 17 14 9   Utah 305,573 52 48 11 12 4   Vermont 158,338 37 63 27 12 11   Virginia 1,361,639 46 54 18 17 11   Washington 1,733,877 44 56 26 11 6	South Dakota	99,912	66	34	12	15	9
Texas     3,931,150     75     25     17     14     9       Utah     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     54     18     17     11       Washington     1733,877     44     56     26     11     4	Tennessee	1,380,743	53	47	23	19	10
Otan     305,573     52     48     11     12     4       Vermont     158,338     37     63     27     12     11       Virginia     1,361,639     46     54     18     17     11       Washington     1.733.877     44     56     26     11     6	Texas	3,931,150	/5	25	17	14	9
vermiont     136,338     37     63     27     12     11       Virginia     1,361,639     46     54     18     17     11       Washington     1,733,877     44     56     26     11     4	Vermert	305,573	52	48	27	12	4
Washington 1733.877 44 56 26 11 4	Virginia	1 241 420	37	63 EX	10	12	11
	Washington	1 733 877	40	56	26	11	6

https://www.commonwealthfund.org/publications/issue-briefs/2021/jan/winding-down-enrollment-medicaid-health-emergency-ends

#### Winding Down Medicaid Enrollment When Health Emergency Ends | Commonwealth Fund

West Virginia	494,356	37	63	30	19	8
Wisconsin	1,062,528	44	56	20	16	12
Wyoming	56,270	64	36	11	14	7

Note: Percentages do not sum to 100%. Medicaid enrollment categories overlap in this analysis.

[1] Derived from Centers for Medicare and Medicaid Services, "August 2020 Medicaid & CHIP Enrollment Data Highlights," n.d.

[2] Derived from Henry J. Kaiser Family Foundation, "Health Insurance Coverage of the Total Population, Timeframe: 2019," n.d. Denominator for "Percent of insured

population in Medicaid" uses number of people insured in 2018.

[3] Henry J. Kaiser Family Foundation, "Medicaid Enrollees by Enrollment Group, Timeframe: FY2014," n.d.

Source: Sara Rosenbaum, Morgan Handley, and Rebecca Morris, Winding Down Continuous Enrollment for Medicaid Beneficiaries When the Public Health Emergency Ends (Commonwealth Fund, Jan. 2021). https://doi.org/10.26099/bw1x-3r88

The characteristics of the protected population vary from state to state, with the percentages who are children and adults with low income, children and adults with disabilities, or elderly varying considerably according to the characteristics of each state's Medicaid plan and choices regarding coverage rules. Although all states have large numbers of affected beneficiaries across every major eligibility category, the contrasts are also notable — again, a reflection of factors ranging from state plan design to underlying population demographics.

In Utah, for example, 4 percent of the protected population is 65 or older compared to 18 percent in Maine. In Pennsylvania, 28 percent of the protected population is enrolled based on disability, compared to 8 percent in California and Hawaii. Protected children range from 32 percent to 75 percent of the enrolled population. Twenty-three states report July 2020 enrollment rates of 1 million or more, while 34 states have enrollments of 500,000 or more.

# Ensuring That Enrolled Populations Do Not Erroneously Lose Coverage When the Public Health Emergency Ends

Given the relationship between Medicaid coverage and access to care, the FFCRA continuous enrollment protections, together with the *Goldberg* safeguards, represent essential protections.<sup>15</sup> The CMS guidance gives states flexibility to adjust their operations to move toward normal functioning over time and offers options for simplifying the application and renewal process so as to reduce administrative burdens.

At the same time, the guidance envisions an extremely rapid return to normal operations with respect to both applications and renewals. Time pressures increase the risk of errors, especially when states are allowed to use old information and data to determine that a beneficiary is no longer eligible — for example, income from summer employment earned by working adults who later were laid off in the fall. The risk of error in the case of low-income, working-age adults may be particularly elevated given the fact that the CMS guidance expressly identifies the group as a priority for more rapid eligibility review action.

## POLICY MODIFICATIONS THAT COULD MAKE AN IMPORTANT DIFFERENCE

One policy change to consider is a longer period for achieving normal functioning. For example, the CMS guidance appears to suggest that states will be able to meet the application timeliness standards within four months. But tight recovery performance criteria could trigger a wave of application denials and premature and erroneous case closures. As the Supreme Court observed in *Goldberg*, the risk of erroneous benefit expenditures is outweighed by the risk of erroneous loss or denial of basic assistance. Pandemic conditions clearly propel the equities even more strongly in the direction of averting incorrect denials and coverage losses.

A second policy option is to enhance federal Medicaid funding during a disaster recovery period, so that states have the additional resources needed for an orderly restoration of normal operations. As with the public health emergency declaration system authorized under Section 1135 of the Social Security Act, the HHS secretary could be given flexibility to tie a disaster recovery period to certain objective indicators, such as those related to population health and economic recovery. This would not be the first time Medicaid has played a role in disaster recovery; the Affordable Care Act contained an early version of such a policy, targeted to certain states.<sup>16</sup>

As states undertake recovery, an essential condition for qualifying for enhancement funding would be a disaster recovery plan that is submitted for public comment during the development phase, as well as a robust outreach strategy that can effectively inform beneficiaries of the case review process they will undergo and their rights during this process.

Ultimately, the pandemic emergency will end, and states will resume their normal Medicaid operations, including eligibility reviews and redeterminations. Given the health and health care stakes involved, when this time arrives the process should resume with caution as well as enhanced federal financial and administration support.

## NOTES

1 Chris Frenier, Sayeh S. Nikpay, and Ezra Golberstein, "COVID-19 Has Increased Medicald Enrollment, But Short-Term Enrollment Changes Are Unrelated to job Losses," Health Affairs, published online Aug. 6, 2020.

2 Section 6008, Pub. L. 116-127 (116th Congress, 2d session).

3 Alex M. Azar II, "<u>Public Health Emergency: Renewal of Determination That a Public Health Emergency Exists</u>," U.S. Department of Health and Human Services, Oct. 2, 2020.

4 The enhancement is set 6.2 percentage points over a state's normal federal medical assistance percentage (FMAP) rate, with the exception of the Affordable Care Act adult Medicaid expansion population, for whom the FMAP rate is already set at an enhanced 90 percent.

5 The CARES Act, enacted subsequently, amends FFCRA to allow states to qualify even if that had increased premiums before the effective date (March 18) as long as within 30 days they rolled back their premiums to January 1 levels. Section 3716, Pub. L. 116-136 (116th Congress, 2d session).

6 Sara Rosenbaum et al., "<u>Administration Effectively Rescinds Families First' Medicald Continuous Enrollment</u> <u>Protection</u>," *Health Affairs Blog*, Nov. 18, 2020.

7 Centers for Medicare and Medicaid Services, "Letter to State Health Officials, SHO# 20-004 — RE: Planning for the Resumption of Normal State Medicaid, Children's Health Insurance Program (CHIP), and Basic Health Program (BHP) Operations Upon Conclusion of the COVID-19 Public Health Emergency," Dec. 22, 2020.

8 Benjamin D. Sommers, "Loss of Health Insurance Among Nonelderly Adults In Medicald," Journal of General Internal Medicine 24, no. 1 (Jan. 2009): 1–7.

9 Even in states in which CHIP operates as a Medicaid expansion, this change would trigger an eligibility redetermination, since the federal payment rate under CHIP differs from that used for Medicaid. An exception would be if a family lives in one of the 24 states that have opted to establish continuous eligibility for children. Centers for Medicare and Medicaid Services, "<u>Continuous Eligibility for Medicaid and CHIP Coverage</u>," n.d.

10 42 C.F.R. § 435.916-917.

11 397 U.S. 254 (1970).

12 In Medicaid expansion states, the proportion of adults enrolled on the basis of disability may have dropped slightly, since some adults previously covered because of a disability may now qualify through the easier-to-determine low-income category. However, we expect this drop to be small. A disability determination remains extremely important, since a disability finding also triggers eligibility for other vital cash assistance and social services.

13 Centers for Medicare and Medicaid Services, Medicaid and CHIP Enrollment Trends Snapshot Through July 2020, n.d.

14 CMS, Medicaid and CHIP, n.d.

15 Leighton Ku and Erin Brantley, <u>Continuous Medicaid Eligibility for Children and Their Health</u> (George Washington University, May 2020).

16 Congressional Research Service, Medicald's Federal Medical Assistance Percentage (FMAP) (CRS, updated July 29, 2020).

# **Publication Details**

### Publication Date: January 7, 2021

**Contact:** <u>Sara Rosenbaum</u>, Harold and Jane Hirsh Professor of Health Law and Policy, Milken Institute School of Public Health at the George Washington University Email: sarar@gwu.edu

### Editor: Deborah Lorber

### Citation:

Sara Rosenbaum, Morgan Handley, and Rebecca Morris, *Winding Down Continuous Enrollment for Medicaid Beneficiaries When the Public Health Emergency Ends* (Commonwealth Fund, Jan. 2021). <u>https://doi.org/10.26099/bw1x-3r88</u>

# Topics

Health Care Coverage and Access COVID-19

# Tags

State Health Follcy and Medicald

# **Experts**



### Sara Rosenbaum

Harold and Jane Hirsh Professor of Health Law and Policy, Milken Institute School of Public Health at the George Washington University



### Morgan Handley

Senior Research Associate, Department of Health Policy and Management, Milken Institute School of Public Health, George Washington University



### **Rebecca Morris**

Research Associate, Department of Health Policy and Management, Milken Institute School of Public Health, George Washington University



© 2021 The Commonwealth Fund. All Rights Reserved.

#### **HEALTH POLICY CENTER**



**RESEARCH REPORT** 

# The Health Insurance Policy Simulation Model for 2020

**Current-Law Baseline and Methodology** 

Matthew Buettgens December 2020 Jessica Banthin





#### **ABOUT THE URBAN INSTITUTE**

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.

Copyright © December 2020. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute. Cover image by Tim Meko.

# Contents

Acknowledgments	v
The Health Insurance Policy Simulation Model for 2020	1
How HIPSM Has Been Used	1
HIPSM's Strengths Relative to Other Models	4
Overview of the Model	4
Output Capabilities	6
Part 1. 2020 Open Enrollment Period Baseline and Methodology	7
The HIPSM 2020 OEP Current-Law Baseline	7
Health Insurance Coverage of the Nonelderly	7
Medicaid/CHIP Coverage by State	10
The Uninsured by State	12
Health Coverage by Income	14
Health Coverage by Age	16
Overall Health Care Spending	18
Federal Government Spending	19
State Government Spending	21
The Impact of the COVID-19 Pandemic	23
Part 2. HIPSM Methodology	24
The Underlying Population of Households and Synthetic Firms	24
Variable Editing and Imputations	24
Population Weights for Current and Future Years	26
Synthetic Firms	26
Imputation of Dependent Coverage Options and Contribution Rates	28
Underlying Health Care Expenditures	30
Spending under Different Coverage Types.	32
Uncompensated Care	33
Construction of Insurance Packages	34
Eligibility for Medicaid, CHIP, and Marketplace Tax Credits	37
Medicaid Eligibility under ACA Repeal	38
Marketplace Tax Credit Eligibility	38
The Flow of a Policy Simulation	39
Stage 1: Calculate Health Insurance Packages and Premiums	40
Stage 2: Employer Health Benefit Decisions	41
Stage 3: Individuals' Optimal Health Insurance Decisions	42

Stage 4. Benchmarking to the Literature	45
Integration with the Tax Policy Center's Microsimulation Model	49
Limitations	50
Notes	52
References	54
About the Authors	57
Statement of Independence	58
## Acknowledgments

This report was funded by the Robert Wood Johnson Foundation. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

The authors are grateful for comments and suggestions from Michael Simpson and for editorial assistance by Rachel Kenney.

## The Health Insurance Policy Simulation Model for 2020

The Health Insurance Policy Simulation Model (HIPSM) is a detailed microsimulation model of the health care system designed to estimate the cost and coverage effects of proposed health care policy options. The model simulates household and employer decisions and models the way changes in one insurance market interact with changes in other markets. HIPSM is designed for quick-turnaround analysis of policy proposals. It can be rapidly adapted to analyze a wide variety of new scenarios—from novel health insurance offerings and strategies for increasing affordability to state-specific proposals—and can describe the effects of a policy option over several years.

HIPSM is based on two years of the American Community Survey (ACS), which provides a representative sample of families large enough for us to produce estimates for individual states and smaller regions, such as cities. The model is designed to incorporate timely, real-world data to the extent they are available. In particular, we regularly update the model to reflect published Medicaid and Marketplace enrollment and costs in each state.

Results from HIPSM simulations have been favorably compared with actual policy outcomes and other respected microsimulation models, as assessed by outside experts (Glied, Arora, and Solís-Román 2015). Findings from the model were cited in the majority opinion in the Supreme Court case *King v. Burwell* and in many amicus briefs submitted to the court in that case and are broadly cited in top media, including the *New York Times, Washington Post, Wall Street Journal, Vox,* CNN, and *Los Angeles Times*. HIPSM results have also been displayed on the floor of the US Senate during debate and are widely distributed among legislative staff.

### How HIPSM Has Been Used

The Health Policy Center at the Urban Institute has a long history of health insurance simulation work, including extensive experience working with state and national policymakers to examine the coverage effects, costs, and financing of alternative strategies to cover the uninsured. In a notable example of our early work, we simulated health reform policies that yielded a road map for the landmark 2006 health care reform legislation in Massachusetts that expanded coverage and created a subsidized private insurance market for low-income residents, among other policies. That research garnered the

prestigious Health Services Research Impact Award in 2007, and the success of the Massachusetts programs influenced the design of the Affordable Care Act (ACA).

Since 2010, HIPSM has been used in analyses of the impact of the ACA and proposed alternatives. HIPSM has had a notable impact on the following:

- ACA implementation. Beginning in 2009, we published analyses of wide-ranging issues related to ACA implementation, including premium age rating, the role of the individual and employer mandates, nongroup market regulation, a Basic Health Program (BHP), self-insured group health coverage, and the impact of loosening restrictions on unregulated short-term, limited-duration plans (Blumberg, Buettgens, and Wang 2018). We also used HIPSM to provide technical assistance to several states, as we note below.
- Medicaid expansion. We regularly publish estimates of the impact on health coverage and state and federal costs if the remaining states that have not expanded Medicaid under the ACA were to do so. These estimates have played an important role in informing the policy debate about ACA Medicaid expansion in many states (Buettgens 2018). We have also conducted more detailed analyses of Medicaid expansion in some states, such as Alaska and Ohio.
- King v. Burwell. HIPSM has had an impact at the national level, most notably in a series of analyses about the impact of King v. Burwell; the chief justice in the Supreme Court's 2015 opinion cited HIPSM results.<sup>1</sup>
- ACA repeal and replace efforts. Congressional efforts to repeal and replace the ACA were numerous in 2017. We have published state-level analyses of the impact of these bills as they evolved (Blumberg, Buettgens, and Holahan 2016). Our research received tens of thousands of media citations in 2020 alone.
- Single-payer and other approaches toward universal coverage. In 2016, we published an often-cited estimate of the costs of Senator Sanders's single-payer health coverage proposal (Holahan et al. 2016). In 2019, we followed this up with a report presenting detailed cost and coverage estimates for health reforms ranging from modest expansions of the ACA to replacing the ACA with a single-payer system (Blumberg, Holahan, et al. 2019).
- California v. Texas. This is the latest legal challenge to the ACA, which was known as Texas v.
   US until the Trump administration declined to defend the law. We have published a series of frequently quoted studies of what would happen if the ACA were overturned by a finding for

the plaintiff (Blumberg, Buettgens, et al. 2019). The Supreme Court heard oral arguments in November 2020.

In addition, HIPSM is or has been used for the following state-level technical assistance efforts:

- New York (2009-present). We have been providing microsimulation work and technical assistance to the New York State Department of Health since 2009 on issues related to Medicaid, the Children's Health Insurance Program (CHIP), private nongroup and small-group markets, and the BHP.
- Massachusetts (2010-present). With funding from the Blue Cross Blue Shield of Massachusetts Foundation that was coordinated with state agencies, we have been providing technical assistance in analyzing ACA Marketplace and regulatory design choices since 2010. This year, we presented an analysis of the impact on health coverage and costs should the latest legal challenge to the ACA, *Texas v. California*, be found for the plaintiffs (Banthin, Buettgens, and Blumberg 2019).
- Missouri (2010–11). Following passage of the ACA, we provided broad technical assistance to the state through a 2010 grant funded by the Missouri Foundation for Health.
- Virginia (2011). We presented Virginia-specific simulation estimates of the impact of the ACA to the Virginia Health Reform Initiative, convened by the governor. The presentation focused on important state decisions for ACA Marketplace implementation, such as the definition of small firms and whether to merge the small-firm and individual health insurance markets. This work was funded by the Virginia Health Care Foundation.
- Washington (2011–12). We provided technical assistance for ACA implementation to Washington State. In addition to this state-funded research, we published a feasibility analysis of the BHP for Washington, funded by the Empire Health Foundation.
- Alaska (2013 and 2019). With funding from the Alaska Native Tribal Health Consortium, we analyzed the impact of Medicaid expansion in Alaska, estimating enrollment changes, characteristics of those gaining coverage, and Medicaid spending by both state and federal governments.
- Oregon (2014, 2016, 2018). In partnership with actuaries at Wakely and with funding from the state government, we prepared detailed analyses of the feasibility of the ACA's BHP in Oregon in 2014 and 2016. In 2018, we completed a detailed analysis of the characteristics of the state's uninsured and the implications of a state individual mandate.

- Texas (2018). With funding from the Episcopal Health Foundation, we conducted an analysis
  of the uninsured, providing estimates by county or group of counties and by detailed
  demographic and economic characteristics (Buettgens, Blumberg, and Pan 2018).
- New Mexico (2019–2020). In 2019, we conducted a detailed analysis of the uninsured in New Mexico for the state government (Banthin et al. 2019). In 2020, we estimated the impacts of 2020 enrollment changes and job changes related to the COVID-19 pandemic on the uninsured in New Mexico. We also simulated a range of state policy options to make health coverage more affordable (Buettgens et al. 2020).

### HIPSM's Strengths Relative to Other Models

HIPSM is similar to other microsimulation models of insurance coverage and costs for the population under age 65, but it has some strengths relative to those models:

- HIPSM is based on data from the ACS and can produce reliable, state-specific estimates, and it can often produce estimates for substate areas. The simulation of any policy alternative automatically includes state variation in demographics, economics, or relevant laws and regulations and shows differences in the impact of the resulting policy change.
- HIPSM is updated annually to the most recently available state-level data on Marketplace premiums and enrollment and Medicaid enrollment and spending. This means the model produces an accurate and timely baseline against which the impact of proposed policies can be measured.
- HIPSM parameters are estimated using a series of probit estimations, each of which is a decision between two options. More complicated decisions are built from these binary decisions. This approach simplifies some of the decisions of actors in the model and yields faster run times and easier adaptations to new policies that add new health coverage choices.

### Overview of the Model

HIPSM is similar to other microsimulation models of health coverage and costs in that individual and family decisions are based on an expected-utility framework.<sup>2</sup> Such models define an expected-utility function that accounts for expected out-of-pocket spending, health needs, risk of high health costs,

and income. Each family unit chooses the option with the highest expected utility. This approach allows for evaluation of novel policies in the same framework.

Though HIPSM decisionmaking follows an expected-utility framework, we add a latent preference term for each observation that represents factors involved in a person's or family's choice that we could not capture in the available data. These terms are set so each observation makes the choice it reported, and the distribution of latent preference terms is set so the model replicates elasticity targets from the literature if premiums rise or fall. This approach makes it easier to consistently simulate novel policies while calibrating the model to a wide range of real-world data, such as Medicaid and Marketplace enrollment and estimates of price responsiveness from the literature.

Below, we summarize the construction of HIPSM's baseline under current law. Part 2 of this report, on methodology, provides greater detail, including a detailed description of the flow of a simulation.

- As the core data, we use the US Census Bureau's 2012 and 2013 ACS, which we combine to increase sample size (more than 6 million observations). The combined file is reweighted to reflect the distribution of demographic, economic, and health coverage characteristics of the 2013 ACS.
- Each year, the model is calibrated to reproduce the latest available Medicaid and Marketplace enrollment numbers in each state.
- Population weights for current and future years are based on more recent ACS data. For future years, we use projections for the 2030 population from the Urban Institute's Mapping America's Futures program. These projections match Census Bureau national population projections but include greater detail and state-level projections.
- Using the Medical Expenditure Panel Survey Household Component (MEPS-HC) and other data sources, we estimate health care expenditures for each individual in the dataset in each possible coverage status, including out-of-pocket spending, spending covered by private insurance, Medicaid/CHIP spending, and uncompensated care for the uninsured.
- We impute offers of employer-sponsored insurance (ESI), immigration status, and eligibility for Medicaid, CHIP, and subsidized qualified health plan coverage.
- We group workers with the same employment characteristics, such as firm size and industry, into simulated firms. The distribution of these firms matches the characteristics of employers in each census division provided in the Statistics of US Businesses.

### **Output Capabilities**

Like most microsimulation models incorporating various microdata, HIPSM can output a range of coverage and spending variables. The model's outputs can be designed to meet the specific needs of a project, but, in general, are intended to compare a situation under current law versus under a policy change. This highlights changes in coverage, the impact on state and federal spending, and the detailed characteristics of those who would gain or lose coverage. We frequently use HIPSM to estimate the following:

- eligibility for Medicaid, CHIP, a BHP, Marketplace premium tax credits (PTCs), cost-sharing reductions (CSRs), and exemptions from the individual mandate
- type of coverage: employer, Marketplace (with PTCs and CSRs, with PTCs only, and full-pay), other nongroup, BHP, Medicaid (for children, children with disabilities, nonparents, parents, and adults with disabilities), CHIP, other public (including Medicare), and uninsurance
- socioeconomic characteristics: income group, age, race/ethnicity (including Asians/Pacific Islanders and American Indians/Alaska Natives, which are often unavailable because of small sample size), educational attainment, employment status, family structure, immigration status, English proficiency, and language spoken at home
- tabulations by state and substate regions
- state and federal shares of Medicaid-related costs (per capita or total)
- BHP-related costs (per capita or total): out-of-pocket premiums and cost sharing and costs to federal and state governments
- Marketplace qualified health plan costs (per capita or total): out-of-pocket premiums and cost sharing, federal PTCs and CSRs, and total premiums
- other costs: uncompensated care, employer premium contributions, and total premiums for employer health coverage
- health cost risk scores for any group of nonelderly people
- health care spending by hospital, physician, prescription-drug, and other categories

## Part 1. 2020 Open Enrollment Period Baseline and Methodology

In part 1 of this report, we present detailed estimates of health care coverage and costs in early 2020 from our model, using a baseline that incorporates data from the 2020 open enrollment period (OEP). In part 2, we describe the broad methodology of our model in detail, from the data used as input to the mechanics of how families choose between available health coverage options.

We update HIPSM's baseline coverage estimates under current law every year. As mentioned, we incorporate the latest available data on enrollment and premiums and make various other adjustments. Nearly every year sees important federal and state policy changes related to the ACA and differences in enrollment driven by both these changes and other factors affecting premiums and eligibility. In addition, there is always a lag between the collection and public release of survey data on coverage. Also, survey data do not always match administrative data on enrollment in the Marketplaces, Medicaid, CHIP, or a BHP. As we incorporate those data, we make adjustments to align coverage distributions with administrative data and population totals.

The coverage estimates presented in this section assume an economy at full employment and incorporate enrollment data from the 2020 OEP, reflecting the US in January and February 2020. Since then, economic disruption from the COVID-19 pandemic and related shutdowns has led to substantial job losses that can affect health coverage. The 2020 OEP baseline served as our starting point for estimating the impact of pandemic-related job losses on health insurance coverage. Our recent work describes those estimates for 2020 (Banthin et al. 2020) and estimates for 2022 (Blumberg et al. 2020).

### The HIPSM 2020 OEP Current-Law Baseline

In this section, we present estimates of health coverage and costs from our 2020 current-law baseline, based on data from the 2020 open enrollment period.

#### Health Insurance Coverage of the Nonelderly

In table 1, we show the detailed distribution of health coverage among the nonelderly based on 2020 OEP data. The estimates represent average monthly enrollment for 2020. However, job losses due to

the pandemic have changed health coverage noticeably. We have updated the model to reflect these changes, but they are not included here.

The model estimates about 55 percent of the nonelderly (151.1 million) have health coverage provided through an employer in 2020. About 5.5 percent (15.1 million) have health coverage provided through the nongroup market or the ACA's BHP, which operates in only New York and Minnesota. Among people enrolled in the Marketplaces, 8.5 million get premium tax credits and 1.3 million others pay the full premium. Finally, we estimate 4.4 million people are enrolled in ACA-compliant nongroup coverage outside the Marketplaces. The Centers for Medicare & Medicaid Services (CMS) releases data on Marketplace enrollment, which we use to calibrate our model, but no complete data on national off-Marketplace enrollment exist; this is simulated by the model.

Based on enrollment data provided by CMS and state Medicaid agencies, we estimate 69.5 million nonelderly people are enrolled in Medicaid or CHIP in 2020. About 8.6 million nonelderly people are enrolled in other public programs, such as Medicare. That means 28.6 million people are uninsured (10.4 percent of the nonelderly), and, in an average month, 2.5 million people are enrolled in non-ACA-compliant plans (i.e., that do not provide minimum essential coverage).

#### TABLE 1

#### Health Insurance Coverage Distribution of the Nonelderly under Current Law, 2020

	Thousands	
	of people	Percent
Insured (minimum essential coverage)	244,346	88.7
Employer	151,117	54.9
Private nongroup	15,131	5.5
Basic Health Program	890	0.3
Marketplace with PTCs	8,546	3.1
Full-pay Marketplace	1,310	0.5
Other nongroup	4,386	1.6
Medicaid/CHIP	69,478	25.2
People with disabilities	9,387	3.4
Medicaid expansion	13,965	5.1
Nondisabled adults	12,361	4.5
Nondisabled children	33,729	12.2
State-funded program	36	0.0
Other public	8,619	3.1
Uninsured (no minimum essential coverage)	31,128	11.3
Uninsured	28,596	10.4
Noncompliant nongroup	2,532	0.9
Total	275,474	100.0

**Source:** Urban Institute Health Insurance Policy Simulation Model, 2020 open enrollment period baseline (before the COVID-19 pandemic).

Notes: PTCs = premium tax credits. CHIP = Children's Health Insurance Program.

In table 2, we show our projected enrollment in ACA-compliant nongroup health coverage by state, based on reported plan choices after the 2020 open enrollment period. Data on how many of those plans were effectuated (i.e., how many started paying their premiums) were unavailable, so we applied effectuation rates from 2019. We estimate 890,000 people are enrolled in BHPs in New York and Minnesota, called Essential Plan and MinnesotaCare, in 2020.

#### TABLE 2

Types of Nongroup Coverage under Current Law, by State, 2020	
Thousands of people	

	<b>Basic Health</b>	Marketplace	Full-pay	Other	
	Program	with PTCs	Marketplace	nongroup	Total
Alabama	0	130	7	53	190
Alaska	0	13	2	5	20
Arizona	0	108	22	124	253
Arkansas	0	48	6	38	92
California	0	1,206	173	806	2,186
Colorado	0	110	28	143	282
Connecticut	0	68	29	45	142
Delaware	0	18	2	11	32
District of					
Columbia	0	1	16	0	17
Florida	0	1,570	77	334	1,982
Georgia	0	343	34	128	505
Hawaii	0	14	3	16	33
Idaho	0	66	8	24	98
Illinois	0	215	33	219	467
Indiana	0	84	39	75	197
lowa	0	45	4	58	107
Kansas	0	67	7	40	114
Kentucky	0	58	13	46	117
Louisiana	0	66	7	76	149
Maine	0	48	6	9	63
Maryland	0	115	20	91	225
Massachusetts	0	255	75	57	387
Michigan	0	196	30	147	373
Minnesota	93	59	39	91	282
Mississippi	0	81	1	34	117
Missouri	0	146	21	64	232
Montana	0	33	5	22	60
Nebraska	0	80	3	40	123
Nevada	0	55	8	51	113
New Hampshire	0	29	10	14	53
New Jersey	0	159	46	75	279
New Mexico	0	33	10	22	64
New York	797	142	102	72	1,112
North Carolina	0	405	24	140	569
North Dakota	0	17	3	24	44
Ohio	0	128	37	134	299
Oklahoma	0	140	7	43	190
Oregon	0	94	31	53	178
Pennsylvania	0	248	32	188	469

THE HEALTH INSURANCE POLICY SIMULATION MODEL FOR 2020

	Basic Health	Marketplace	Full-pay	Other		
	Program	with PTCs	Marketplace	nongroup	Total	
Rhode Island	0	27	6	11	44	
South Carolina	0	169	12	50	231	
South Dakota	0	25	2	17	44	
Tennessee	0	146	16	84	246	
Texas	0	843	80	342	1,264	
Utah	0	126	56	0	182	
Vermont	0	21	4	9	35	
Virginia	0	185	24	91	300	
Washington	0	122	69	91	282	
West Virginia	0	15	2	13	29	
Wisconsin	0	152	20	53	225	
Wyoming	0	21	1	12	34	
Total	890	8,546	1,310	4,386	15,131	

Note: PTCs = premium tax credits.

#### Medicaid/CHIP Coverage by State

In table 3, we summarize our simulated Medicaid and CHIP enrollment of the nonelderly in each state by broad eligibility types. Our enrollment is based on CMS monthly enrollment snapshots, supplemented with data from certain state Medicaid agencies. In these counts, we exclude people enrolled in waiver programs (e.g., family planning) with very limited benefits.

We estimate 69.5 million people younger than 65 are enrolled in either Medicaid or CHIP in 2020. Of these, about 9.4 million are eligible because of disabilities and 14.0 million are eligible through the ACA's Medicaid expansion. For the latter group, we include all people who qualify for the federal government to cover 90 percent of their health care costs, most of whom would be ineligible for Medicaid without the ACA. Another 12.4 million Medicaid enrollees are nonelderly adults without disabilities, most of whom are parents. Lastly, about 33.7 million Medicaid/CHIP enrollees are children without disabilities. In our model, we distinguish those who are in Medicaid, CHIP-funded Medicaid programs, or separate CHIP programs, but we do not show that here. Finally, we track a small number of people enrolled in state-funded coverage providing Medicaid-like benefits.

#### Types of Medicaid/CHIP Coverage under Current Law, by State, 2020

Thousands of people

	People				State-	
	with	Medicaid	Nondisabled	Nondisabled	funded	
	disabilities	expansion	adults	children	program	Total
Alabama	191	0	205	576	0	972
Alaska	15	30	52	98	0	195
Arizona	195	480	313	758	0	1.746
Arkansas	123	269	76	411	0	880
California	1.054	3.210	1.777	5.126	0	11.166
Colorado	102	377	160	582	0	1.221
Connecticut	80	205	187	324	0	797
Delaware	27	43	.38	81	Ő	189
District of	_,	10	00	01	0	107
Columbia	30	39	35	59	16	180
Florida	567	0	913	1 993	0	3 4 7 3
Georgia	295	0 0	399	1 251	0 0	1 945
Hawaii	273	71	48	111	0	259
Idaho	46	95	55	178	0	374
Illinois	308	539	186	1 1 5 5	0	2/89
Indiana	186	J37 /35	400	609	0	2,407
	77	433	88	3/1	0	678
Kansas	60	1/2	76	232	0	367
Kontuclay	204	472	115	232	0	1 2 2 4
Louisiana	204	472	113	200	0	1,324
Louisiana	17/	455	133	020	0	1,414
Mandand	145	4J 200	75	424	0	1 204
Massachusatta	145	200	244 404	620	0	1,304
Michigan	277	203	420	002	0	1,040
Michigan	371	032	200	909	0	2,190
Minnesota	140	206	201	401	0	947 401
Mississippi	124	0	137	500	0	021
Missouri	195	0	207	505	0	907
Montana	27	85	24	127	0	263
Nebraska	37	0	49	140	0	226
Nevada	69	206	61	299	0	636
New Hampshire	33	65	19	88	0	204
New Jersey	194	459	221	703	0	1,578
	/1	264	69	316	0	720
New York	601	1,628	1,087	2,299	20	5,635
North Carolina	363	0	483	1,251	0	2,097
North Dakota	10	24	13	28	0	/5
Ohio	360	624	425	1,032	0	2,442
Oklahoma	132	0	134	375	0	641
Oregon	111	310	108	4/2	0	1,000
Pennsylvania	460	/0/	288	1,048	0	2,502
Rhode Island	40	81	46	103	0	269
South Carolina	1/6	0	230	535	0	942
South Dakota	18	0	24	71	0	113
Tennessee	235	0	388	742	0	1,365
Texas	669	0	927	3,120	0	4,716
Utah	50	104	85	228	0	467
Vermont	22	20	37	51	0	130
Virginia	177	450	131	602	0	1,361
Washington	178	448	180	809	0	1,615

	People				State-	
	with	Medicaid	Nondisabled	Nondisabled	funded	
	disabilities	expansion	adults	children	program	Total
West Virginia	94	160	46	195	0	495
Wisconsin	136	0	387	443	0	965
Wyoming	9	0	12	30	0	51
Total	9,387	13,965	12,361	33,729	36	69,478

Note: CHIP = Children's Health Insurance Program.

#### The Uninsured by State

In table 4, we decompose the uninsured population in each state based on eligibility for public programs and immigration status. Nationally, about 20 percent of the uninsured are eligible for Medicaid or CHIP but not enrolled, and about 19 percent are eligible for premium tax credits in the Marketplaces. Just over a quarter are undocumented immigrants. The remaining 36 percent are ineligible for assistance and legally present.

Eligibility for assistance among the uninsured depends largely on whether a state has expanded Medicaid eligibility. For example, North Dakota has expanded Medicaid, whereas South Dakota has not. In North Dakota, almost 39 percent of the uninsured are eligible for Medicaid or CHIP, compared with only about 14 percent of the uninsured in South Dakota. Overall, nearly two-thirds of the uninsured in North Dakota are eligible for assistance, compared with just over 40 percent of the uninsured in South Dakota.

#### Composition of the Uninsured under Current Law, by State, 2020

	Medica	id/CHIP-			Undoc	umented		
	Eli	gible	Tax Cre	dit-Eligible	Immi	igrants	C	Other
-	1,000s		1,000s		1,000s		1,000s	
	of	% of total	of	% of total	of	% of total	of	% of total
	people	uninsured	people	uninsured	people	uninsured	people	uninsured
AL	31	7.0	95	21.0	46	10.1	280	61.9
AK	26	29.2	35	39.3	4	4.5	24	27.0
AZ	143	20.5	201	28.8	213	30.5	141	20.2
AR	63	30.0	53	25.4	38	18.2	56	26.4
CA	725	21.1	558	16.3	1,381	40.2	768	22.4
CO	90	20.0	113	25.0	122	27.2	125	27.8
СТ	35	19.3	30	16.2	70	38.1	48	26.4
DE	26	41.3	10	16.5	11	18.4	15	24.0
DC	20	48.5	6	14.7	4	8.7	11	28.2
FL	190	7.7	202	8.2	687	27.8	1,394	56.4
GA	74	5.7	247	19.0	285	21.9	694	53.4
HI	28	27.3	41	40.3	7	7.2	26	25.0
ID	51	34.4	24	16.0	26	17.5	47	32.0
IL.	391	39.0	135	13.5	275	27.5	200	20.0
IN	179	38.7	105	22.7	70	15.0	109	23.6
IA	37	29.0	33	25.7	19	14.6	40	30.7
KS	57	17.8	67	21.1	50	15.6	146	45.6
KY	96	35.4	74	27.1	30	11.0	71	26.1
	118	33.2	88	27.4	52	14.6	98	27.5
ME	15	30.9	9	187	2	3.8	23	16.8
MD	76	20.2	52	13.9	1/1	37.6	106	28.4
	100	20.2	16	74	141	37.0 21.2	40	20.4
M	215	40.0	10	10.0	40	21.2	120	27.0
	21J 71	42.3	50	20.5	70	10.5	1J7 Q1	21.2
	/1	20.2	JZ 74	20.5	47	17.5	107	51.7
MO	100	17.4	154	21.5	13	5.7	220	51.0
	109	17.1	120	24.0	41	0.5	329	51.0
	23	32.3	20	27.9	2	Z.Z	2/	52.0
	25	15.8	20	13.0	27	17.4	84 70	53.9
	85	24.0	/0	21.0	123	34.9	07	19.6
	19	28.9	14	21.2	4	0./	29	43.2
	128	18.9	99	14.7	274	40.4	1//	26.1
	47	22.9	48	23.5	61	29.9	48	23.7
NY	258	23.5	187	17.0	436	39.5	138	12.5
NC	58	5.3	221	20.2	247	22.6	565	51.8
ND	27	38.6	18	26.0	4	5.9	20	29.4
OH	236	35.7	192	29.1	53	8.0	180	27.3
Ok	162	28.3	97	17.0	66	11.5	248	43.3
OR	81	25.6	/8	24.7	66	20.8	92	28.9
PA	2/1	43.1	115	18.3	84	13.3	159	25.3
RI	5	8.6	9	16.9	16	30.8	23	43.6
SC	49	9.3	121	22.9	66	12.4	293	55.4
SD	13	14.3	23	26.4	6	6.5	46	52.8
TN	45	6.6	190	27.9	100	14.6	347	50.9
TX	446	9.5	852	18.1	1,444	30.7	1,960	41.7
UT	98	35.5	25	9.1	76	27.4	77	28.0
VT	27	61.7	5	11.7	1	2.8	10	23.9
VA	168	24.2	153	22.0	165	23.7	210	30.1
WA	126	22.9	131	23.8	146	26.4	148	26.9

	Medica	id/CHIP-	Undocumented					
	Eli	gible	Tax Cre	dit-Eligible	Imm	igrants	C	Other
	1,000s		1,000s		1,000s		1,000s	
	of	% of total	of	% of total	of	% of total	of	% of total
	people	uninsured	people	uninsured	people	uninsured	people	uninsured
WV	43	42.4	32	31.8	2	1.6	24	24.1
WI	121	36.5	60	18.1	49	14.8	102	30.6
WY	29	35.6	15	19.3	6	7.6	30	37.6
Total	5,623	19.6	5,378	18.8	7,261	25.3	10,334	36.0

Note: CHIP = Children's Health Insurance Program.

#### Health Coverage by Income

In table 5, we show the distribution of health coverage for the nonelderly at different income levels in 2020. Nearly two-thirds of those with incomes below 138 percent of the federal poverty level (FPL), the eligibility threshold for the ACA's Medicaid expansion, are enrolled in Medicaid. The share enrolled in Medicaid or CHIP drops off sharply at higher incomes. Uninsurance rates are also higher among those with lower incomes: such rates are 15.7 percent for those with incomes below 138 percent of FPL and 4.3 percent for those with incomes above 400 percent of FPL.

ESI shows the opposite pattern; about 86 percent of those with incomes above 400 percent of FPL have such coverage. This share declines to less than 12 percent among those with incomes below 138 percent of FPL. Private nongroup coverage is most common among those with incomes between 138 and 400 percent of FPL.

## Health Insurance Coverage Distribution of the Nonelderly under Current Law, by Income Group, 2020

	Thousands of people	Percent
Below 138% of FPL		
Insured (minimum essential coverage)	65,909	83.9
Employer	9,087	11.6
Private nongroup	2,385	3.0
Basic Health Program	327	0.4
Marketplace with PTCs	1,554	2.0
Full-pay Marketplace	97	0.1
Other nongroup	407	0.5
Medicaid/CHIP	51,981	66.2
People with disabilities	7,302	9.3
Medicaid expansion	13,958	17.8
Nondisabled adults	8,235	10.5
Nondisabled children	22,467	28.6
State-funded program	19	0.0
Other public	2,456	3.1
Uninsured (no minimum essential coverage)	12,656	16.1
Uninsured	12,333	15.7
Noncompliant nongroup	324	0.4
Total	78,565	100.0
Between 138% and 200% of FPL		
Insured (minimum essential coverage)	26.006	84.5
Employer	11.901	38.7
Private nongroup	4.313	14.0
Basic Health Program	563	1.8
Marketplace with PTCs	3.463	11.3
Full-pay Marketplace	59	0.2
Other nongroup	228	0.7
Medicaid/CHIP	8,514	27.7
People with disabilities	657	2.1
Medicaid expansion	2	0.0
Nondisabled adults	1,908	6.2
Nondisabled children	5,940	19.3
State-funded program	6	0.0
Other public	1,278	4.2
Uninsured (no minimum essential coverage)	4 762	15 5
Uninsured	4.675	15.2
Noncompliant nongroup	87	0.3
Total	30,768	100.0
Between 200% and 400% of FPL	,	
Insured (minimum essential coverage)	64 972	88.3
Employer	50.462	68.6
Private nongroup	4 695	64
Marketplace with PTCs	3 482	47
Full-nav Marketplace	379	0.5
Other nongroup	834	11
Medicaid/CHIP	7.169	97
People with disabilities	910	1.2
Medicaid expansion	2	0.0
Nondisabled adults	1,682	2.3

	Thousands of people	Percent
Nondisabled children	4,568	6.2
State-funded program	7	0.0
Other public	2,645	3.6
Uninsured (no minimum essential coverage)	8,583	11.7
Uninsured	7,644	10.4
Noncompliant nongroup	939	1.3
Total	73,555	100.0
Above 400% of FPL		
Insured (minimum essential coverage)	87,458	94.5
Employer	79,667	86.0
Private nongroup	3,738	4.0
Marketplace with PTCs	46	0.0
Full-pay Marketplace	774	0.8
Other nongroup	2,917	3.2
Medicaid/CHIP	1,814	2.0
People with disabilities	518	0.6
Medicaid expansion	2	0.0
Nondisabled adults	536	0.6
Nondisabled children	754	0.8
State-funded program	4	0.0
Other public	2,240	2.4
Uninsured (no minimum essential coverage)	5,127	5.5
Uninsured	3,944	4.3
Noncompliant nongroup	1,183	1.3
Total	92,585	100.0

Notes: FPL = federal poverty level. PTCs = premium tax credits. CHIP = Children's Health Insurance Program.

#### Health Coverage by Age

In table 6, we show the distribution of types of health coverage for different age groups in 2020. Children have the lowest uninsurance rate, just over 4 percent, largely because of high eligibility thresholds for Medicaid and CHIP. For adults, uninsurance rates drop with increasing age, from 16.7 percent of those ages 19 to 34 to 7.4 percent of those ages 55 to 64.

## Health Insurance Coverage Distribution among the Nonelderly under Current Law, by Age Group, 2020

	Thousands of people	Percent
Birth to age 18		
Insured (minimum essential coverage)	74,767	94.9
Employer	36,727	46.6
Private nongroup	1.391	1.8
Basic Health Program	0	0.0
Marketplace with PTCs	421	0.5
Full-pay Marketplace	221	0.3
Other nongroup	749	1.0
Medicaid/CHIP	35,223	44.7
Children with disabilities	1,494	1.9
Nondisabled children	33,729	42.8
Other public	1,426	1.8
Uninsured (no minimum essential coverage)	3.984	5.1
Uninsured	3.331	4.2
Noncompliant nongroup	652	0.8
Total	78 751	100.0
Ages 19-3/	70,751	100.0
Ages 17-34	57 210	01 0
Insured (minimum essential coverage)	37,218	01.7 51.0
Drivete personal	30,293	51.9
Private hongroup	3,732	5.0
Basic Health Program Marketplace with DTCs	422	0.0
Full new Marketplace	2,207	5.2
Other pengroup	008 333	0.5
	15 574	1.3
Deople with disabilities	2 301	22.5
Medicaid expansion	7 223	10.3
Nondisabled adults	6 0 3 0	8.6
State-funded program	21	0.0
Other public	1 419	2.0
Unincured (no minimum assential coverage)	10 477	101
Uninsured	12,077	16.1
Noncompliant nongroup	070	1 /
	777	1.4
	69,895	100.0
Ages 34-54		
Insured (minimum essential coverage)	75,891	86.9
Employer	54,433	62.3
Private nongroup	5,658	6.5
Basic Health Program	317	0.4
Marketplace with PTCs	3,324	3.8
Full-pay Marketplace	468	0.5
Other nongroup	1,549	1.8
Medicaid/CHIP	13,282	15.2
People with disabilities	3,497	4.0
	4,402	5.0
Nondisabled adults	5,370	6.1
State-Tunded program	13	0.0
Other public	2,518	2.9
Uninsured (no minimum essential coverage)	11.433	13.1

	Thousands of people	Percent
Uninsured	10,640	12.2
Noncompliant nongroup	794	0.9
Total	87,325	100.0
Ages 55-64		
Insured (minimum essential coverage)	36,470	92.3
Employer	23,663	59.9
Private nongroup	4,150	10.5
Basic Health Program	151	0.4
Marketplace with PTCs	2,534	6.4
Full-pay Marketplace	286	0.7
Other nongroup	1,180	3.0
Medicaid/CHIP	5,399	13.7
People with disabilities	2,095	5.3
Medicaid expansion	2,340	5.9
Nondisabled adults	962	2.4
State-funded program	2	0.0
Other public	3,257	8.2
Uninsured (no minimum essential coverage)	3,034	7.7
Uninsured	2,927	7.4
Noncompliant nongroup	107	0.3
Total	39,504	100.0

Notes: PTCs = premium tax credits. CHIP = Children's Health Insurance Program.

#### **Overall Health Care Spending**

Table 7 summarizes total health care spending by payer. We chose these income groups because of their relevance to ACA programs. However, they do not contain the same number of people. For example, total household out-of-pocket health care spending is very similar between those with incomes below 138 percent of FPL and those with incomes between 138 and 200 percent of FPL. However, 78.6 million people have incomes below 138 percent of FPL, and only 30.8 million people have incomes between 138 percent of FPL. Thus, per capita out-of-pocket health care spending is much lower for those with incomes below 138 percent of FPL. Household spending increases with rising income, because Medicaid and the most generous Marketplace subsidies are available at lower incomes, and lower-income populations include more uninsured people.

Unsurprisingly, state and federal Medicaid spending is heavily concentrated on those with the lowest incomes; 71 percent of total Medicaid spending on acute care for the nonelderly is for those with incomes below 138 percent of FPL. Marketplace premium tax credits are for people with incomes below 400 percent of FPL, except for enhanced, state-funded premium tax credits available

in California. Lastly, uncompensated care spending is generally proportional to the number of uninsured people in each income group (tables 5 and 7).

#### TABLE 7

Total Spending on Acute Care for the Nonelderly under Current Law, by Income Group, 2020

	Income Group				
	Below 138% of FPL	Between 138% and 200% of FPL	Between 200% and 400% of FPL	At or above 400% of FPL	Total
Household					
Premiums	15,897	22,331	85,558	149,062	272,849
Other health care					
spending	21,624	21,437	86,278	143,688	273,027
Subtotal	37,522	43,768	171,836	292,751	545,876
Federal government					
Medicaid	249,199	41,382	45,051	17,010	352,642
Marketplace PTCs	13,215	24,797	16,955	0	54,967
Marketplace CSRs	0	0	0	0	0
Additional	44	334	461	424	1,263
Uncompensated care	10,013	2,401	7,072	6,771	26,257
Subtotal	272,471	68,915	69,539	24,204	435,130
State government					
Medicaid	129,472	18,330	22,888	10,757	181,446
Marketplace PTCs	10	56	191	119	376
Marketplace CSRs	1	20	27	0	47
Additional	8	95	118	122	343
Uncompensated care	6,258	1,501	4,420	4,232	16,411
Subtotal	135,748	20,003	27,643	15,230	198,624
Employers					
Premium contributions	45,927	55,580	228,857	390,562	720,926
Providers					
Uncompensated care	8,762	2,101	6,188	5,925	22,975
Total	500,431	190,366	504,063	728,671	1,923,531

**Source:** Urban Institute Health Insurance Policy Simulation Model, 2020 open enrollment period baseline (before COVID-19 pandemic).

Notes: FPL = federal poverty level. PTCs = premium tax credits. CSRs = cost-sharing reductions.

#### **Federal Government Spending**

In table 8, we summarize state-by-state federal spending on Medicaid acute care for the nonelderly, Marketplace premium tax credits, and state reinsurance waivers. Federal BHP payments for Minnesota and New York are counted in the premium tax credit column. Tables 2 and 3 provide corresponding enrollment numbers by state.

#### Federal Spending under Current Law, by State, 2020

Millions of dollars

	Medicaid/CHIP	Tax credits	Reinsurance	Total
Alabama	4,404	1,109	0	5,513
Alaska	1,194	110	77	1,381
Arizona	10,832	646	0	11,478
Arkansas	5,091	224	0	5,315
California	45,129	5,510	0	50,639
Colorado	5.310	481	169	5.961
Connecticut	4,489	463	0	4.952
Delaware	1,295	125	22	1.441
District of Columbia	1.471	5	0	1.475
Florida	14,935	9.273	0	24,208
Georgia	8 658	2 109	0	10 767
Hawaii	1.042	87	0	1,129
Idaho	2 128	416	0	2 543
Illinois	7 935	1 182	0	9 1 1 6
Indiana	8,066	406	0	8 4 7 2
lowa	3 4 5 5	443	0	3 898
Kansas	1 611	476	0	2 087
Kentucky	8 4 9 4	347	0	8 841
Louisiana	7 754	047 126	0	8 1 8 0
Maine	1 703	324	26	2 073
Mandand	6 6 6 4 9 4	504	117	2,075
Massachusetts	7 883	821	-++/	8 704
Michigan	13 357	729	86	1/ 172
Minnesota	6 183	616	0	6 799
Mississinni	1 1 3 3	614	0	1 717
Missouri	6 761	1 077	0	7 8 3 8
Montana	1 924	196	23	2 1/2
Nebraska	981	743	0	1 724
Nevada	2859	251	0	3 1 1 0
New Hampshire	870	137	0	1 007
New Jersey	6.364	602	190	7 1 5 6
New Mexico	5,266	146	0	5 412
New York	26.651	6.090	0	32,741
North Carolina	12,282	3.215	0	15.498
North Dakota	448	53	21	523
Ohio	13 836	563	0	14 399
Oklahoma	3.719	1.103	0	4.822
Oregon	5.634	512	54	6.200
Pennsylvania	14.572	1.375	0	15,947
, Rhode Island	1,236	89	5	1,330
South Carolina	4,344	1,248	0	5,592
South Dakota	630	213	0	843
Tennessee	7,386	1,226	0	8,612
Texas	27,241	4,880	0	32,120
Utah	3,119	624	0	3,743
Vermont	1,100	119	0	1,219
Virginia	7,490	1,177	0	8,666
Washington	7,375	571	0	7,945
West Virginia	2,943	145	0	3,088
Wisconsin	4,042	895	142	5,079
Wyoming	303	275	0	578
Total	352,642	54,967	1,263	408,872

Note: CHIP = Children's Health Insurance Program.

In table 9, we show the distribution of the 9.4 million people getting financial assistance for enrolling in coverage either in the Marketplaces (8.5 million) or BHP (900,000) by income group. We also show total federal premium tax credit spending for each group and spending on state-funded enhanced premium tax credits and reinsurance. Reinsurance programs, where available, affect everyone enrolled in the nongroup market, not just those getting premium tax credits.

#### TABLE 9

Distribution of Tax Credits by Income Group and Coverage Type and Federal and State Spending on Tax Credits under Current Law, 2020

		SPENDING ON TAX CREDITS (MILLIONS OF DOLLARS)					
	Thousands of	Federal		State			
	people with tax credits	APTC	CSR	Other	APTC	CSR	Other
Basic Health Program							
< 138% of FPL	449	3,290	0	0	0	0	0
>= 138% of FPL	441	2,535	0	0	0	0	0
Marketplace with PTCs							
< 150% of FPL	2,421	16,156	0	114	24	3	25
150% to < 200% of FPL	2,596	16,031	0	231	42	18	67
200% to < 250% of FPL	1,126	6,451	0	106	63	18	26
250% to < 300% of FPL	963	4,661	0	93	79	9	23
300% to 400% of FPL	1,394	5,844	0	150	48	0	37
> 400% of FPL	46	0	0	0	119	0	0
Full-pay Marketplace	0	0	0	0	0	0	0
Other nongroup	0	0	0	0	0	0	0
Total	9,436	54,968	0	694	376	47	178

**Source:** Urban Institute Health Insurance Policy Simulation Model, 2020 open enrollment period baseline (before COVID-19 pandemic).

**Notes:** Other includes reinsurance and a few special programs. APTC = advanced premium tax credit. CSR = cost-sharing reduction.

#### State Government Spending

In table 10, we summarize state spending on Medicaid acute care for the nonelderly, supplemental state-funded premium tax credits, and state reinsurance waivers. Tables 2 and 3 provide the corresponding enrollment numbers by state.

### State Government Health Spending on Acute Care for the Nonelderly under Current Law, 2020 *Millions of dollars*

	Supplemental premium tax				
	Medicaid and CHIP	credits and reinsurance	Total		
Alabama	1,535	0	1,535		
Alaska	495	0	495		
Arizona	3,317	0	3,317		
Arkansas	1,441	0	1,441		
California	26,530	225	26,755		
Colorado	2,974	81	3,055		
Connecticut	3,097	0	3,097		
Delaware	694	5	699		
District of					
Columbia	574	0	574		
Florida	8.742	0	8.742		
Georgia	3.796	0	3.796		
Hawaii	569	0	569		
Idaho	626	0	626		
Illinois	5.648	0	5.648		
Indiana	2.885	0	2.885		
lowa	1.525	0	1.525		
Kansas	987	0	987		
Kentucky	2.168	0	2.168		
Louisiana	2.491	0	2,491		
Maine	824	0 0	824		
Maryland	4 261	15	4 275		
Massachusetts	5 669	193	5 862		
Michigan	5 108	91	5 1 9 9		
Minnesota	4 871	0	4 871		
Mississinni	1 1 4 9	Û	1 1 4 9		
Missouri	3 288	0	3 288		
Montana	567	12	579		
Nebraska	756	0	756		
Nevada	1 160	0	1 1 60		
New Hampshire	608	0	608		
New Jersev	3 937	77	4 014		
New Mexico	1 219	0	1 219		
New York	16 969	0	16,969		
North Carolina	5 4 1 4	0	5 4 1 4		
North Dakota	295	26	.321		
Ohio	6 1 1 1	0	6 1 1 1		
Oklahoma	1 754	Û	1 754		
Oregon	2 228	16	2 244		
Pennsylvania	9 1 5 8	0	9 1 5 8		
Rhode Island	746	10	755		
South Carolina	1 674	0	1 674		
South Dakota	397	0	397		
Tennessee	3,608	0	3,608		
Texas	15 698	0	15 698		
Utah	1 047	0	1 047		
Vermont	776	6	782		
Virginia	4 285	0	A 285		
Washington	4 204	0	4 203		
West Virginia	733	Ũ	733		

	Supplemental premium tax				
	Medicaid and CHIP	credits and reinsurance	Total		
Wisconsin	2,557	12	2,569		
Wyoming	279	0	279		
Total	181,446	767	182,213		

Note: CHIP = Children's Health Insurance Program.

#### The Impact of the COVID-19 Pandemic

Shortly after we completed the annual model update based on OEP data, the COVID-19 pandemic resulted in historic job losses. This has undoubtedly had substantial impacts on health insurance coverage. Though definitive data will not be available until 2021, we have published two estimates of how the pandemic has affected health coverage and costs. Given shifts in coverage owing to pandemic-related job losses, the first analysis estimated 3 million people would be uninsured in the last three quarters of 2020 (Banthin et al. 2020). In addition, the number of people in ESI would decline by more than 7 million, while Medicaid/CHIP enrollment would increase by more than 4 million people. Nongroup enrollment would increase slightly on net; new nongroup enrollees would be largely offset by current enrollees becoming eligible for Medicaid because of lost income.

In our second analysis, we estimated distribution of current-law health coverage for 2022 (Blumberg et al. 2020). We assumed the pandemic would still have a residual impact on employment; the number of lost jobs would be lower than in 2020, but recovery would not be the same for all groups of workers. According to data from the US Bureau of Labor Statistics, employment for those with a college degree had returned to nearly prepandemic levels by September 2020, while employment for those with less educational attainment lagged substantially.<sup>3</sup> In our 2022 baseline estimates, roughly 2 million more people are uninsured than in our 2020 OEP baseline. And 2022 Medicaid/CHIP enrollment is higher than, ESI coverage is lower than, and net nongroup coverage is similar to those in the 2020 OEP baseline.

## Part 2. HIPSM Methodology

# The Underlying Population of Households and Synthetic Firms

As noted, the core data used in HIPSM are from the 2012 and 2013 American Community Surveys, an annual survey fielded by the US Census Bureau that represents the US-resident population. We use an augmented version of the ACS, the Integrated Public Use Microdata Series, which uses the public-use sample of the ACS and contains edits for family relationships and other variables. The 2012 ACS had a household response rate of 97.3 percent.<sup>4</sup>

We pool the 2012 and 2013 ACS data. By combining the two years of survey data, the HIPSM sample increases to just over 6 million observations. We adjust the weights associated with each observation to reflect the distribution of demographic, economic, and health coverage characteristics of the 2013 ACS population. Later, while producing each annual baseline, these weights are adjusted to match the weights of the most recent ACS. The high response rate and the large sample size of the ACS substantially increase HIPSM's power to produce estimates by state and even substate regions. HIPSM is well positioned to analyze the distributional impacts of policies that may differ in their effects on subgroups, and the model's large sample size means it is more likely to contain representative observations of small but policy-relevant subgroups.

We use these years of data for our model baseline because they predate the ACA. Later years reflect either the ACA's transitional period, during the first years of implementation, or substantial uncertainty over the ACA's future, especially given the Trump administration's executive actions beginning in 2017. Starting from pre-ACA data also makes it easier for the model to simulate both the full repeal of the ACA and the eventual full impact of the ACA under a stable administration. We incorporate demographic and economic changes between the base data year and current year by periodically reweighting the pre-ACA data, as we describe below.

#### Variable Editing and Imputations

*Edits to pre-ACA coverage variables.* We conduct edits and imputations for some key variables missing from the ACS. The Urban Institute has developed a set of health coverage edits to the ACS (Lynch, Boudreaux, and Davern 2010), and they result in health coverage that closely aligns with data from

the National Health Insurance Survey and the National Association of Insurance Commissioners, which are considered two of the best measures of national health coverage. We also impute the following to individuals on the ACS: detailed firm size, insurance policyholder and dependent status, unemployment compensation, offers of ESI among those not covered by such plans, and immigration status.

Adding firm size, policyholder status, and unemployment compensation. The firm size, policyholder status, and unemployment compensation imputations build on analyses we conducted with the pre-ACA Annual Social and Economic Supplement to the Current Population Survey. We use individual-level data from the ACS and similar data from the Annual Social and Economic Supplement to impute these missing data elements to the ACS. We impute firm size on the ACS because ESI offers are highly dependent on firm size, and we need to match individuals to simulated, or "synthetic," firms based on firm size. Also, many policies under current law and various proposals are or would be implemented differently by firm size. Similarly, we impute policyholder status to people in families with ESI (absent on the ACS) because we need to match workers who take up coverage to synthetic firms that offer that coverage. We also impute unemployment compensation, which is missing from the ACS but used in computing modified adjusted gross income (MAGI).

Adding ESI offer. The ACS does not ask workers without ESI whether they are eligible for ESI or if their firm offers coverage to any of its workers. We impute offers of and eligibility for ESI by firm size and industry on our base data to match the corresponding years' Medical Expenditure Panel Survey Insurance Component (MEPS-IC) summary tables. The MEPS is a survey of individuals and families, employers, and medical providers across the United States that provides information about health care expenditures and health insurance coverage. It has two major components: The Household Component (MEPS-HC), used to estimate HIPSM health care costs as described below, collects data from individuals, families, and their health care providers. The other component, MEPS-IC, collects ESI information from employers. We begin by predicting initial probabilities of whether a worker is in a firm offering coverage and whether the worker is eligible, based on worker and employer characteristics. The data used to build the regression models come from the Contingent Worker Supplement to the February Current Population Survey collected in 2005, the last year including information on ESI offers in that supplement.<sup>5</sup> We then adjust the model so the probabilities of offer by firm size and industry match the latest available MEPS-IC data.

Adding immigration status. The ACS does not contain sufficient information to determine whether noncitizens are authorized immigrants. We therefore impute documentation status for noncitizens using a year-specific model, because eligibility for Medicaid/CHIP and Marketplace tax credits

depends on immigration status and requires that enrollees be citizens or authorized immigrants. Moreover, in some states, immigrants' eligibility also depends on how long they have been in the country. We impute documentation status to immigrants in two stages, using individual and family characteristics based on methodology from Passel and Cohn (2009). The approach is designed to produce imputations that match, in aggregate, published summary estimates of the US undocumented population, nationally and in California, Florida, Illinois, New Jersey, New York, and Texas. To determine whether certain immigrants are eligible for public programs, we use state eligibility rules and ACS information about citizenship, imputed documentation status, and date of immigration.

#### **Population Weights for Current and Future Years**

We reweight our base data for 2020–30 using two sources: a recent source of data on the current population and state-level population projections for 2030. For the first, we reweight the base data to match the distributions of age, gender, and income in each state on the 2017 ACS. We also match Pew Research Center's 2017 estimates of the number of undocumented immigrants nationwide and in each of the large states for which they provided estimates (Passel and Cohn 2018). Our starting point was different for Alaska, Massachusetts, New Mexico, and New York; for these states, we had already developed more detailed current-law weights for other technical assistance work, and we used those instead of the standard 2017 ACS distributions.

The Census Bureau does not provide state-level population projections, so we use 2030 projections from the Urban Institute's Mapping America's Futures program. These projections match Census Bureau population projections nationally but provide greater detail and state-level projections. For years between 2020 and 2030, we extrapolate between the recent ACS and Mapping America's Future projections.

#### Synthetic Firms

An important step in building HIPSM is grouping workers into synthetic firms. Because ACS household survey data lack detailed information on where respondents work, we build synthetic firms to represent employers. Constructing synthetic firms allows us to model firms' decisions to offer ESI to their workers. If a synthetic firm is estimated to offer insurance, we also model the type of plan offered and compute premiums for that firm.

By grouping workers into synthetic firms within HIPSM, we can model firm decisions about ESI in response to policy changes, reflecting the combined preferences and characteristics of the workers in each firm as well as their dependents, who might also obtain coverage through the employer. The distribution of synthetic firms mimics the known distribution of employers by size, industry, region, and baseline offer status, and workers assigned to each synthetic firm are matched to firms by their reported employment characteristics.

We designed and implemented a procedure to create synthetic firms that records the distribution of workers within and across firms while minimizing computational burden. The optimal number of synthetic firms must be relatively large to analyze the distribution of firms' outcomes, and we performed experiments over an optimal number of firms. We began with a representative population of workers and their families from two years of pooled ACS data. From there, we constructed synthetic firms based on four employer characteristics:

- 1. Firm size (100-499 employees versus 500-999 employees)
- 2. Major industry group
- 3. Region
- 4. Whether the firm currently offers health coverage

We obtain information on how many actual firms and workers are in each combination of these characteristics from the latest information available in the Statistics of US Businesses. Health coverage offer rates are not available in the Statistics of US Businesses, so we use published rates from the MEPS-IC summary tables. Each firm worker in our two-year ACS file becomes the nucleus of a synthetic firm. Replicates of other workers in firms with the same combination of employer characteristics are added to each synthetic firm to make a full complement of workers. Each synthetic firm is assigned an analytic weight so weighted sums match the total number of firms in both groups of employee sizes (100–499 versus 500–999), regions, and industries from the latest Statistics of US Businesses, trended to 2016.

We then classify synthetic firms according to three other characteristics the literature has identified as particularly important in the provision of health benefits:

 Low-wage firms versus other firms. We use the same definition of low-wage firms as the Kaiser-Health Research and Educational Trust Employer Health Benefits survey (Kaiser-HRET survey): 35 percent or more of the workforce earns \$25,000 or less annually in 2018. Synthetic firms were marked as either low wage or not low wage.

- Plan deductible type. Some firms offer only high-deductible coverage to their workers, and distinguishing them from firms offering comprehensive options is important. Also, our analysis of plan cost-sharing parameters (deductibles, coinsurance rates, out-of-pocket maximums) in the Kaiser-HRET survey data showed the biggest difference between various comprehensive plans was whether the plans had a deductible; plans without a deductible tended to be around 90 percent actuarial value, and plans with a deductible tended to be around 80 percent actuarial value. We classified firms into (1) those offering only a high-deductible plan, (2) those offering comprehensive coverage with deductibles, and (3) those offering comprehensive plans without a deductible. We take the shares of firms that should fall in each category, based on firm characteristics, from the Kaiser-HRET survey microdata. We use the Kaiser-HRET survey data to estimate the number of firms in each deductible group by industry, region, and low wage. Because workers' preferences factor into an employer's health benefit choices, we ensure each firm's deductible group assignment matches the preferred plan of a majority of workers taking up coverage.
- Employer premium contribution rates. The next section explains how we set contribution rates for single and dependent coverage.

Very few data are available regarding how the distribution of wages varies among firms of similar size and industry. Because our algorithm is based on a representative population of workers, it approximates actual distributions, on average. However, if firms of a particular size and industry employ very different mixes of workers, our synthetic firms may have less extreme wage distributions than do actual firms.

#### Imputation of Dependent Coverage Options and Contribution Rates

HIPSM has been enhanced to better model issues around the so-called "family affordability glitch." Under the ACA, if one family member is offered single coverage that is deemed affordable, the entire family is barred from premium tax credits. The cost of family coverage is not considered and, in some cases, may require an employee contribution that is not affordable. More generally, ESI is the leading source of coverage for children, and the availability and affordability of such coverage is crucial to many policy questions about children's coverage. We collaborated with the Agency for Healthcare Research and Quality to obtain details on dependent coverage and premiums for different types of firms from the 2013 MEPS-IC, information that was previously unavailable to outside researchers. This resulted in two main advances over our previous modeling. First, we imputed the types of dependent coverage offered by firms: no coverage, single-plus-one coverage, family coverage, or both single-plus-one and family coverage. Second, we used information about the joint distribution of required worker contributions for single, employee-plus-one, and family coverage. This allowed us to model, for example, the extent to which firms require small contributions to single coverage but large contributions to dependent coverage, which is critical for modeling the extent of the family glitch.

To assign dependent coverage options and worker contribution rates to our synthetic firms, we use the coefficients of a set of regression models run by the Agency for Healthcare Research and Quality on MEPS-IC data.<sup>6</sup> The regressions, based on computations in the marginal cost of dependent coverage paper, make up three sets of models: single to family coverage, single to plus-one coverage, and plus-one to family coverage. Single to family coverage gave the probability that a firm offered family coverage. Single to plus-one gave the probability that a firm offered employee-plus-one coverage. Plus-one to family gave the probability that firms offering plus-one coverage also offered family coverage. We use these to compute the probabilities that a firm offering single coverage offers one of four dependent coverage options:

- no dependent coverage
- plus-one and family coverage
- family coverage but not plus-one coverage
- plus-one coverage but not family coverage

An option was assigned to each firm using a Monte Carlo model.

Zero worker contributions for all options. In the next step, we imputed the probability that a firm would not require worker premium contributions for either single or dependent coverage, using regression models provided by the Agency for Healthcare Research and Quality.

The joint distribution of single and dependent contributions. For firms that require nonzero contributions for some coverage options, we assign each to a cell in the following matrix (table 11). We compute the quartiles over all firms with nonzero contributions and for those with employee-plusone and family policies.

Dependent coverage (family or plus-one)	Single coverage							
	Zero contribution	1st quartile	2nd quartile	3rd quartile	4th quartile			
1st quartile								
2nd quartile								
3rd quartile	Collapsed							
4th quartile								

Matrix for Distribution of Single and Dependent Contributions

Source: Urban Institute.

Because of sample size, two cells with zero single contributions had to be collapsed. The first set of models computed the probability that a firm was in the collapsed cell.

We impute all other cells in two stages. The first is a regression model for the probability of being in each single worker contribution group (no single contribution and the contribution quartiles columns in the table above). By design, the probabilities for the five single coverage options sum to 100 percent, so we assign a single coverage option to each firm by a Monte Carlo model.

The second stage is a regression model of the probability of being in each of the four dependent coverage contribution groups (rows in the table above). The models contain dependent variables for single coverage. Based on the resulting probabilities, we imputed the availability of plus-one and family coverage in each firm. Assignment to a dependent coverage group accounted for the imputed single coverage group, meaning each firm was assigned to only one cell in the matrix.

For each coverage type, we compute the average contribution rate in each quartile among firms with nonzero worker contributions, based on survey data. We assign single, family, and plus-one contribution rates to each firm offering such options based on the average rate for the imputed quartile.

### **Underlying Health Care Expenditures**

Understanding heath expenditures by individuals and families is central to computing health insurance premiums, evaluating the health insurance options facing families, and assessing the costs of the components of the ACA. The ACS does not collect data on health care expenditures, so we

statistically match health care expenditure data from individuals in the MEPS-HC to individuals in the ACS. We make several adjustments to the MEPS data, as we describe below.

We statistically match health care expenditures, unique health insurance variables, and health conditions from multiple years of pooled MEPS-HC datasets to our core ACS file, matching MEPS and ACS individuals by insurance coverage and demographic and other common characteristics in the two datasets. The 2020 version of HIPSM incorporates MEPS-HC data from 2002 to 2012. We chose these years because the data have been supplemented with diagnosis-based risk scores, which we use for several purposes. More recent years of MEPS data exclude risk scores.

All MEPS expenditures are adjusted to be comparable with estimates from the National Health Expenditure Accounts, following the procedure developed by the Agency for Healthcare Research and Quality, and further scaled by an inflation factor to represent dollars as of the HIPSM baseline year. Using a propensity-weighting approach, we assign a MEPS observation to each ACS observation, and we then append the health expenditure data and information on health status and health conditions from the matched MEPS individuals to their matched ACS individuals. Variables used in the match include age, sex, health status, disability/functional limitation, income group, health coverage, race, and ethnicity. We then confirm that health expenditures in the appended ACS file maintain the statistical distributions of and relationships with other variables existing in the original MEPS data.

For each observation, we include expenditure data for seven service categories: hospital, physician, dental, other professional care, home health care, prescription drugs, and other medical equipment. We created these categories to be consistent with the National Health Accounts personal health care expenditures data, which are maintained by federal actuaries. Compared with the National Health Accounts, the MEPS underestimates the aggregate insured costs associated with Medicaid and privately insured individuals (Selden and Sing 2008; Sing et al. 2006). To correct this discrepancy, we use adjustment factors to boost Medicaid and privately insured dollars; the factors are consistent with the relative differences in the two datasets identified in Sing and colleagues (2006). We apply these factors to each observation in our dataset that reported positive Medicaid and/or privately insured expenditures. We then inflate our expenditures to the current year using the National Health Accounts' per capita growth in each expenditure category.

The MEPS also misses some of the very high-cost cases in the tail of the distribution of health care expenditures. To adjust for that underreporting, we looked to the Society of Actuaries' Health Care Cost Institute database.<sup>7</sup> This comprehensive survey examined seven insurers and their claimants and was designed to represent the national distribution of all claims to private insurers. We found that

the 97th to 99th percentiles of private expenditures among the nonelderly in MEPS data fell below the same percentiles in the Health Care Cost Institute database. The discrepancy ranged from less than 1 percent (97th percentile) to 13 percent (99th percentile). We use these discrepancies as adjustment factors for all privately insured individuals with private expenditures above the 97th percentile. Following this adjustment, we decrease the private expenditures of the privately insured individuals in the lower portion of the distribution by a fixed percentage. This keeps total health expenditures in our MEPS-appended ACS files consistent with the National Health Accounts totals.

#### Spending under Different Coverage Types.

Once we have assigned expenditures to each person in our matched ACS-MEPS analytic file by matching them to a similar person in the MEPS-HC, we next estimate how each individual would alter their spending under different types of insurance. This step is necessary for us to model how individuals' expected utility might change under policy proposals. Total spending on health care varies by the generosity of a health insurance plan's benefits. The same individual would spend more in total (including both out-of-pocket and insured costs) under a health insurance plan with generous benefits than under a health insurance plan with less generous benefits. Different types of health insurance vary in their covered services and cost-sharing requirements (e.g., deductibles, copayments, and out-of-pocket maximums). These plan characteristics alter the out-of-pocket price faced by an individual when consuming medical care. The higher the out-of-pocket price, the less care the individual is likely to consume.

HIPSM assumes individuals value the amount of health care they consume, and this value is included in the utility function. Thus, to understand the value of health care an individual will obtain under various coverage options, we compute health care spending under four alternate "states" of health coverage:

- uninsured
- insured by Medicaid/CHIP
- insured under a typical comprehensive employer plan
- insured under a typical nongroup plan

For the uninsured, we divide total spending into out-of-pocket and uncompensated care costs. For the other states, we divide spending into out-of-pocket and insured costs. To predict spending for each individual in our matched ACS-MEPS files under each insurance state, we estimate four separate models (one for each insurance state). We first estimate total health care spending for each insurance state in two parts. The first part estimates the probability of having any health expenditures, and the second part estimates the amount of health expenditures conditional on having positive expenditures. In the second part, the dependent variable is the log of total health expenditures. The independent variables in both parts of the model are sociodemographic and health characteristics: age, sex, race/ethnicity, poverty category, health status, disability status, and health conditions. We estimate the coefficients of the four separate models by restricting the sample to individuals who report coverage under each of the insurance states. In the final step, we use the four sets of coefficients resulting from the four models to predict the total spending for each individual in our sample under the four insurance states, using an individual's sociodemographic and health characteristics.

#### **Uncompensated Care**

In the previous step, we estimated total health care spending for each individual in our sample under four possible insurance states, including being uninsured. Importantly, HIPSM can estimate the these individuals' demand for uncompensated care, or the amount of health care costs beyond what a person can pay on their own.

To more accurately capture the uncompensated care associated with the uninsured, we adjust MEPS expenditure data. After the previous step, we have estimates of out-of-pocket health care expenditures and total expenditures for each person were a person covered by private insurance. We first reduce total expenditures to capture the moral-hazard effect of the additional out-of-pocket spending resulting from being uninsured. The result is an estimate of the total expenditures of the uninsured person. We then calculate the difference between these expected costs and the original out-of-pocket costs for each uninsured person. This difference is a person's uncompensated care.

Using health coverage from the 2013 ACS, we calibrate individual uncompensated care values to replicate the total amount of 2013 uncompensated care, consistent with findings in Coughlin and colleagues (2014). Coughlin and colleagues estimated the federal government funds about 39 percent of uncompensated care through programs such as Medicaid and Medicare disproportionate share hospital payments, state and local governments fund 24 percent, and health care providers fund 37 percent. For future years, we inflate uncompensated care by the growth in per capita out-of-pocket health care spending in the National Health Expenditure Accounts.

#### Uncompensated care is currently funded by

- Medicaid disproportionate share hospital and upper payment limit programs;
- Medicare disproportionate share hospital payments;
- the Veterans Health Administration;
- other federal programs;
- state and local government programs;
- private programs, such as the patient assistance programs providing free or reduced-cost prescription drugs to qualifying individuals; and
- charity care and bad debt absorbed by health care providers.

HIPSM estimates of uncompensated care should be considered measures of the demand for uncompensated care, rather than the amount of uncompensated care actually provided. The model does not estimate the specific ways in which uncompensated care is funded, which are diverse and vary considerably between states. When simulating policy alternatives, we make no assumptions about how the sources and levels of uncompensated care funding would change, unless the policy contains specific changes to federal programs funding uncompensated care. For example, when simulating the repeal of the ACA, the demand for uncompensated care increases substantially. However, it is unclear whether funding of uncompensated care by federal, state, and local governments would automatically increase proportionally.

#### **Construction of Insurance Packages**

#### EMPLOYER COVERAGE

At this point in a simulation, each individual in the file has been assigned health expenditures consistent with having private coverage. These total health expenditures, however, reflect the particular benefit package the matched MEPS individual had at the time of the survey. For example, if two identical people were given two different health insurance policies, one with a high deductible and one with a low deductible, the person with the low deductible would have higher total health expenditures than the person with the high deductible. Higher out-of-pocket liability lowers expected spending (called the moral-hazard effect).
We want HIPSM to be able to model changes in benefit packages and compute the health spending of each individual under any given package. As a first step, we standardize individual spending to align with enrolling everyone in either (1) a typical benefit package for the ESI market or (2) the pre-ACA nongroup market. These adjustments are based on data with information on deductibles and out-of-pocket maximums from the Kaiser-HRET and America's Health Insurance Plan surveys, respectively. (See below for ACA packages.) Private health expenditures are adjusted to be consistent with each of the defined typical benefit package.<sup>8</sup>

Induction factors provided by actuaries<sup>9</sup> are used to incorporate a behavioral response by individuals and families facing different levels of out-of-pocket spending under the standardized policies than they were assumed to face at the time of the MEPS. We assume those facing lower out-of-pocket expenses respond by increasing use and total expenditures, whereas those facing higher out-of-pocket expenses decrease use and total expenditures. Individuals with high spending levels, who are assumed to have more serious health conditions, respond less to changes in out-of-pocket expenses than those with lower spending levels.

Once such packages are created, they can be modified to achieve a given actuarial value, defined as the average share of spending on covered benefits paid for by the insurer over a group of insured people.

#### NONGROUP MARKETS, INCLUDING MARKETPLACES

Under the ACA, packages in the small-group and nongroup markets include the same essential benefits but differ in actuarial value because of different cost-sharing requirements. For the nongroup market, including the Marketplaces, we construct plans at each of the legally defined actuarial values and cost-sharing reduction levels by varying parameters, such as deductibles, maximum out-of-pocket levels, and coinsurance rates. To do so, we use the Center for Consumer Information and Insurance Oversight actuarial value calculator, as an insurer would.

Every year, we calibrate private health insurance packages and health expenditures to replicate actual Marketplace data for the coming plan year. These data are on (1) plan design (deductibles and out-of-pocket maximums) offered in state Marketplaces and (2) premiums at various metal levels for each state premium rating region, particularly the second-lowest silver plans, on which federal premium tax credits are based.

It is difficult to extract an overall coinsurance rate from available plan data. So, we take the median deductible and out-of-pocket maximum and use the current year's Center for Consumer

Information and Insurance Oversight actuarial value calculator to determine the coinsurance rate with the correct actuarial value. Various plan designs can have the same actuarial value, but they all have about the same expected value for insured costs, by definition. We simplify the plan choices people make; HIPSM decisions are based on expected values and variances of health costs (see below), because people do not have perfect information about their costs for the coming year. This means different plans with same actuarial value would have similar take-up patterns.<sup>10</sup> We model just one plan per metal tier.

In HIPSM, each state is a separate risk pool, as under current law. However, actual premiums can vary by rating region within a state. Our model is based on the ACS, so we use substate regions called census public use microdata areas (PUMAs) when determining premiums. Mapping Marketplace premium rating regions to PUMAs is complex: If a PUMA is entirely contained in a rating region, we use that premium. However, many PUMAs contain multiple rating regions. For these, we take an average of the premiums in each rating region, weighted by the share of a PUMA's population in each region. In this way, HIPSM can reproduce local premium variation.

Another step in constructing the baseline is to adjust health care costs in each state and region to align with the insurance packages and premiums for the coming plan year. We begin with a preliminary simulation of people covered by nongroup insurance during the current plan year, based on current enrollment data and the simulated impact of any policy changes taking effect in the next plan year. Insurers must do similarly to estimate the rates they will charge in the coming year. The difference is that we must take their premiums as fixed. We adjust health care costs, both insured and out of pocket, so the insured costs of covered lives in each state align with the state's premiums.

Expenditures in HIPSM cannot generally be disaggregated into spending on individual benefits, but we can separate spending by four provider types, based on MEPS-HC data: hospital, physician, prescription drugs, and other.

HIPSM does not explicitly model other characteristics of an insurance plan that may affect the amount of medical care a person consumes, such as the size of the provider network and the presence of utilization management and prescription drug formularies. To the extent consumers value network size or other characteristics, those effects are measured in the latent error terms and included with other unmeasured variables when the model is estimated. In our estimates of spending under different insurance sources, those effects are implicitly incorporated. For example, our estimates of what people would spend if enrolled in Medicaid incorporates the effect on utilization of the limited networks of providers accepting Medicaid.

# Eligibility for Medicaid, CHIP, and Marketplace Tax Credits

Under the ACA, income eligibility for both Marketplace subsidies and Medicaid coverage is based on the Internal Revenue Service's tax definition of MAGI, which includes the following types of income for everyone, except tax-dependent children: wages, net business income, retirement income, Social Security, investment income, alimony, unemployment compensation, and financial and educational assistance.

To compute family income as a ratio of the poverty level, we sum person-level MAGI across the tax unit (Kenney et al. 2013). Current regulations define certain exceptions to using the tax unit for Medicaid eligibility determination. Also, such regulations define a formula used to determine how the income of undocumented family members, who are not considered part of the unit, is counted. In situations where a dependent lives outside the home to attend college, the ACS does not include data on family income or other family information in the child's record, nor does it include the child's presence in the records of family members. So, we assign some college students to families before beginning the simulation. In addition, we account for immigration status in determining eligibility for Medicaid, CHIP, and Marketplace tax credits, using the documentation-status imputations described above.

We model Medicaid mandatory disability-related eligibility by identifying adults with functional limitations<sup>11</sup> and comparing their incomes with thresholds for aged, blind, disabled Medicaid coverage. Though functional limitation is not directly comparable with disability status, as used in program eligibility determination, we find it is the best approximation available from this data source. Though some adults with functional limitations gain income-based coverage under the ACA's higher income thresholds, the ACA did not affect income thresholds and eligibility determination procedures for disability-related coverage. All states are required to continue providing Medicaid coverage to individuals receiving Supplemental Security Income benefits, and some states cover additional people with disabilities with higher incomes (Musumeci 2014). For other types of Medicaid and CHIP eligibility, we apply published MAGI eligibility thresholds for each state. Though we can distinguish finer Medicaid eligibility types in some states, we distinguish the following types of Medicaid eligibility in all states:

- people with disabilities
- Medicaid expansion

- nondisabled adults
- nondisabled children
- state-funded programs

For the rare cases in which we need eligibility rules in effect before 2014, we use the Urban Institute Health Policy Center's Medicaid/CHIP Eligibility Simulation Model. The model estimates pre-ACA eligibility for Medicaid/CHIP using available information on eligibility guidelines, including the amount and extent of income disregards and asset tests,<sup>12</sup> for each program and state as of mid-2013 (Lynch, Haley, and Kenney 2014).

#### Medicaid Eligibility under ACA Repeal

The ACA fundamentally changed how states count income for Medicaid and CHIP eligibility, with most eligibility types defined by MAGI. ACA implementation required every state to overhaul their eligibility systems; even if requirements of a Medicaid eligibility type did not change, the eligibility threshold had to be changed to reflect the ACA eligibility rules. None of the attempts to repeal the ACA would require states to go back to their old definitions and replace their eligibility systems again.

We cannot simply revert to pre-ACA income thresholds when simulating ACA repeal. Instead, we use MAGI-converted thresholds from each state's state Medicaid plan amendments submitted to CMS. If the ACA were repealed, the MAGI thresholds used to determine which enrollees qualify for the ACA's new eligible federal matching rate (in states that expanded Medicaid under the ACA) would become the maximum eligibility thresholds.

#### Marketplace Tax Credit Eligibility

Under the ACA, eligibility for Marketplace tax credits depends on four main variables HIPSM must compute:

- 1. **Eligibility for other programs.** Eligibility for Medicaid (described above) and other public health programs makes an individual ineligible for tax credits.
- Immigration status. HIPSM imputes immigration status for each individual in our data. Undocumented immigrants may not purchase coverage in the Marketplaces, even without tax credits. Also, legally present immigrants ineligible for Medicaid because they have been

residents for fewer than five years may be eligible for Marketplace tax credits, even if their incomes are below the FPL.

- 3. MAGI. We construct tax units and MAGI for each unit. The importance of MAGI goes beyond premium tax credit eligibility; it is also used to determine the level of tax credits and cost-sharing reductions for which a family is eligible. For families including undocumented immigrants, we compute MAGI for the legally present family members, as specified in federal regulations, which count a portion of the income of undocumented family members without counting them in family size.
- 4. Affordable offers of ESI coverage. Under current law, a family is barred from tax credit eligibility if any member is offered single coverage deemed affordable. The maximum percentage of income considered affordable is defined each year. For each worker in a family with an offer of coverage through an employer, we look at the worker's share of the cheapest available offer of single coverage (HIPSM models which employers offer a choice of multiple plans) and compare it with family MAGI to determine whether the worker's offer is affordable.

The model also computes eligibility for state-specific programs to make health coverage more affordable: BHPs in Minnesota and New York; supplemental tax credits and cost-sharing reductions in California, Massachusetts, and Vermont; and the DC Health Alliance. We account for state and federal government financing of these programs. For BHPs, we compute federal payments according to the current formula defined by CMS. Federal BHP payments are paid into a trust fund used only to provide health coverage to beneficiaries, and we are not aware of any data that suggest these payments are insufficient to pay program costs in either New York or Minnesota. Some state supplemental subsidy programs, notably Massachusetts's ConnectorCare health plans, are financed through long-standing Medicaid waivers. Others, such as California's new program, are state-funded.

## The Flow of a Policy Simulation

HIPSM coordinates behavior by iterating a sequence of four stages. In the first, the health insurance industry sets premiums for all available health insurance plans, given information observed in the last period and any policy changes that become effective for the current period. In the second stage, employers decide whether to offer an ESI plan, based on these premiums and information about their employees. If they choose to offer coverage, the employer then decides the plan to be offered and may adjust the employees' cash wages as a result. In the third stage, individuals choose their optimal health insurance option given their available alternatives and associated premiums, income, and relevant tax incentives. In the fourth stage, employer, individual, and family decisions are calibrated so overall behavior aligns with research from the health economics literature. Premiums are also updated based on the new enrollment decisions. Iterations continue until the changes in coverage fall below a specified threshold, meaning an equilibrium has been reached. Under the equilibrium, premiums and coverage distributions of individuals and families are aligned. In the following sections, we detail these stages.

#### Stage 1: Calculate Health Insurance Packages and Premiums

HIPSM calculates health insurance premiums using information on the health risks of enrollees, also called the risk pool, in a similar way to health insurers. For example, to calculate nongroup premiums in the current period, we use data on the health risks of people who bought a nongroup health insurance plan in the last period, accompanied by information on any policy changes that may affect the risk pool in the current period.<sup>13</sup> The model aims to reflect the health care costs of individuals who select into specific coverage types in the premiums for that option. Any policy change that affects individuals' health insurance decisions could affect premiums of *all* available coverage types. For example, a policy to expand public health insurance coverage will, in general, cause some people who formerly chose other types of coverage, such as nongroup health insurance, to switch to the public program. Given the change in nongroup risk pools, nongroup premiums will change accordingly.<sup>14</sup>

*Calculation of premiums from ESI risk pools.* We compute single and family ESI premiums faced by each employee and each firm for both standard and high-deductible ESI packages. We base our premium computations on the expenses of the covered lives within each synthetic firm. Premiums are calculated based on the weighted average of actual and expected insured costs, reflecting that firms are generally experience rated by insurers. From these blended costs, we calculate expected values for the individual firm and for ESI groups defined by firm size, industry, and self-insured status. This gives an average insured cost that blends the firm's and ESI group's average costs. We then apply an administrative load that varies by firm size and industry. The worker's share of premiums is then computed based on the previously calculated firm contribution rates.

Our baseline national ESI premium estimates are calibrated to be compatible with premiums in the most recent MEPS-IC and Kaiser-HRET survey. We compare the average and variance of premiums for HIPSM single, worker-plus-one, and family coverage with the latest available MEPS-IC summary tables. Premiums by firm size are calibrated by adjusting the actuarial value of ESI plans and the extent to which risk is pooled beyond a firm's workers.

We compute premiums for self-insured firms by applying a stop-loss insurance plan to a firm's health claims, which protects the firm from unexpectedly high costs. The firm is responsible for paying the remaining claims and the stop-loss premium. Stop-loss parameters vary by firm size and are based on data from the Kaiser-HRET survey and the available literature on self-insured health benefits.

*Calculation of nongroup premiums.* We compute single and family nongroup premiums in each iteration. The initial premiums are based on insured expenditures of those in the nongroup market at the baseline. In the following iterations, the pool is adjusted to include only those individuals simulated to enroll in nongroup coverage in the immediately preceding iteration. HIPSM follows the ACA's requirement that covered lives in each state form a single risk pool, but premium pricing can vary between regions in each state. We calibrate our model each year so nongroup premiums in each ACA premium rating region match posted premiums for the current year. (See the Construction of Insurance Plans section above.) We account for state-specific policies that affect premiums, particularly state-specific premium-rating age curves and reinsurance waivers. Premiums for policy alternatives change as the risk profile of enrollees in each state changes. To simulate alternatives to the ACA that would eliminate its nongroup market reforms, such as guaranteed issue, we can simulate individual underwriting and denials of coverage calibrated to results from pre-ACA America's Health Insurance Plans surveys.<sup>15</sup>

*Medicaid spending.* We use the latest Medicaid Statistical Information System (2012 to 2016, depending on state) to benchmark Medicaid spending in each state. We compute per capita spending for each of three groups: people with disabilities, nondisabled adults, and nondisabled children. We then age this spending to the current year using estimates from the National Health Expenditure Accounts. In computing each person's Medicaid costs, we account for differences in health risk between the pre-ACA Medicaid population and the current Medicaid population under the ACA. To ensure consistency, we then compare the per capita national federal spending for people with disabilities, nondisabled adults, and nondisabled children with the current Congressional Budget Office Medicaid baseline.

#### Stage 2: Employer Health Benefit Decisions

In HIPSM, synthetic firms are constructed to model employer decisions. In the model, employers account for their employees' gains or losses from having a health insurance offer and the perceived offering costs when deciding whether to make an offer. The costs of offering coverage are calculated as the cost of employers' premium contributions plus any assessments or penalties for which the

employer is liable, plus a fixed administrative cost, minus any tax incentives due to the tax exclusion of ESI, and minus any employer tax-credits under reform.

Employers will make an offer when they anticipate that (1) the employees' aggregate value of the insurance offer exceeds the costs of offering and (2) enough employees gain from having the offer.<sup>16</sup> Workers' values of ESI offers can be summed over all workers in a firm when determining that firm's decision. We assume employers distribute the costs of offering coverage back to their employees in the form of lower wages. That is, employees' cash wages are lower when they have an employer-provided health insurance offer than they would be without an insurance offer. This wage reduction is not realized at the individual level; rather, employer costs and savings are distributed across the wages of all workers (Gruber 1994).

#### Stage 3: Individuals' Optimal Health Insurance Decisions

We adopted an expected utility-based approach to modeling individual and family demand for health insurance coverage. With this approach, workers value different insurance options based on premiums, expected out-of-pocket payments, risk of high out-of-pocket expenditures, and the value they place on health care. Workers convey their valuation to employers, who decide whether and what to offer their workers based on whether the sum of the workers' valuations for an insurance option is greater than its cost. Individual insurance coverage states generally fall into four categories: ESI, nongroup coverage, public coverage, or uninsurance. However, nongroup, and less commonly ESI, decisions may involve additional decisions between coverage options within each type: Under current law, families can choose between actuarial value metal tiers in the nongroup market. They can also choose between ACA-compliant and non-ACA-compliant nongroup coverage, such as short-term, limited-duration policies. Policy alternatives may add further options.

#### UTILITY FUNCTIONS

The utility functions are the metric for valuing different insurance options available to individuals and health insurance units. The value of each type of coverage accounts for (1) out-of-pocket health care expenses, (2) premiums, (3) the uncertainty of out-of-pocket health care expenses, (4) the value of differences in the amount of health care consumed when insured versus when uninsured, and (5) the comprehensiveness of coverage a plan provides. The utility functions also capture other aspects of family preferences, including aversion to public program participation (e.g., due to welfare stigma) and unmeasured preferences associated with sociodemographic characteristics. Key inputs to the utility calculations include (1) the expected total and out-of-pocket health care spending individuals and

health insurance units would incur under each health insurance option and (2) the variance of expenditures under each option. We chose our utility function because it has the following mathematical and economic properties.

First, utility is additively separable into a function of disposable income (*C*) and a function of health care spending, whether out of pocket (*m*) or paid for by insurers, the government, or uncompensated care (*s*).

Second, both individuals and firms exhibit constant relative risk aversion (CRRA). Whereas several papers in the literature use absolute risk aversion (Feldman and Dowd 1991; Glied 2003; Zabinski et al. 1999), or ARA, HIPSM uses CRRA to achieve decreasing absolute risk aversion (DARA). We chose this for the following reasons:

- DARA incorporates two theoretically desirable behaviors: First, not only does the marginal utility of income decrease with income, but the percent decrease also decreases. Second, willingness to tolerate risk varies directly with income.
- Many studies using constant ARA were based on data from a limited income range (e.g., the RAND Health Insurance Experiment). In its utility computations, HIPSM uses income and wages adjusted to match Statistics of Income data from tax returns. The resulting amounts are not top coded. We therefore model a much larger range of income than other studies.
- The utility function in HIPSM is not used only for individual health insurance units. Sums of health insurance unit utility are the basis of firms' utility functions. With constant ARA, pooling risks has no benefits. This is why DARA utility functions are generally chosen for modeling *insurer* behavior (Venter 1983).
- Beyond DARA, empirical evidence supports CRRA (Chiappori and Paiella 2011; Szpiro 1986).

Third, we use the standard form of a CRRA utility function for risk aversion constant  $\sigma \neq 1$ , which is generally set to 2. For example:

$$u(C) = \frac{C^{1-\sigma}}{1-\sigma}u(C) = \frac{C^{1-\sigma}}{1-\sigma}$$

The following elasticities are constant:

$$\frac{\frac{\partial u}{\partial c}}{\frac{\partial u}{\partial m}} \equiv \gamma_m \qquad \qquad \frac{\frac{\partial u}{\partial c}}{\frac{\partial u}{\partial s}} \equiv \gamma_s$$

Further, the elasticities do not depend on the health insurance option under consideration, a standard assumption in the literature.

THE HEALTH INSURANCE POLICY SIMULATION MODEL FOR 2020

Fourth, out-of-pocket and insured costs are valued differently, (i.e.  $\gamma_m \neq \gamma_s$ ). This is an important component of some models in the literature (Glied 2003) but absent from others (Zabinsky et al. 1999). We believe the difference in valuation between costs paid directly by the health insurance unit and those paid on its behalf is important. Based on a review of the literature, we set the out-of-pocket elasticity to 1 and the insured cost elasticity to 0.5.

Fifth, the coefficients of relative risk aversion are the same for *C*, *m*, and *s*. Various papers have estimated this coefficient for different types of risk with comparable results (Friend and Blume 1975; Szpiro 1986). Our choice of coefficient is within the ranges estimated. Empirical estimates of the coefficients for *m* and *s* would be very difficult to generate, and there is no *a priori* reason why they would differ substantially from the coefficient for *S*.

And lastly, to compute the best available option for health insurance units and employer groups, we must be able to aggregate measures of individuals' utility to a group utility. In particular, the utility of a firm can be represented by either the mean or median of the utilities of its workers, modified by the overall costs of offering coverage. The resulting individual utility function is as follows:

$$u(C,m,s) = \frac{(C_0^{\sigma}C^{1-\sigma} + (\gamma_m m_0 + \gamma_s s_0)^{\sigma}(\gamma_m m + \gamma_s s)^{1-\sigma})}{1-\sigma}$$
(1)

Or, for the default CRRA coefficient of 2:

$$u(C,m,s) = -\left(\frac{c_0^2}{c} + \frac{(\gamma_m m_0 + \gamma_s s_0)^2}{\gamma_m m + \gamma_s s}\right)$$
(2)

We then decompose nonhealth consumption into  $C_j = Y - m_j - \pi_j + \tau_j$ , where  $\tau_j$  is the tax incentive for option *j*, and  $\pi_j$  is the out-of-pocket premium for that option. We thus consider *U* a function of  $m_j$  and  $s_j$ :

$$U(m_j, s_j) = Y_0 - \pi_0 + \tau_0 + (\gamma_m - 1)m_0 + \gamma_s s_0 - \left(\frac{c_0^2}{\gamma - m_j - \pi_j + \tau_j} + \frac{(\gamma_m m_0 + \gamma_s s_0)^2}{\gamma_m m_j + \gamma_s s_j}\right)$$
(3)

This defines a deterministic utility function, but a unit cannot know its exact out-of-pocket expenditures and insured costs for the coming year. Given a policy option *j*, the premium and tax incentives will be known, whereas the out-of-pocket expenditures and insured costs will be random variables. To find a unit's expected utility, given these variables' distribution, we consider utility a function of *m* and *s* and expand the utility function around the point  $(E[m_j], E[s_j])$  to the second order:

$$E[U(m_j, s_j)] \approx U(E[m_j], E[s_j]) - \frac{E[C_0]^2 V[m_j]}{(Y - E[m_j] - \pi_j + \tau_j)^3} - \frac{E[\gamma_m m_0 + \gamma_s s_0]^2 \gamma_m^2 V[m_j]}{(\gamma_m E[m_j] + \gamma_s E[s_j])^3} + \frac{V[m_0]}{E[C_0]} + \frac{\gamma_m^2 V[m_0]}{E[\gamma_m m_0 + \gamma_s s_0]}$$
(4)

Given a choice between two options, *i* and *j*, a unit will choose *i* if the following is greater than zero, where  $\varepsilon$  is a latent preference term set when calibrating the model:

$$E[U(m_i, s_i)] - E[U(m_i, s_i)] + \varepsilon$$

As mentioned above, latent preference terms are set so each unit in our underlying data facing a choice between coverage options makes the choice reported in the data. We adjust the distribution of latent preference terms across populations to replicate benchmarks from the literature, particularly premium-elasticity estimates.

#### Stage 4. Benchmarking to the Literature

As noted earlier, after the first three stages, premiums are updated based on the new enrollment decisions. Iterations continue until the changes in coverage fall below a specified threshold, meaning an equilibrium has been reached. Before the equilibrium is deemed final, however, we review employer, individual, and family decisions and calibrate them so overall behavior aligns with research from the health economics literature.

**Refinement of utility measures and benchmarking to behavioral parameters from the literature.** Because our method converts utilities to dollar values, we can examine whether families' valuations for various insurance options are reasonable. We adjust the utility values for individuals by adding a latent preference term so the baseline insurance coverage choice they make in a HIPSM simulation aligns with what they are observed to have chosen in the core data. This adjustment captures unobserved reasons why people might not choose the coverage type that appears to be their best option, given what we can observe. We continue to refine our utility parameters and components so the model will reflect what is known about the sensitivity of workers' behavior to different incentives, such as price responsiveness to changes in premiums.

Choices between available options are implemented as a series of binary choices. Consider, under the ACA, a family in which the children are eligible for CHIP, the parents are eligible for Marketplace tax credits, and one parent is offered employer coverage with a premium for single coverage high enough that the family is not disqualified for tax credits. The choices are implemented as follows:

- 1. Do the eligible children enroll in CHIP or go uninsured?
- 2. Do the parents enroll in subsidized Marketplace coverage or go uninsured?

3. Would the worker enroll self or family in employer coverage rather than the CHIP/Marketplace/uninsured choices made earlier?

Each choice is made using a regression model built from reported data on comparable choices. The right side of the regression includes the difference in expected utility and a latent preference term, and some additional demographic variables not correlated with utility may be added. The latent preference terms ensure an observation used in building the model makes its reported choice. In addition, the variance and mean of the preference terms are calibrated to reproduce price responsiveness or take-up rate targets from the literature, as described below. Additional demographic variables are rarely used because of the lack of generally accepted pre-ACA elasticity estimates for specific demographic groups. Instead, the simulated take-up of ACA options is calibrated to enrollment data with demographic characteristics, where available. See below.

*ESI price elasticity.* Table 12 shows our elasticity targets by firm size, drawn from the literature (Blumberg, Nichols, and Banthin 2001; Gruber and Lettau 2004; Nichols et al. 2001).

#### TABLE 12

Firm size	Elasticity
<10	-1.16
10-25	-0.45
25-50	-0.4
50-100	-0.3
100-500	-0.21
500-1,000	-0.047
1,000+	Not available from the literature but
	assumed to be very small given historical
	offer rates for such firms

#### Employer-Sponsored Insurance Price Elasticity Targets, by Firm Size

Source: Authors' review of Blumberg, Nichols, and Banthin (2001), Gruber and Lettau (2004), and Nichols and colleagues (2001).

**Nongroup price elasticity.** For the price responsiveness of nongroup coverage, we use calculations and targets introduced by the Congressional Budget Office (CBO 2005). We separately calibrate single and family coverage by income group.

**Public coverage expansions.** HIPSM models the effects on Medicaid and CHIP enrollment of additional outreach and the stigma of public coverage. Expansions of public programs have often led to additional enrollment from people who were already eligible. Large expansions, such as CHIP or health reform in Massachusetts, are often accompanied by major outreach efforts that alter societal attitudes toward public coverage. Before enrollment data were available under the ACA, we used the literature on pre-ACA Medicaid expansions to calibrate Medicaid expansion take-up rates in our model.<sup>17</sup> These

baseline take-up rates for the uninsured were between 60 and 70 percent, depending on a person's age, eligibility category, and income group. The ACA contains important provisions that increase take-up, however: States are required to establish a website capable of determining eligibility for Medicaid and automatically enrolling those eligible. Hospitals can make presumptive eligibility determinations. And new requirements simplify Medicaid and CHIP enrollment and renewal. We estimated a take-up rate of about 73 percent for the uninsured who become newly eligible under the ACA. This rate is higher than the pre-ACA rate because of outreach and enrollment simplification provisions in the law, as well as a modest indirect effect of the individual mandate, as observed in health reform in Massachusetts.

However, when estimating the impact of new Medicaid expansions, we can now use take-up rates from recent ACA Medicaid expansions, dividing actual enrollment gains by the estimated number of people gaining eligibility. The resulting overall take-up rate for the uninsured newly becoming eligible for Medicaid is close to our initial 73 percent estimate, though some states have achieved notably higher take-up rates.

*Crowd-out.* To ensure reasonable levels of displacement of private coverage by expanded public insurance, or crowd-out, we calibrate the decrease in private coverage as a share of the total increase in Medicaid enrollment (22 percent), following the literature (Cutler and Gruber 1996).

Individual mandates. To model the individual mandate before actual enrollment data were available, we began with the baseline HIPSM, in which behavior is calibrated to agree with results from the empirical health economics literature. The resulting model behavior is applicable for a voluntary health insurance regime. To model behavior under an individual requirement to obtain insurance, we rely heavily on empirical evidence from the only similar requirement already implemented, the Massachusetts reforms (Long and Stockley 2010). Our simulation of how behavior would change under the mandate has three components:

- 1. **The applicable financial penalty.** This is a computation of both whether the penalty is applicable and the amount of the penalty as defined by the law (i.e., the fully phased-in amount discounted to present dollars).
- 2. An additional "disutility" of not complying with the mandate. The mandate is more than a dollar amount; it is a legal requirement. Desire to comply with the law, or at least avoid enforcement and the stigma of noncompliance, can lead to behavioral responses much stronger than what the nominal penalty would suggest, as appears to be the case in Massachusetts. The mandate has the effect of making being uninsured less desirable. We

operationalize this in the model by applying an additional "psychic penalty" to being uninsured.<sup>18</sup>

3. A relatively small spillover disutility of being uninsured on populations not bound by the mandate. The mandate in Massachusetts was also associated with an increase in coverage among those not bound by the mandate (i.e., those who would not face a penalty for noncompliance). We assume this association was driven, in part, by a spillover effect of the mandate onto those who either mistakenly assumed they were subject to a penalty or reacted to a new social norm to have coverage. People may make judgments about whether they will lose their mandate exemption in the future because their incomes rise during the course of a year. However, for those exempt from the mandate, the amount of additional disutility of being uninsured is far smaller than for those bound by the mandate.

In the years where enrollment data were available for the ACA with an individual mandate, we take the actual increase in the nongroup market under the ACA as a given (see the next section) and set the parameters described above to achieve that enrollment level. This allows us to simulate the full impact of removing the mandate by eliminating the effect of these parameters. At present, no federal individual mandate penalty exists, but California, the District of Columbia, Massachusetts, New Jersey, and Rhode Island each have their own. We calibrate the nongroup markets in these states to 2020 target enrollment with the mandate parameters described above, and we calibrate enrollment in other states without setting any individual mandate effect.

#### BENCHMARKING TO REPORTED ACA ENROLLMENT

As described above, we incorporate administrative data on plan design and premiums by state and premium rating region every plan year.

For Marketplace enrollment, we use the effectuated enrollment snapshots annually reported by CMS, which list enrollment with advanced premium tax credits for each state.<sup>19</sup> We have done so for every year in which the Marketplace has operated. We adjust the HIPSM take-up model to achieve the reported enrollment levels for each state. We also reproduce Marketplace take-up rates by income and age group from the CMS open enrollment reports.<sup>20</sup> HIPSM enrolls in the Marketplace people who are eligible for advanced premium tax credits and have the highest expected utility for Marketplace coverage versus for alternative coverage types (uninsurance or ESI). The individual mandate also led to a modest increase in nongroup enrollment (inside and outside the Marketplace) among those not eligible for advanced premium tax credits.

We incorporate CMS data on overall metal-level choices. However, these are limited in two crucial ways. First, CMS only publishes metal-level choices for plan selections, not effectuated enrollment. Second, plan selections for the nongroup market outside the Marketplace are unavailable.

For Medicaid enrollment, we generally use the June enrollment report from CMS for each year since 2014.<sup>21</sup> We chose to use a point-in-time snapshot for all states compatible with our Marketplace targets, rather than an annual average. For each state, we compute the difference in Medicaid/CHIP enrollment between June of the target year (e.g., 2019) and 2013. We then add that difference to the simulated Medicaid enrollment in 2015 without the ACA to produce an overall June 2019 Medicaid enrollment target for each state. We cannot use the CMS totals as targets because they include the elderly. Also, the CMS reports do not separate different groups of enrollees by state, so there is no way to know how much new enrollment owes to new eligibles versus old eligibles, or even adults versus children. We use the HIPSM expected-utility model to decide which eligible people newly enroll.

# Integration with the Tax Policy Center's Microsimulation Model

Health policy and tax policy are closely connected, and premium subsidies under the ACA are administered as advanceable, refundable tax credits. Some proposed tax changes, such as limiting the tax exclusion for health insurance premiums financed through an employer, have important consequences for health coverage and costs. Conversely, health reforms that improve the affordability of coverage often result in additional government spending that must be financed. Though HIPSM and the Urban-Brookings Tax Policy Center's microsimulation model cannot be completely integrated, we have developed fine-grained statistical matching procedures that allow the models to pass results back and forth to each other. This methodology and some examples are described separately (Mermin and Buettgens 2020; Mermin et al. 2020).

# Limitations

HIPSM has several limitations. First, it does not model state variation in some state insurance market regulations, such as benefit mandates and requirements for health plans inside and outside the Marketplace. For example, a state may require that a plan offered outside the Marketplace also be offered in the Marketplace.

**Nongroup insurance.** The nongroup insurance market before the ACA had so many different plans (roughly 16,000 in New York alone) with such varied designs that no comprehensive source of what was offered before the ACA exists. Even basic statistics, such as average premiums, may not be meaningful. Thus, it would be extremely difficult to capture the extreme variation possible in the nongroup market when modeling policy changes involving repealing the ACA's insurance market reforms.

In addition, HIPSM does not model choice between different plan designs at the same actuarial value. This is of relatively small importance because different plan designs scoring the same in the actuarial value calculator have the same expected insured and out-of-pocket costs, by definition.

HIPSM also does not directly model insurer competition. However, it does account for differences in actual premiums in each state and rating region that partly owe to differences in competition. Our model has one premium per metal tier in each rating region, so any average of total premiums from our model will differ from any averages taken over the range of premiums actually offered. However, such averages are rarely reported in HIPSM, because sufficient data are seldom available to make such averages outside a model.

**ESI coverage.** There are no comprehensive data available on the distribution of wages within different types of firms. This has potential implications for employers' offer decisions in response to various policies. HIPSM synthetic firms are based on the characteristics of workers employed in each combination of firm size, industry, census division, and ESI offered. Millions of synthetic firms are created and the number of workers in each aligns with actual firm size. Thus, the model constructs the best approximation of within-firm wage distribution given available data.

Data on the design of ESI plans are available from the MEPS-IC and Kaiser-HRET survey. However, the available data limit HIPSM's ability to quantify the variation in plans offered by different firms of a certain type. For self-insured firms, only very limited data are available on stop-loss attachment points for firms of different types. Limited data on Medicaid and Marketplace enrollees under the ACA. Survey data are limited in their ability to provide timely estimates of Medicaid and Marketplace enrollment. The time lag inherent in releasing survey data means data are one year old when we update the model for a new open enrollment period. The National Health Interview Survey is the most timely survey and gives the best estimates of enrollment in different types of coverage but cannot provide state-specific estimates. The Current Population Survey and ACS both differ substantially from administrative data in estimates of enrollment across coverage types. Coverage edits developed by Urban Institute researchers improve the ACS and align the uninsured with National Health Interview Survey estimates (Lynch, Boudreaux, and Davern 2010), but important differences in other types of coverage remain.

Medicaid administrative data were particularly sparse. CMS enrollment snapshots allowed us to estimate the increase in Medicaid enrollment by state from 2013 to the present but provided no further information about enrollees by state. For example, the data do not show how many new enrollees in each state were adults versus children. Publicly available Medicaid cost data are also very limited, particularly by state. As noted, we depend on data that are many years old and can only benchmark our results to recent national estimates.

Marketplace enrollment data based on enrollee plan selections were available in great detail, including enrollee characteristics such as income, age, and metal-tier selections. For effectuated enrollment, however, only state totals were available.

Lastly, HIPSM does not model differences in how state and local governments fund uncompensated care; estimates of how uncompensated care is financed are based on national analysis. See the section on uncompensated care above for more details on how these estimates should be interpreted.

# Notes

- <sup>1</sup> King v. Burwell, No. 14-114, slip op. (S. Ct. Jun. 25, 2015).
- <sup>2</sup> Some models are based on elasticities from the literature. An earlier version of the Congressional Budget Office model and a model by Jonathan Gruber used that approach. The Congressional Budget Office has updated its model to be based on an expected-utility approach.
- <sup>3</sup> US Bureau of Labor Statistics, "The Employment Situation September 2020," news release, October 2, 2020, https://www.bls.gov/news.release/archives/empsit\_10022020.htm.
- <sup>4</sup> "American Community Survey Response Rates," US Census Bureau, accessed November 30, 2020, http://www.census.gov/acs/www/methodology/sample-size-and-data-quality/response-rates/.
- <sup>5</sup> Questions about employer offers were recently added to the Current Population Survey, beginning with the 2014 data year. However, offer rates by firm size differ notably from other sources, such as the MEPS-IC. For this reason, we are still investigating how more recent Current Population Survey data should be incorporated into HIPSM.
- <sup>6</sup> Detailed documentation of these regressions is found in Miller and colleagues (2017).
- <sup>7</sup> Society of Actuaries, "Group Medical Insurance Large Claims Database Collection and Analysis," July 1, 2002. https://www.soa.org/resources/essays-monographs/group-med-large-claims-coll-analysis/.
- <sup>8</sup> Our computation of moral hazard throughout the model is based on private consultation with experts at the Actuarial Research Corporation.
- <sup>9</sup> Private consultation with experts at the Actuarial Research Corporation.
- <sup>10</sup> Extreme individual plan designs, such as those with zero deductibles, may result in somewhat different expected health costs among different groups (e.g., people with low health care costs versus those with high health care costs) than the median plan design we construct here.
- <sup>11</sup> Functional-limitation status is identified by responses to questions on serious difficulty walking or climbing stairs; difficulty dressing or bathing; serious difficulty hearing or seeing when not wearing glasses; and serious difficulty concentrating, remembering, or making decisions because of a physical, mental, or emotional condition. Adults with affirmative responses to one or more of these questions are classified as having a functional limitation.
- <sup>12</sup> Pre-ACA income disregard policies varied considerably across states. In Florida, the average threshold for nonworking parents was 19 percent of FPL, compared with 56 percent of FPL for working parents (incorporating work disregards). In South Dakota, the thresholds for working and nonworking parents were the same at 50 percent of FPL.
- <sup>13</sup> To be specific, we predict who should have bought nongroup health insurance last period had the policies effective this period been in effect last period.
- <sup>14</sup> If the expansion results in people with higher-than-average health care costs leaving the nongroup market, the updated premiums will be lower. Lower premiums then induce more people into the nongroup market, and the premiums may increase if the new enrollees have higher-than-average costs. The adjustment process continues until an equilibrium is reached.
- <sup>15</sup> America's Health Insurance Plans, 2009 Individual Market Survey.
- <sup>16</sup> By an individual worker's "value of the offer," we mean the difference in his or her family's expected utility with and without an offer.

- <sup>17</sup> See, for example, Garrett and colleagues (2009).
- <sup>18</sup> Behavior in HIPSM is modeled using an expected-utility framework. This "penalty" is thus the disutility of not complying with the law.
- <sup>19</sup> "June 30, 2015 Effectuated Enrollment Snapshot," Centers for Medicare & Medicaid Services, September 8, 2015, https://www.cms.gov/newsroom/fact-sheets/june-30-2015-effectuated-enrollment-snapshot.
- <sup>20</sup> These reports are based on plan selections, not effectuated enrollment. CMS does not report effectuated enrollment by these characteristics. See ASPE (2015).
- <sup>21</sup> Retrieved from https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollmentdata/report-highlights/index.html.

# References

- ASPE (US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation). 2015. "Health Insurance Marketplaces 2015 Open Enrollment Period: March Enrollment Report." Washington, DC: US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.
- Banthin, Jessica, Matthew Buettgens, and Linda J. Blumberg. 2019. "Potential Coverage and Federal Funding Losses for Massachusetts if *Texas v. United States* Ultimately Overturns the Affordable Care Act." Boston: Blue Cross Blue Shield of Massachusetts Foundation.
- Banthin, Jessica, Matthew Buettgens, Linda J. Blumberg, Robin Wang, and Clare Wang Pan. 2019. *The Uninsured in New Mexico*. Washington, DC: Urban Institute.
- Banthin, Jessica, Michael Simpson, Matthew Buettgens, Linda J. Blumberg, and Robin Wang. 2020. "Changes in Health Insurance Coverage Due to the COVID-19 Recession: Preliminary Estimates Using Microsimulation." Washington, DC: Urban Institute.
- Blumberg, Linda J., Matthew Buettgens, and John Holahan. 2016. "Implications of Partial Repeal of the ACA through Reconciliation." Washington, DC: Urban Institute.
- Blumberg, Linda J., Matthew Buettgens, John Holahan, and Clare Wang Pan. 2019. "State-by-State Estimates of the Coverage and Funding Consequences of Full Repeal of the ACA." Washington, DC: Urban Institute.
- Blumberg, Linda J., Matthew Buettgens, and Robin Wang. 2018. "Updated Estimates of the Potential Impact of Short-Term, Limited Duration Policies." Washington, DC: Urban Institute.
- Blumberg, Linda J., John Holahan, Matthew Buettgens, Anuj Gangopadhyaya, Bowen Garrett, Adele Shartzer, Michael Simpson, Robin Wang, Melissa M. Favreault, and Diane Arnos. 2019. From Incremental to Comprehensive Health Reform: How Various Reform Options Compare on Coverage and Costs. Washington, DC: Urban Institute.
- Blumberg, Linda J., Len J. Nichols, and Jessica S. Banthin. 2001. "Worker Decisions to Purchase Health Insurance." International Journal of Health Care Finance and Economics 1, 305–25. https://doi.org/10.1023/A:1013771719760.
- Blumberg, Linda J., Michael Simpson, Matthew Buettgens, Jessica Banthin, and John Holahan. 2020. "The Potential Effects of a Supreme Court Decision to Overturn the Affordable Care Act: Updated Estimates." Washington, DC: Urban Institute.
- Buettgens, Matthew. 2018. "The Implications of Medicaid Expansion in the Remaining States: 2018 Update." Washington, DC: Urban Institute.
- Buettgens, Matthew, Jessica Banthin, Michael Simpson, Linda J. Blumberg, and Robin Wang. 2020. "Updated Estimates of the New Mexico Uninsured and Health Care Reform Options to Expand Marketplace Coverage and Improve Affordability." Washington, DC: Urban Institute.
- Buettgens, Matthew, Linda J. Blumberg, and Clare Wang Pan. 2018. "The Uninsured in Texas: Statewide and Local Area Views." Washington, DC: Urban Institute.
- CBO (Congressional Budget Office). 2005. The Price Sensitivity of Demand for Nongroup Health Insurance. Washington, DC: Congressional Budget Office.
- Chiappori, Pierre-André, and Monica Paiella. 2011. "Relative Risk Aversion Is Constant: Evidence from Panel Data." *Journal of the European Economic Association* 9 (6): 1021–52.

- Coughlin, Teresa A., John Holahan, Kyle J. Caswell, and Megan McGrath. 2014. Uncompensated Care for the Uninsured in 2013: A Detailed Examination. Menlo Park, CA: Henry J. Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured.
- Cutler, David M., and Jonathan Gruber. 1996. "Does Public Insurance Crowd Out Private Insurance?" Quarterly Journal of Economics 111 (2): 391–430. https://doi.org/10.2307/2946683.
- Feldman, Roger, and Bryan Dowd. 1991. "A New Estimate of the Welfare Loss of Excess Health Insurance." American Economic Review 81 (1): 297–301.
- Friend, Irwin, and Marshall E. Blume. 1975. "The Demand for Risky Assets." American Economic Review 65 (5): 900–22.
- Garrett, Bowen, John Holahan, Allison Cook, Irene Headen, and Aaron Lucas. 2009. *The Coverage and Cost Impacts of Expanding Medicaid*. Menlo Park, CA: Henry J. Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured.
- Glied, Sherry A. 2003. "Health Insurance Expansions and the Content of Coverage: Is Something Better Than Nothing?" Forum for Health Economics and Policy 6 (1): 1046. https://doi.org/10.2202/1558-9544.1046.
- Glied, Sherry A., Anupama Arora, and Claudia Solís-Román. 2015. "The CBO's Crystal Ball: How Well Did It Forecast the Effects of the Affordable Care Act?" New York: Commonwealth Fund.
- Gruber, Jonathan. 1994. "The Incidence of Mandated Maternity Benefits." American Economic Review 84 (3): 622– 41.
- Gruber, Jonathan, and Michael Lettau. 2004. "How Elastic Is the Firm's Demand for Health Insurance?" Journal of Public Economics 88 (7–8): 1273–93. https://doi.org/10.1016/S0047-2727(02)00191-3.
- Holahan, John, Matthew Buettgens, Lisa Clemans-Cope, Melissa M. Favreault, Linda J. Blumberg, and Siyabonga Ndwandwe. 2016. *The Sanders Single-Payer Health Care Plan: The Effect on National Health Expenditures and Federal and Private Spending*. Washington, DC: Urban Institute.
- Kenney, Genevieve M., Michael Huntress, Matthew Buettgens, Victoria Lynch, and Dean Resnick. 2013. *State and Local Coverage Changes under Full Implementation of the Affordable Care Act*. Menlo Park, CA: Henry J. Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured.
- Long, Sharon K., and Karen Stockley. 2010. *Health Reform in Massachusetts: An Update as of Fall 2009*. Washington, DC: Urban Institute.
- Lynch, Victoria, Michael Boudreaux, and Michael Davern. 2010. "Applying and Evaluating Logical Coverage Edits to Health Insurance Coverage in the American Community Survey." Suitland, MD: US Census Bureau.
- Lynch, Victoria, Jennifer M. Haley, and Genevieve M. Kenney. 2014. "The Urban Institute Health Policy Center's Medicaid/CHIP Eligibility Simulation Model." Washington, DC: Urban Institute.
- Mermin, Gordon B., and Matthew Buettgens. 2020. Description of the Tax Policy Center Microsimulation Model's Revamped Health Module: Technical Methodology Report. Washington, DC: Urban Institute.
- Mermin, Gordon B., Matthew Buettgens, Clare Wang Pan, and Robin Wang. 2020. "Reforming Tax Expenditures for Health Care." Washington, DC: Urban Institute.
- Miller, Edward G., Jessica Vistnes, Matthew Buettgens, and Lisa Dubay. 2017. "Estimating the Costs of Covering Dependents through Employer-Sponsored Plans." Working Paper CES-17-48. Suitland, MD: US Census Bureau.
- Musumeci, MaryBeth. 2014. "The Affordable Care Act's Impact on Medicaid Eligibility, Enrollment, and Benefits for People with Disabilities." Menlo Park, CA: Henry J. Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured.

- Nichols, Len J., Linda J. Blumberg, P. Cooper, and J. Vistnes. 2001. "Employer Decisions to Offer Health Insurance: Evidence from the MEPS-IC Data." Paper presented at American Economic Association meetings, New Orleans, 2001.
- Passel, Jeffrey S., and D'Vera Cohn. 2009. A Portrait of Unauthorized Immigrants in the United States. Washington, DC: Pew Research Center.
- ---. 2018. US Unauthorized Immigrant Total Dips to Lowest Level in a Decade. Washington, DC: Pew Research Center.
- Selden, Thomas M., and Merrile Sing. 2008. "Aligning the Medical Expenditure Panel Survey to Aggregate US Benchmarks." Working Paper 08006. Rockville, MD: Agency for Healthcare Research and Quality.
- Sing, Merrile, Jessica S. Banthin, Thomas M. Selden, Cathy A. Cowan, and Sean P. Keehan. 2006. "Reconciling Medical Expenditure Estimates from the MEPS and NHEA, 2002." *Health Care Financing Review* 28 (1): 25–40.
- Szpiro, George G. 1986. "Measuring Risk Aversion: An Alternative Approach." *Review of Economics and Statistics* 68 (1): 156–59. https://doi.org/10.2307/1924939.
- Venter, Gary G. 1983. "Utility with Decreasing Risk Aversion." Arlington, VA: Casualty Actuarial Society.
- Zabinski, Daniel, Thomas M. Selden, John F. Moeller, and Jessica S. Banthin. 1999. "Medical Savings Accounts: Microsimulation Results from a Model with Adverse Selection." *Journal of Health Economics* 18 (2): 195–218. https://doi.org/10.1016/S0167-6296(98)00038-1.

# About the Authors

Matthew Buettgens is a senior fellow in the Health Policy Center at the Urban Institute, where he is the mathematician leading the development of Urban's Health Insurance Policy Simulation Model (HIPSM). The model is currently being used to provide technical assistance for health reform implementation in Massachusetts, Missouri, New York, Virginia, and Washington as well as to the federal government. His recent work includes a number of research papers analyzing various aspects of national health insurance reform, both nationally and state-by-state. Research topics have included the costs and coverage implications of Medicaid expansion for both federal and state governments; small firm self-insurance under the Affordable Care Act and its effect on the fully insured market; state-by-state analysis of changes in health insurance coverage and the remaining uninsured; the effect of reform on employers; the affordability of coverage under health insurance exchanges; and the implications of age rating for the affordability of coverage.

Buettgens was previously a major developer of the Health Insurance Reform Simulation Model the predecessor to HIPSM—used in the design of the 2006 Roadmap to Universal Health Insurance Coverage in Massachusetts.

Jessica Banthin is a senior fellow in the Health Policy Center, where she studies the effects of health insurance reform policies on coverage and costs. Before joining the Urban Institute, she served more than 25 years in the federal government, most recently as deputy assistant director for health at the Congressional Budget Office. During her eight-year term at the Congressional Budget Office, Banthin directed the production of numerous major cost estimates of legislative proposals to modify the Affordable Care Act. Banthin has contributed to Congressional Budget Office reports and written about how reform proposals affect individuals' and families' incentives to enroll in coverage, influence employers' decisions to offer coverage to their employees, and affect insurance market competitiveness. In her recent work, Banthin has written on competition in insurer markets and the accuracy of various data sources used in modeling health reforms. She has special expertise in the design of microsimulation models for analyzing health insurance coverage and a deep background in the design and use of household and employer survey data.

#### **STATEMENT OF INDEPENDENCE**

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.

500 L'Enfant Plaza SW Washington, DC 20024

N

• E L E V A T E •

1 TUTE 1.0

.

ТНЕ

DEBATE

www.urban.org

U

- 22

1.0

1.0

.

1

. .

1.1

1

1.0

- 15

1.1

.

.

.

.

12

20

10

## 5 Targeted Actions a Biden Administration Could Use to Expand Medicaid Coverage

Robin Rudowitz (https://www.kff.org/person/robin-rudowitz/) (https://twitter.com/RRudowitz),

Jennifer Tolbert (https://www.kff.org/person/jennifer-tolbert/), and

MaryBeth Musumeci (https://www.kff.org/person/marybeth-musumeci/)

(https://twitter.com/mmusumec)

Published: Dec 21, 2020



The recent election of former Vice President Joe Biden as well as the on-going effects of the coronavirus pandemic and related economic downturn are the key issues that will substantially shape Medicaid policy over the next year. The President-elect has supported the Medicaid expansion under the Affordable Care Act (ACA) and has proposed broader coverage expansions using a federal public option to cover more low-income Americans, including those in states that have not expanded. Such proposals require Congressional Action that will likely be difficult to pass in a closely divided Senate, and particularly so without Democratic control. Barring major legislative initiatives, there are a number of more targeted actions that the new Administration could implement to expand Medicaid coverage. While these approaches have the potential to reduce the number of people uninsured, they could also increase federal and state spending, which could pose particular challenges at the state level during a period of tight revenues and increasing needs.

#### **Revise Section 1115 Waiver Policy to Support Coverage**

The Biden Administration can revise current demonstration waiver policy to focus on expanding coverage and <u>rescind or reverse waiver policies</u> (https://www.kff.org/health-reform/issue-brief/potential-health-policy-administrative-actions-under-president-biden/) that limit coverage, including work requirements and other restrictive provisions. Section 1115 waiver priorities may change from one presidential administration to another. While each administration has some discretion over which types of waivers to approve and encourage, that discretion is not unlimited: the HHS Secretary must determine that the waiver will promote program objectives as set out by Congress. The Biden Administration could revise the Section 1115 waiver approval criteria (https://www.kff.org/medicaid/issue-brief/the-landscape-of-medicaiddemonstration-waivers-ahead-of-the-2020-election/) to include expanding coverage, a provision removed by the Trump Administration. The Biden Administration also could rescind CMS guidance that invites state waivers to condition Medicaid eligibility on work requirements (https://www.kff.org/medicaid/issue-brief/understanding-the-intersection-of-medicaidand-work-what-does-the-data-say/); stop defending waiver approvals involving work requirements and other restrictive provisions in lawsuits in AR (https://www.kff.org/medicaid/issue-brief/3-key-questions-about-the-arkansas-medicaid-work-andreporting-requirements-case/), NH, IN, and MI (https://www.kff.org/medicaid/issue-brief/thelandscape-of-medicaid-demonstration-waivers-ahead-of-the-2020-election/); and reject pending work requirement (https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-andpending-section-1115-waivers-by-state/) waivers. The Biden Administration will face these issues as soon as it takes office, because the Supreme Court is hearing cases involving the Arkansas and New Hampshire work requirement waivers this term. In addition, the Biden Administration could review provisions (https://www.kff.org/medicaid/issue-brief/thelandscape-of-medicaid-demonstration-waivers-ahead-of-the-2020-election/), such as work requirements, in currently approved waivers and renewal requests and move to withdraw or not renew waivers that are not promoting program objectives.

# The Biden Administration can approve or encourage waivers that would expand coverage to targeted groups or help make Marketplace coverage more

affordable. For example, the Biden Administration could approve pending waivers and encourage additional waivers to extend the postpartum (https://www.kff.org/medicaid/issuebrief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/) coverage period beyond 60 days, or encourage waiver proposals to extend coverage to incarcerated individuals prior to release, and to allow 12-month continuous eligibility for adults. Massachusetts and Vermont (https://www.kff.org/health-reform/issue-brief/stateactions-to-improve-the-affordability-of-health-insurance-in-the-individual-market/) were able to leverage existing Medicaid Section 1115 waivers to secure federal Medicaid matching funds to help finance enhanced premium subsidies for Marketplace coverage. Some states had debated and Washington state enacted a public plan option designed to spur competition and lower costs for Marketplace enrollees, but without any type of waiver from the federal government. While the Trump administration has discouraged use of waivers under Section 1332 to expand public coverage, the Biden administration could provide guidance to states on using Medicaid 1115 waivers in combination with Section 1332 waivers to advance these public plan proposals or other strategies, along with the potential flexibility to reinvest any federal savings from lower costs for ACA premium subsidies to improve affordability for consumers and expand coverage.

#### The Biden Administration could encourage states to adopt certain waiver policies by establishing a template with options to expand coverage and with

**streamlined approval.** One constraint in using waivers to expand coverage is that it has been longstanding federal policy to require that waivers be budget neutral for the federal government, meaning federal costs under a waiver must not exceed what

federal costs would have been for that state without the waiver. Unlike before the ACA, states do not need to find savings to extend coverage to adults without dependent children.

## **Extend the Public Health Emergency (PHE)**

The Biden Administration can extend the COVID-19 public health emergency (PHE) declaration, which will extend access to the temporary increase in the Medicaid match rate as well as Maintenance of Eligibility (MOE) requirements including continuous coverage. The PHE currently is set to expire on January 20, 2021. The Families First Coronavirus Response Act provided a 6.2 percentage point increase in the federal share for non-expansion Medicaid spending with requirements to maintain eligibility and provide continuous coverage for all Medicaid enrollees. The enhanced match is in place until the end of the guarter in which the PHE ends, while the continuous coverage requirement of the MOE is in place until the end of the month in which the PHE ends. The enhanced FMAP (https://www.kff.org/coronavirus-covid-19/issuebrief/how-much-fiscal-relief-can-states-expect-from-the-temporary-increase-in-the-medicaid-fmap/) provides broad fiscal relief states and also supports increases in enrollment tied to the MOE and the economic downturn. Under the MOE (https://www.kff.org/medicaid/issuebrief/medicaid-maintenance-of-eligibility-requirements-issues-to-watch-when-they-end/), states cannot make eligibility standards or enrollment procedures more restrictive or increase premiums while they are receiving enhanced federal funds.

States are using emergency authorities (https://www.kff.org/coronavirus-covid-19/issuebrief/state-actions-to-facilitate-access-to-medicaid-and-chip-coverage-in-response-to-covid-19/) to adopt a number of policy options to facilitate Medicaid coverage that are also tied to the PHE. Beyond the MOE requirements, nearly all (47) states are making changes to streamline eligibility and/or enrollment to help connect people to coverage more quickly during the pandemic. States are also using emergency authorities to expand eligibility for individuals who need long-term services and supports (https://www.kff.org/medicaid/issue-brief/state-actions-to-sustain-medicaid-long-term-services-andsupports-during-covid-19/). Over half of states have expanded eligibility criteria for seniors and people with disabilities, while a few states have increased the total number of home and community-based waiver enrollees served. Nearly all states have streamlined enrollment processes, and over one-third of states have eased premium and/or cost-sharing requirements for seniors and people with disabilities. Extending the PHE would also extend use of many of these emergency authorities.

#### The Biden Administration could also expand the use of Section 1115 waivers

(https://www.kff.org/medicaid/issue-brief/the-landscape-of-medicaid-demonstration-waivers-ahead-ofthe-2020-election/view/footnotes/) **during the PHE.** The Trump Administration released a waiver template for COVID-19 related changes that were primarily focused on allowing states to adopt certain LTSS policies, and approvals to date have been related to requests made under the template. For example, CMS did not approve <u>Washington's</u> <u>request (https://www.kff.org/coronavirus-covid-19/issue-brief/what-does-cms-approval-of-first-covid-19-section-1115-waiver-in-washington-mean-for-other-states/</u>) to establish a temporary eligibility group to provide additional Marketplace subsidies for individuals with incomes at or below 200% FPL. CMS also has not yet approved Washington's request to use Medicaid waiver authority create a Disaster Relief Fund to cover costs associated with the treatment of uninsured individuals with COVID-19, housing, nutrition supports and other COVID related expenditures. Historically, states have used Section 1115 authority to expand coverage and/or reimburse uncompensated care to address the direct impact of natural disasters and public health emergencies.

## **Remove Barriers to Coverage Post PHE**

A Biden Administration can work with states to help support coverage after the PHE ends. The Biden Administration can help and encourage states to transition policies that expand eligibility and streamline enrollment adopted under emergency authorities to permanent authorities after the PHE. In addition, the Biden Administration can develop guidance to ensure that those who are eligible stay enrolled in Medicaid at the end of the PHE. When states were implementing updated enrollment systems and processes to comply with the ACA, CMS worked with states to delay and stagger renewal and redetermination processes and also to suspend Payment Error Rate Measurement (PERM) reviews.

# A Biden Administration could issue guidance to encourage states to take up

**existing options to support coverage** (https://www.kff.org/coronavirus-covid-19/report/medicaid-and-chip-eligibility-enrollment-and-cost-sharing-policies-as-of-january-2020-findingsfrom-a-50-state-survey/). Such options include removing the 5-year coverage ban for recent pregnant women or children immigrants, using presumptive eligibility for one or more groups to expedite enrollment in Medicaid or CHIP, providing 12-month continuous eligibility to children in Medicaid or CHIP, and taking into account reasonably predictable changes in income when determining eligibility. In addition, states can adopt processes to improve communications with enrollees such as taking proactive steps to update enrollee address information and following up on returned mail by calling and/or sending email or text notifications. Many of these options could play an even more significant role as states resume renewals and redeterminations post PHE.

A Biden Administration can reverse current policies that impose enrollment barriers making it more difficult for those who are eligible for Medicaid to maintain coverage. While current rules require states to act when enrollees report a change in circumstances that may affect their continued eligibility, the Trump Administration has encouraged use of <u>periodic eligibility checks</u> (https://www.kff.org/medicaid/issue-brief/recent-medicaid-chip-enrollment-declines-and-barriers-tomaintaining-coverage/) as a <u>program integrity strategy (https://www.kff.org/medicaid/issuebrief/medicaid-program-integrity-and-current-issues/)</u> and has encouraged states to conduct enhanced eligibility verification and more closely monitor changes in enrollee circumstances. While such measures were encouraged to reduce instances of ineligible people being enrolled in the program and other eligibility errors, they also have resulted in creating greater enrollment barriers for people who remain eligible for the program. <u>Research (https://www.kff.org/medicaid/issue-brief/recent-medicaid-chip-enrollmentdeclines-and-barriers-to-maintaining-coverage/)</u> and experience show that increased requirements associated with eligibility determinations and renewals can lead to decreases in coverage among eligible people due to difficulties completing administrative processes and providing documentation. Such policies were likely a factor contributing to declines in Medicaid enrollment prior to the pandemic.

**The Biden Administration can reverse proposed changes to Supplemental Security Income (SSI) disability review rules, which could impact Medicaid eligibility for people with disabilities.** The Trump Administration proposed changes (https://www.federalregister.gov/documents/2019/11/18/2019-24700/rules-regarding-the-frequencyand-notice-of-continuing-disability-reviews) to Social Security regulations that would increase the number and frequency of "continuing disability reviews" for children and adults who receive SSI benefits. SSI is federal cash assistance for people with low incomes, limited assets, and significant disabilities. SSI is an important <u>Medicaid eligibility</u> **pathway** (https://www.kff.org/medicaid/issue-brief/medicaid-financial-eligibility-for-seniors-andpeople-with-disabilities-findings-from-a-50-state-survey/) for people with disabilities. Increasing the frequency of SSI continuing disability reviews could result in some enrollees losing Medicaid coverage for which they remain eligible, due to difficulty navigating the administrative process.

## **Expand Outreach Efforts**

A Biden Administration can increase outreach and enrollment efforts for Medicaid and Marketplace coverage. Since taking office, the Trump Administration has dramatically reduced funding for federal marketplace Navigators that were created to provide outreach, education, and enrollment assistance to consumers eligible for Marketplace and Medicaid coverage and now requires that they be funded by the marketplaces. Compared to 2016, federal Navigator funding for FY 2020 was reduced by 84% on average. Outreach under the ACA was also reduced by 90%. A Biden Administration could restore federal spending for navigators and on marketing and outreach. The new administration could also provide funding to states for outreach and enrollment assistance in Medicaid. Recent analysis (https://www.kff.org/healthreform/issue-brief/consumer-assistance-in-health-insurance-evidence-of-impact-and-unmet-need/) suggests that there is a shortage of consumer assistance resources, even as lack of knowledge of ACA coverage options among the public persists. With the coronavirus crisis causing record job losses, increased investment in outreach and enrollment assistance could ensure people losing their job-based health coverage understand other coverage options and can get needed help applying for and enrolling in other coverage.

## **Propose More Targeted Legislative Changes**

Narrow legislative proposals could encourage states to adopt the ACA Medicaid expansion. If Congressional support for more sweeping health care proposals is lacking – including a public option that would cover poor adults in states that have not expanded Medicaid — the Biden Administration may consider more targeted legislative changes to Medicaid to encourage Medicaid expansion, such as legislation to allow 100% federal matching funds for states that newly adopt the expansion for a period of time. Under the ACA, states that adopted the Medicaid expansion received 100% federal matching funds for three years (from 2014-2016) and the match has gradually phased down to 90% where it remains. Without a change in the law, states that newly expand would be eligible for the 90% match rate for expansion coverage. Twelve states have not adopted the Medicaid expansion, leaving many poor adults in a coverage gap, not eligible for Medicaid or Marketplace subsidies.

# Legislative proposals could focus on extending coverage for specific populations including postpartum women, those needing community based long-term care, those ready to transition out of the criminal justice system and recent

**immigrants.** There has been bi-partisan support for <u>legislation</u> (<u>https://www.congress.gov/bill/116th-congress/house-bill/4996?</u>

<u>q=%7B%22search%22%3A%5B%22helping+moms%22%5D%7D&s=1&r=1</u>) that would allow states to extend postpartum Medicaid coverage from the current 60 days to 12 months. Other targeted legislative bi-partisan legislative proposals include the <u>Medicaid Reentry</u> <u>Act (https://www.congress.gov/bill/116th-congress/house-bill/1329/text)</u> (included in the House passed COVID-relief package) would allow Medicaid to cover services for Medicaid beneficiaries who are incarcerated during the 30 days preceding their release from prison or jail which could facilitate coverage and access post-release. The Health and Economic Recovery Omnibus Emergency Solutions (<u>HEROES</u>

(https://www.congress.gov/bill/116th-congress/house-bill/6800)) Act also includes a provision offering states a time-limited 10% enhanced FMAP for activities to increase HCBS during and after the PHE period ends, including increasing the number of individuals receiving HCBS. Finally, the Biden Administration could work with Congress to allow states the options to allow coverage for recent immigrants (eliminating the 5 year coverage bar) for groups other than pregnant women and children.

# Additional fiscal relief can bolster states' ability to support and sustain increases in Medicaid coverage. President-elect Biden has indicated

(http://files.kff.org/attachment/Slideshow-Health-Care-and-the-2020-Presidential-

<u>Election.pdfhttp:/files.kff.org/attachment/Slideshow-Health-Care-and-the-2020-Presidential-Election.pdf</u>) support for further increasing the FMAP and may try to work with Congress to enact legislation though Republican leaders have generally been opposed to substantial increases in state and local assistance during the pandemic and economic crisis. The Medicaid and CHIP Payment and Access Commission (MACPAC) at the December 2020 meeting announced moving toward a recommendation calling for an <u>automatic</u> Medicaid countercyclical financing model (https://www.macpac.gov/wpcontent/uploads/2020/12/A-Countercyclical-Medicaid-Financing-Adjustment-Moving-towards-Recommendations.pdf) based on earlier recommendations from the General Accountability Office (GAO). The <u>HEROES (https://www.congress.gov/bill/116th-congress/housebill/6800)</u> Act passed by the House in May and then updated and passed again in October would increase the enhanced FMAP to 14% effective through September 2021 to support states as the COVID-19 pandemic continues providing states with an <u>estimated \$55.5 billion (https://www.cbo.gov/system/files/2020-10/hr925.pdf)</u> in federal support according to the Congressional Budget Office. Congress could also consider alternative options to target the relief to states experiencing higher enrollment increases. However, it remains unclear if Congress will provide additional relief through the FMAP or if they will revisit the MOE requirements as part of another coronavirus relief package.

### GET THE LATEST ON HEALTH POLICY Sign Up For Email Alerts

Enter email address...

SIGN UP >

FOLLOW KFF

Twitter

Facebook

Instagram

Email Alerts

Feeds



Powered by WordPress.com VIP

#### CITATIONS AND REPRINTS PRIVACY POLICY

The Henry J. Kaiser Family Foundation Headquarters: 185 Berry St., Suite 2000, San Francisco, CA 94107 | Phone 650-854-9400

Washington Offices and Barbara Jordan Conference Center: 1330 G Street, NW, Washington, DC 20005 | Phone 202-347-5270

www.kff.org | Email Alerts: kff.org/email | facebook.com/KaiserFamilyFoundation | twitter.com/kff

# NASHP

# State Medicaid and CHIP Strategies to Protect Coverage during COVID-19

Updated December 18, 2020

In response to COVID-19, many states have implemented emergency measures to ensure that Medicaid and Children's Health Insurance Program (CHIP) enrollees continue to have access to essential health services. States have submitted disaster relief state plan amendments (SPAs) to the Centers for Medicare & Medicaid Services (CMS) to suspend and revise policies that could prevent enrollees from maintaining coverage and accessing care during the public health emergency.

Disaster relief SPA <u>templates</u> for CHIP and Medicaid outline actions states can take, including adjusting eligibility requirements, waiving premiums and cost sharing for enrollees, and expanding benefits. Some states have also implemented a new <u>option</u> provided by the Families First Coronavirus Response Act to extend Medicaid eligibility to uninsured individuals to cover COVID-19 testing and related services.

As states await CMS approval of their SPAs, several state Medicaid and CHIP agencies have already communicated important policy changes to enrollees through their websites. These announcements, in conjunction with approved disaster relief SPAs, show the wide range of actions states are taking to maintain enrollment, minimize the financial burden on enrollees, and increase access to care during the emergency.

This chart describes the actions states have taken to protect and expand coverage for Medicaid and CHIP enrollees during the COVID-19 public health emergency, sourced from state websites and approved Medicaid and CHIP disaster relief SPAs.

Premiums and Cost Sharing

Click on the state names to access relevant state documentation.

Information from State Websites

State

CHIP

**Eligibility and Enrollment** 

Arizona Susnend nremiums members who have

https://www.nashp.org/state-medicaid-and-chip-strategies-to-protect-coverage-during-covid-19/

acy - Terms

-

State Medicaid and CHIP Strategies to Protect Coverage during COVID-19 - The National Academy for State Health Policy

paid March premiums will be credited.

California	Waive premiums	Allow for self-attestation
Connecticut	Suspend copayments	
Delaware	Waive premiums	
Idaho	Suspend penalty for failure to pay premiums	
Indiana	All cost sharing suspended. Premiums waived from March-August 2020. Those who already made payments will be credited towards their accounts.	
lowa	Waive all co-payments, premiums, and contributions	Equip hospitals to determine presumptive eligibility.
Maine	Waive premiums and copayments for all prescription drugs, office visits, emergency department visits, and radiology and lab services.	
Maryland	Waive premiums	
Massachusetts		
Montana	Waive copayments	
New Jersey	Waive premiums	
Pennsylvania	Waive copayments for services related to testing and treatment of COVID-19. Gives more time to pay premiums, if needed.	
Texas	Waive copayments	
Utah	Waive CHIP premiums. Any premiums paid during the emergency period will be refunded.	
Vermont	Waive premiums	Waive financial verifications
Virginia	Waive copayments	
Washington	Individuals affected by COVID-19 may have Children's Health Insurance Program (CHIP) balances written off if unable to pay CHIP premiums or are not currently eligible due to past due CHIP premium payments.	State will accept self-attestation of income for retroactive coverage start February 2020 and for each month impacted by COVID-19.
West Virginia	All monthly premiums and copayments are waived during the emergency.	
Wisconsin	Starting in April, state will not charge BadgerCare Plus children monthly premiums. Individuals will receive a	æ

https://www.nashp.org/state-medicaid-and-chip-strategies-to-protect-coverage-during-covid-19/

acy - Terms

Support for this work was provided by the David and Lucile Packard Foundation. The views expressed here do not necessarily reflect the views of the foundation.

# Sign Up for Our Weekly Newsletter

EMAIL

NAME

MMERGE10

STATE

САРТСНА



Submit

Privacy - Terms
## NASHP

## In Major Victory for States, Supreme Court Clears the Way for State Health Reform

December 15, 2020 / by Jennifer Reck and Trish Riley

Last week, states won a clear path to regulating pharmacy benefit managers (PBMs) in a unanimous US Supreme Court <u>ruling</u> [<u>https://www.supremecourt.gov/opinions/20pdf/18-540\_m64o.pdf]</u> in Rutledge vs. Pharmaceutical Care Management Association (PCMA). At issue was whether federal law preempted an Arkansas law (<u>Act 900 [https://www.nashp.org/wp-</u> <u>content/uploads/2020/10/AR-Act-900.pdf]</u>) that requires PBMs to reimburse pharmacies at no less than what pharmacies pay to acquire drugs, among other provisions.

PCMA, the trade group representing PBMs, argued the Arkansas law was preempted by the Employee Retirement Income Security Act of 1974 (ERISA), the federal law that governs employee benefits. Enacted to protect employee benefit plans from fraud and mismanagement, the law applies to health benefits and – with few exceptions – preempts all state laws that attempt to regulate those plans. While states may regulate fully-insured health insurance plans, they are barred from regulating – either directly or indirectly – health benefits that are paid for directly by employers, often referred to as self-funded plans. More than <u>60 percent</u> [https://www.kff.org/health-costs/report/2020-employer-health-benefits-survey/]\_of employees with employer-based coverage are enrolled in such self-funded plans.

View all of NASHP's model laws that help states curb prescription drug pricing <u>here</u> [<u>https://www.nashp.org/policy/prescription-drug-pricing/model-legislation/]</u>.

State health policymakers have followed the Rutledge case closely as any ERISA challenge has the potential to impact broader state health care reforms. State health reforms efforts have regularly been subjected to ERISA challenges in the courts, making the acronym ERISA better named in state policy circles as, "Every Roadblock to Innovative State Action." For example, in <u>Gobeille vs. Liberty Mutual Insurance</u> [https://www.supremecourt.gov/opinions/15pdf/14-181\_5426.pdf]\_, the Supreme Court ruled that ERISA preempts states from <u>collecting much-needed data</u> [https://www.nashp.org/wp-content/uploads/2017/02/ERISA.pdf]\_that would improve how they paid for and delivered health care. The Gobeille decision established that self-funded plans do not need to submit health care claims – data needed to advance cost containment efforts – to states.

The 8-0 decision was unequivocal in its ruling that the Arkansas law was not preempted by ERISA. The opinion, authored by Associate Justice Sonia Sotomayor, characterized Arkansas Act 900 as "a form of cost regulation that does not dictate plan choices" and therefore is not preempted by ERISA.

The Rutledge decision, rather than rely on Gobeille's rationale, expands on the 1995 ERISA case, <u>New York State Conference of Blue Cross & Blue Shield Plans vs.</u> <u>Travelers Insurance [https://supreme.justia.com/cases/federal/us/514/645/]</u>, that found that a state's imposition of surcharges on employer-sponsored health plans was not preempted by ERISA, despite its indirect economic impact on health plans. In that case, the surcharge was assessed on hospital claims. The Rutledge decision extended the Travelers ruling to create a new category of health care cost regulation that surpasses ERISA' past legal preemptions, paving the way for new state action that exceeds regulation of PBMs that administer benefits for health plans. Protection from ERISA's preemptions for a broader category of health care cost regulations, as seen in Rutledge, positions states for important and emerging cost containment efforts.

The Rutledge decision is good news for all states, including those that have been recently actively regulating PBMs. Since 2017, 46 states have implemented more than 90 laws regulating PBMs. Some of those laws appear similar to Arkansas' Act 900, which focused on pharmacy reimbursement, while other laws go further. Examples include laws prohibiting spread pricing – which occurs when PBMs pay pharmacies a lower reimbursement rate for prescriptions and then claim higher

rates from a health plan while retaining the difference as profit. Other new laws require PBMs to pass savings from rebates negotiated with drug manufacturers back to health plans and consumers. All of these state PBM regulations are designed to control prescription drug costs. The logic driving the Rutledge decision potentially now shields all of these state laws from ERISA preemption.

The Rutledge ruling represents an important step in the right direction to clarify the scope of ERISA while also enabling states to exercise the regulatory authority needed to take on drug costs – and broader health care costs – in the absence of federal action.

## Sign Up for Our Weekly Newsletter

EMAIL

NAME

MMERGE10

STATE

САРТСНА

l'm not a robot reCAPTCHA Privacy - Terms 1/13/2021



## Removing the Firewall Between Employer Insurance and the ACA Marketplaces: Who Could Benefit?

December 15, 2020 | Jesse C. Baumgartner, Sara R. Collins, and David C. Radley



### ABSTRACT

- Issue: Employer-based health insurance has become less affordable for many Americans over the past decade, with premium contributions and deductibles taking up a larger share of household income. As millions of workers lose income through furloughs and wage cuts, COVID-19 may exacerbate this trend. One proposed solution is to make it easier for workers and their families to enroll in subsidized health plans through the Affordable Care Act (ACA) marketplaces. Such a change would remove the current "firewall" between employer plans and marketplace coverage.
- **Goal:** To analyze the potential effects of a proposal to allow more workers and their families to purchase ACA marketplace plans, both with the subsidies currently available and with more generous ones.

- **Methods:** Analysis of the 2018 and 2019 Current Population Survey's Annual Social and Economic Supplement.
- Key Findings and Conclusions: Between 6 percent and 13 percent of people in nonelderly households covered by employer insurance could pay lower premiums through a marketplace plan if the firewall were lifted. The vast majority of those benefitting would be low- or middle-income families. Residents of southern states would particularly benefit, since their employee plan premiums often take up a larger percentage of household income than the national average.

## Introduction

The COVID-19 pandemic has triggered the worst economic downturn since the Great Depression: Around 70 million people have lost jobs or been furloughed since March.<sup>1</sup> An estimated 14.6 million people have lost jobs that also came with health insurance, with more possible if the virus continues to rage out of control and affect sectors where more workers get employer-based coverage.<sup>2</sup>

The Affordable Care Act's (ACA) coverage expansions are expected to keep the number of newly uninsured lower than in past recessions.<sup>3</sup> However, the deep contraction in the economy means that millions more will suffer income loss through furloughs, wage cuts, and falling business revenue. Thus, the premiums and out-of-pocket costs in employer health plans, which were already high for many with low and moderate incomes,<sup>4</sup> could become an even larger share of shrinking household budgets.

President-elect Joe Biden and other policymakers have proposed addressing these affordability concerns by removing the barrier, or firewall, between employer coverage and marketplace subsidies. Doing so could allow more people to reduce the cost burden of employer coverage.<sup>5</sup> In this analysis, we use data from the Current Population Survey in the two years prior to the pandemic to examine how much nonelderly people were spending on employer plan premiums on average relative to their income. We compare that to the burdens they could potentially face in marketplace plans at two different levels of subsidies — current-level subsidies and more generous subsidies.

## WHAT IS THE EMPLOYER COVERAGE FIREWALL?

The ACA established a barrier, or firewall, to marketplace subsidies for people who have an affordable offer of comprehensive coverage through their employer. If employers do not offer comprehensive and affordable coverage to their employees, they face a federal tax penalty.

Workers with incomes between 100 percent and 399 percent of the federal poverty level (\$26,200 and \$104,800 for a family of four in 2021) who have employer premium expenses that exceed 9.83 percent of their income are eligible for marketplace subsidies, which triggers the employer tax penalty. This penalty is also triggered if the actuarial value of an employer's plan is less than 60 percent (i.e., covers less than 60 percent of an employee's costs, on average).

But there's a catch: both provisions only apply to single-person policies. This so-called family coverage glitch has left millions of low- and middle-income families with expensive family plans unable to qualify for marketplace subsidies. The Urban Institute has estimated that more than 6 million people may be negatively impacted by this coverage glitch.<sup>6</sup>

#### Exhibit 1

## Percentage of People in Employer Plans with High Premium Burdens Relative to Income, by Poverty Level

Percentage of people with employer coverage where more than 8.5 percent of household income goes toward after-tax premium contributions



Notes: FPL = federal poverty level. People below 138% FPL in states that have expanded Medicaid are excluded from the analysis sample. See the "How We Conducted This Study" box below.

Data: Analysis of U.S. Census Bureau Current Population Survey, Annual Social and Economic Supplement, Sept. 2019 and 2020 data releases (2018 and 2019 data years).

Source: Jesse C. Baumgartner, Sara R. Collins, and David C. Radley, Removing the Firewall Between Employer Insurance and the ACA Marketplaces: Who Could Benefit? (Commonwealth Fund, Dec. 2020). https://doi.org/10.26099/hg7v-dy10

## Findings

### **CURRENT EMPLOYEE PREMIUM BURDEN**

As of 2019, around 160 million nonelderly people received health insurance through their employer.<sup>7</sup> Although a majority of people with employer coverage have incomes of 400 percent of the federal poverty level or higher, more than 40 percent of people earn less

than that amount.<sup>8</sup>

Entering the pandemic, an estimated 26 percent of nonelderly people with employer coverage in the lowest income group of our <u>analytic sample</u> (below 200% of poverty; \$25,520 for an individual and \$52,400 for a family of four in 2021) lived in households spending more than 8.5 percent of their income on after-tax premium contributions.<sup>9</sup> In addition, nearly 10 percent of people with incomes between 200 percent and 399 percent of poverty (\$51,040 for an individual and \$104,800 for a family of four in 2021) spent this much on premiums (Exhibit 1, <u>Table 1</u>).

#### Exhibit 2

Marketplace Premium Contributions as a Share of Income, 2021 and Enhanced Subsidies

FPL ranges	Income ranges		Premium contributions as percent of income (current law, 2021)	Premium contributions as percent of income (enhanced subsidies)
0%-100%	S: \$0-\$12,760	F: \$0-\$26,200	2.07%	0%
100%-133%	S: \$12,760-\$16,971	F: \$26,200-\$34,846	2.07%	0%
133%-150%	S: \$16,971-\$19,140	F: \$34,846-\$39,300	3.10%-4.14%	0%
150%-200%	S: \$19,140-\$25,520	F: \$39,300\$52,400	4.14%-6.52%	0%-3%
200%-250%	S: \$25,520-\$31,900	F: \$52,400-\$65,500	6.52%-8.33%	3%4%
250%-300%	S: \$31,900-\$38,280	F: \$65,500-\$78,600	8.33%-9.83%	4%6%
300%-400%	S: \$38,280-\$51,040	F: \$78,600\$104,800	9.83%	6%-8.5%
400%-500%	S: \$51,040-\$63,800	F: \$104,800-\$131,000	No cap	8.5%
500%-600%	S: \$63,800-\$76,560	F: \$131,000-\$157,200	No cap	8.5%
600%+	S: \$76,560+	F: \$157,200+	No cap	8.5%
600%+	S: \$76,560+	F: \$157,200+	No cap	8.5%

#### [1] Download data

Notes: FPL = 2020 federal poverty level guidelines for coverage year 2021; "S" = single household; "F" = family of four. "Enhanced subsidies" cap premium expenses at a lower percentage of income and extend to all income levels. They are based on H.R. 1425, which passed the U.S. House of Representatives in June 2020.

Data: Current: 26 CFR 601.105; Enhanced: Patient Protection and Affordable Care Enhancement Act of 2020, H.R.1425, 116th Cong, (2020).

Source: Jesse C. Baumgartner, Sara R. Collins, and David C. Radley, Removing the Firewall Between Employer Insurance and the ACA Marketplaces: Who Could Benefit? (Commonwealth Fund, Dec. 2020). https://doi.org/10.26099/hg7v-dy10

### FIREWALL REFORM OPTIONS AND ANALYSIS APPROACH

Several health care reform proposals, including President-elect Joe Biden's, aim to lower people's premium costs by enhancing and extending marketplace tax credits. These subsidies cap premium expenses at a percentage of income that increases as incomes rise.<sup>10</sup> Some proposals also would remove the employer coverage firewall (see "<u>What Is the Employer Coverage Firewall?</u>") and allow people with employer coverage with incomes between 100 percent and 399 percent of poverty to choose a plan and be eligible for these subsidies.

We examined the potential effects if the firewall were removed, allowing nonelderly people with employer coverage to buy marketplace plans under two different premium subsidy schedules (Exhibit 2):

- **1.** The current 2021 marketplace premium tax credit schedule  $\frac{11}{1}$
- A schedule with enhanced premium subsidies that extends to all income levels and is linked to a gold-level benchmark plan that covers a greater percentage of average costs than the current silver-level benchmark plan<sup>12</sup>

The enhanced subsidy schedule is based on the Patient Protection and Affordable Care Enhancement Act (H.R. 1425), which passed the U.S. House of Representatives in June 2020.

We used the 2018 and 2019 Current Population Survey to calculate what percentage of income a household covered by an employer plan was paying toward premiums. We adjusted these payments to reflect the estimated tax benefits associated with employer-provided health insurance. We then compared it to the percentage that the household *could* potentially pay for a subsidized benchmark marketplace plan if the firewall were removed.

Although people with incomes below the federal poverty level are not currently eligible for marketplace subsidies, our analysis assumed a policy change in which all people with employer coverage could access them. However, we did exclude households below 138 percent of poverty (\$17,608 for an individual, \$36,156 for a family of four in 2021) in Medicaid expansion states from the analysis because they are likely to be eligible for Medicaid (see "How We Conducted This Study").

Exhibit 3

#### Estimated Percentage of People with Employer Coverage Whose Household Premiums Could Decrease if They Enrolled in Marketplace Plans

Percentage of people with employer coverage whose household could pay lower premiums through the marketplace



Source: Jesse C. Baumgartner, Sara R. Collins, and David C. Radley, Removing the Firewall Between Employer Insurance and the ACA Marketplaces: Who Could Benefit? (Commonwealth Fund, Dec. 2020). https://doi.org/10.26099/hg7v-dy10

### ESTIMATED EFFECTS

Under the two subsidy options, between 6 percent and 13 percent of people with employer coverage could pay a lower amount on premiums by enrolling in a marketplace plan (Exhibit 3, <u>Table 1</u>).

People in the two lowest income groups would benefit the most (0%–199% of poverty, \$25,520 for an individual and \$52,400 for a family of four; and 200%–399% of poverty, \$51,040 for an individual and \$104,800 for a family of four in 2021). They are the only groups currently able to access marketplace subsidies, which do not extend past 399 percent of poverty, and they make up the vast majority of those who could benefit from the enhanced subsidies.

#### Exhibit 4

Estimated Percentage of People with Employer Coverage Whose Household Premiums Could Decrease if They Enrolled in Marketplace Plans, by Race/Ethnicity



People with incomes below 250 percent of poverty also receive subsidies to help with costsharing when they purchase marketplace plans, which significantly lower the amount they pay for copayments, deductibles, and coinsurance, as well as their annual out-of-pocket limits.<sup>13</sup> Research shows that out-of-pocket spending can significantly burden people in employer plans with low to moderate incomes<sup>14</sup> and deter their use of health services.<sup>15</sup> At least two-thirds of the people in employer plans who could benefit from either the current or enhanced marketplace subsidies also could be eligible for these lower cost-sharing plans (data not shown).

Larger shares of Black, Latino, and American Indian or Alaska Native individuals with employer plans could see lower premiums compared to white and Asian American people under each of the two subsidy options (Exhibit 4).

These three communities were all less likely to have employer coverage than white and Asian American people, but larger shares of those who did paid a high relative premium burden in their employer plans (spending greater than 8.5% of income; see <u>Table 1</u>).<sup>16</sup>





Data: Analysis of U.S. Census Bureau Current Population Survey, Annual Social and Economic Supplement, Sept. 2019 and 2020 data releases (2018 and 2019 data years). Source: Jesse C. Baumgartner, Sara R. Collins, and David C. Radley, *Removing the Firewall Between Employer Insurance and the ACA Marketplaces: Who Could Benefit?* (Commonwealth Fund, Dec. 2020). https://doi.org/10.26099/hg7v-dy10

### ESTIMATED REGIONAL EFFECTS

Because marketplace premium subsidies are pegged to income level, the potential effects of these policy changes could vary widely across states with different levels of average incomes and health care costs. We mapped the percentage of people in employer plans in each state whose household could pay lower premiums through a subsidized marketplace plan (Exhibit 5).

Larger shares of people in employer plans in southern states could face lower premium burdens under both subsidy options compared to those in other regions of the country (<u>Table 2</u>). Employee premium contributions in these states tend to be higher relative to median income, as highlighted in a recent Commonwealth Fund study.<sup>17</sup>

## **Policy Implications**

This analysis indicates that removing the firewall between employer plans and subsidized marketplace plans could provide financial relief to many low- and middle-income employees facing premium costs that are high relative to their incomes. If the pandemic-related recession continues to slow income growth, more people in employer plans may be eligible. Removing the firewall also would eliminate the well-documented "family glitch" that currently blocks millions of people from accessing subsidies. The enhanced subsidy

option, which uses an identical tax credit schedule to that proposed in a Congressional bill (H.R. 1425) that passed the House of Representatives in 2020, significantly increases the estimated effects of this reform.

There are important implementation issues to consider. Research has demonstrated that marketplace plans may lead to a greater out-of-pocket burden than employer plans.<sup>18</sup> This is a particular problem for people with incomes above 250 percent of poverty who don't qualify for cost-sharing assistance (\$31,900 for an individual and \$65,500 for a family of four in 2021). Some consumers may choose to keep their employer plans despite higher premiums, although others may trade lower premiums for higher cost-sharing.<sup>19</sup> This choice could lead to adverse selection in employer plans, raising premiums in those plans. It is also unclear how employers would respond to the option: Would they design employer plans to incentivize sicker employees to opt for marketplace plans, which could increase marketplace premiums? How many employers might stop offering coverage altogether? These behavioral uncertainties also have significant implications for federal budget costs.

These questions and others can help shape complementary policies to ensure greater affordability for people with employer coverage:

- Increasing the marketplace's benchmark plan to a "gold" level. Premium subsidies are based on the benchmark plan, and gold-level plans have a significantly higher actuarial value that is similar to that of employer coverage on average (80% versus 70% for current benchmark silver plans).<sup>20</sup> This has been proposed by President-elect Biden, among others, and would result in higher subsidies and less out-of-pocket costs for marketplace consumers.<sup>21</sup>
- **Requiring employer contributions.** If the firewall were removed, employers may want to incentivize certain groups of employees to enroll in the marketplace to save costs (at the federal government's expense). Policymakers could address this possibility by requiring employers to pay the government an amount equal to what they were previously spending on an employee's health care, as Senator Elizabeth Warren proposed in her presidential campaign's single-payer health plan.<sup>22</sup>
- Introducing a public option. President-elect Biden and other policymakers have proposed a choice of a public-option plan in the marketplaces that would have the power to negotiate provider and pharmaceutical prices.<sup>23</sup> If a public-option plan were able to attract significant enrollment, it could use its negotiating leverage to drive prices down for the entire individual market and limit the growth of overall health care costs. An Urban Institute analysis found that a public option combined with additional reforms could achieve near-universal coverage while actually lowering overall national health spending.<sup>24</sup>

- Filling in the Medicaid expansion gap. People in Medicaid expansion states with incomes under 138 percent of poverty have Medicaid as a lower-cost option regardless of whether they have access to an employer plan. But 12 states still have not expanded. Federal policymakers could allow people who would otherwise be eligible for Medicaid to enroll in marketplace plans with low or zero premiums, as we did within this analysis. President-elect Biden has proposed this.
- Increasing Medicaid enrollment outreach. Our study sample excluded people with employer coverage with incomes under 138 percent of poverty in Medicaid expansion states because they are likely already eligible for Medicaid as a low-cost insurance option. But this group still includes millions of people in employer plans, and our analysis (not shown) indicates that many are paying more than they would under a Medicaid plan. Expanding federal and state outreach efforts could let more families know they are eligible for Medicaid.
- Immigration reform. Undocumented immigrants are not currently allowed to use the marketplace or its subsidies, even if the firewall were removed. Comprehensive immigration reform could make a significant difference toward ensuring that these communities can more easily access health insurance.

## HOW WE CONDUCTED THIS STUDY

This analysis uses data from the U.S. Census Bureau's Current Population Survey (CPS), Annual Social and Economic Supplement (ASEC). The ASEC includes the self-reported amount of money that people spend on health insurance premium contributions each year. We used both the 2018 and 2019 data years (2019 and 2020 data releases) to ensure adequate sample size for state-level estimates.<sup>25</sup> CPS respondents were grouped into households based on the CPS-provided tax unit, and premium spending and income were aggregated and reported at the tax unit level. The Census Bureau found that income data for 2019, collected in March 2020, potentially overestimates household income as the result of a nonresponse bias introduced by data collection issues as travel and social distancing restrictions for COVID-19 were beginning to be implemented. We have adjusted 2019 incomes downward to account for this bias, using discount estimates from the Census Bureau.<sup>26</sup>

To maximize the likelihood that we were only capturing premium costs for employer coverage, we followed past methodology by limiting our population base to households in which all members are under age 65 and have employer coverage, and at least one member is a primary policyholder for an employer plan.<sup>27</sup> Removing these limitations does not change the study results.

We excluded all households with incomes below 138 percent of the poverty level who live in states that have expanded Medicaid under the ACA, because most are likely eligible for Medicaid as a lower-cost option.<sup>28</sup> The final analysis sample included approximately 145,000 respondents across more than 64,000 tax unit households, corresponding to an annual weighted, nationally-representative population base of approximately 137 million individuals.

For our analysis, we first calculated the percentage of income that a household was currently spending on premium contributions for employer coverage. To limit the effect of outlier values for very-low-income households, we followed past methodology by bottom-coding household income at \$100. To account for the tax benefits of employer-sponsored insurance expenses, we followed past analyses<sup>29</sup> and adjusted premium contributions for the tax unit downward by an estimated effective marginal individual income plus payroll tax rate. This rate was taken from 2018 and 2019 marginal rate estimates from the Urban Institute and Brookings Institution Tax Policy Center, based on the tax unit's income group.<sup>30</sup>

We then compared that percentage to what the people in a household *might* pay for a benchmark marketplace plan under two different sets of income-based premium subsidies (Exhibit 2):

- The current 2021 marketplace subsidy schedule
- An enhanced schedule of subsidies which extend to all income levels and are capped at 8.5 percent of income.<sup>31</sup>

Although households under 100 percent of poverty are not currently eligible to use marketplace subsidies, our analysis assumed a policy change in which all people with employer coverage could access subsidies. These households could access the most generous subsidy level on the schedule (2.07% of income for current subsidies; 0% for enhanced subsidies). This assumption only affected low-income households in Medicaid nonexpansion states because those within expansion states were already excluded.

Under each scenario, we compared a household's income to the annual 2018 or 2019 federal poverty level guidelines<sup>32</sup> to establish potential eligibility for a marketplace subsidy. We then calculated how many individuals could access a subsidized benchmark marketplace plan with *lower* household premium costs than their current employer coverage.

One limitation of the analysis is that it does not account for undocumented immigrants with employer coverage, who may appear eligible for marketplace subsidies or Medicaid but are not currently allowed to access either. Another limitation is that the analysis does not capture smoking status, and tobacco

users may be issued a surcharge by insurers depending on their state and plan. Finally, state income taxes are not incorporated in the marginal individual income plus payroll tax rate discount. Doing so would lower the estimated after-tax cost of employer-sponsored insurance even further.

## ACKNOWLEDGMENTS

The authors thank David Blumenthal, Liz Fowler, Barry Scholl, Chris Hollander, Paul Frame, Jen Wilson, Munira Gunja, and Gabriella Aboulafia, all of the Commonwealth Fund, for providing constructive guidance and editorial and production support; and Naomi Zewde of City University of New York, for helpful discussion around the analysis approach.

#### NOTES

1. U.S. Bureau of Labor Statistics, "Unemployment Insurance Weekly Claims," news release, Dec. 10, 2020.

2. Paul Frontsin and Stephen A. Woodbury, *How Many Americans Have Lost jobs with Employer Health Coverage During the Pandemic?* (Commonwealth Fund, Oct. 2020).

3. Jessica Banthin et al., Changes in Health insurance Coverage Due to the COVID-19 Recession (Urban Institute, July 2020).

4. Sara R. Collins, David C. Radley, and Jesse C. Baumgartner, <u>State Trends in Employer Premiums and Deductibles,</u> 2010–2019 (Commonwealth Fund, Nov. 2020).

5. "The Biden Flan to Protect and Build on the Affordable Care Act," Biden-Harris campaign website, Apr. 2019.

6. Matthew Buettgens, Lisa Dubay, and Genevieve M. Kenney, "<u>Marketplace Subsidies: Changing the 'Family Giltch'</u> <u>Reduces Family Health Spending but Increases Government Costs</u>," *Health Affairs* 35, no. 7 (July 2016): 1167–75.

7. Congressional Budget Office, Federal Subsidies for Health Insurance Coverage for People Under Age 65: 2019 to 2029 (CBO, May 2019).

8. Authors' analysis of the 2020 Current Population Survey Annual Social and Economic Supplement, 2019 data year.

9. To account for the likely tax benefits of premium contributions for people with employer coverage, we discounted premiums by an estimated effective marginal individual income plus payroll tax rate. See "<u>How We</u> <u>Conducted This Study</u>" for details.

10. Commonwealth Fund, <u>The Many Varieties of Universal Coverage</u> (Commonwealth Fund, Apr. 2019); Amy Goldstein, "<u>House Democrats Fush Through First Bill In a Decade Expanding Affordable Care Act</u>," *Washington Post*, June 29, 2020; "Biden Plan to Protect," 2019; and Cynthia Cox et al., <u>Affordability in the ACA Marketplace Under a</u> <u>Proposal Like foe Biden's Health Plan</u> (Henry J. Kaiser Family Foundation, Sept. 2020).

11. Current marketplace subsidy schedule in Internal Revenue Service, "<u>26 CFR 601.105: Examination of Returns</u> and Claims for Refund, Credit, or Abatement; Determination of Correct Tax Liability," (IRS, n.d.). 12. Enhanced marketplace subsidy schedule in <u>Patient Protection and Affordable Care Enhancement Act of 2020</u>, H.R. 1425, 116th Cong. (2020).

13. Louise Norris, "The ACA's Cost-Sharing Subsidies," HealthInsurance.org, last updated Nov. 28, 2020.

14. Susan L. Hayes, Sara R. Collins, and David C. Radley, <u>How Much U.S. Households with Employer Insurance Spend</u> on <u>Premiums and Out-of-Pocket Costs: A State-by-State Look</u> (Commonwealth Fund, May 2019).

15. J. Frank Wharam et al., "Breast Cancer Diagnosis and Treatment After High-Deductible Insurance Enrollment," Journal of Clinical Oncology 36, no. 11 (Apr. 10, 2018): 1121–27.

16. "2019 Employer-Sponsored Coverage Rates for the Nonelderly by Race/Ethnlelty," Henry J. Kaiser Family Foundation, n.d.

17. Collins, Radley, and Baumgartner, State Trends, 2020.

18. Kenneth E. Thorpe, Lindsay Allen, and Peter Joski, "Out-of-Pocket Prescription Costs Under a Typical Silver Plan Are Twice as High as They Are in the Average Employer Plan," Health Affairs 34, no. 10 (Oct. 2015): 1695–703; and Michel H. Boudreaux, Gilbert Gonzales, and Brendan Saloner, "Medical Financial Burden Declined for Consumers In the Nongroup Market," Health Affairs 36, no. 5 (May 2017): 833–37.

19. A 2019 Urban Institute analysis for the Commonwealth Fund included projections about the transition of enrollees in employer plans to marketplace plans if the employer coverage firewall was removed and enhanced subsidies were provided; see Linda J. Blumberg et al., <u>Comparing Health Insurance Reform Options: From "Bulliong on the ACA" to Single Payer</u> (Commonwealth Fund and Urban Institute, Oct. 2019). A 2016 analysis on the family coverage glitch by Buettgens et al. also included projections about how many families would switch to marketplace plans if the glitch was fixed.

20. Actuarial value is the average percentage of total health costs that an insurance plan covers; Tara Straw, <u>Itapped by the Firewall: Folicy Changes Are Needed to Improve Health Coverage for Low-Income Workers</u> (Center on Budget and Policy Priorities, Dec. 2019), footnote 19.

21. "Biden Plan to Protect," 2019; and Cox et al., Affordability in the ACA, 2020.

22. Thomas Kaplan, Abby Goodnough, and Margot Sanger-Katz, "Elizabeth Warren Proposes \$20.5 Trillion Health Care Plan," New York Times, Nov. 1, 2019.

23. "Biden Plan to Protect," 2019.

24. Blumberg et al., Comparing Health Insurance, 2019.

25. Primary insurance hierarchy methodology from Ougni Chakraborty and Sherry Glied of New York University.

26. Jonathan Rothbaum and Adam Bee, <u>Coronavirus infects Surveys, Too: Nonresponse Bias During the Pandemic in</u> <u>the CPS ASEC</u>, Social, Economic, and Housing Statistics Division Working Paper Number 2020-10 (U.S. Census Bureau, Sept. 15, 2020).

27. Hayes et al., How Much U.S. Households, 2019; and Gary Claxton, Bradley Sawyer, and Cynthia Cox, <u>How</u> <u>Affordability of Health Care Varies by Income Among People with Employer Coverage</u> (Peterson-Kaiser Health System Tracker, Apr. 2019).

28. For this exclusion analysis, Medicaid expansion states are the 36 states and the District of Columbia that have already expanded Medicaid. Oklahoma and Missouri recently passed Medicaid expansion ballot initiatives, but implementation is not expected until mid-2021. They are designated as nonexpansion states for this analysis.

29. Cox et al., Affordability in the ACA, 2020.

30. Urban Institute and Brookings Institution Tax Policy Center, "Effective Marginal Tax Rates on Wages, Salaries, and Capital Income, by Expanded Cash Income Level," <u>2018</u> and <u>2019</u>.

31. Enhanced marketplace subsidy schedule in <u>Patient Protection and Affordable Care Enhancement Act of 2020</u>, H.R. 1425, 116th Cong. (2020).

32. Office of the Assistant Secretary for Planning and Evaluation, "2018 Poverty Guidelines," 2018; and ASPE, "2019 Poverty Guidelines," 2019.

## **Publication Details**

Publication Date: December 15, 2020

**Contact:** Jesse C. Baumgartner, Research Associate, Health Care Coverage and Access & Tracking Health System Performance, The Commonwealth Fund

Email: jb@cmwf.org

Editor: Maggie Van Dyke

#### Citation:

Jesse C. Baumgartner, Sara R. Collins, and David C. Radley, *Removing the Firewall Between Employer Insurance and the ACA Marketplaces: Who Could Benefit?* (Commonwealth Fund, Dec. 2020). https://doi.org/10.26099/hg/v-dy10

## Topics

Health Care Coverage and Access

## Tags

Health Insurance Marketplace, Employer-Based Health Insurance

## **Experts**



#### Jesse C. Baumgartner

Research Associate, Health Care Coverage and Access & Tracking Health System Performance, The Commonwealth Fund



<u>Sara R. Collins</u> Vice President, Health Care Coverage and Access, The Commonwealth Fund



David C. Radley Senior Scientist, Tracking Health System Performance, The Commonwealth Fund



© 2021 The Commonwealth Fund. All Rights Reserved.

## NASHP

### Federal Insurance Rule Change Proposes an Insurer/Broker Alternative to State Exchanges

December 14, 2020 / by Christina Cousart

Last month, the US Department of Health and Human Services (HHS) released its proposed 2022 Notice of Benefit and Payment Parameters, the annual rule that governs health insurance and the exchanges. Its most significant proposal is creation of a new option that allows a state to exclusively use direct enrollment by health insurers and brokers to enroll individuals in qualified health plans that meet all of the Affordable Care Act's (ACA) coverage requirements, such pre-existing condition protections and essential health benefits.

By electing this option, a state would effectively eliminate use of a centralized health insurance exchange, which historically was designed to be a one-stop shop where consumers could compare all available qualified health plan (QHP) options to a private system marketing various coverage products. The exchanges also currently allow consumers to see if they qualified for Medicaid, which would be eliminated under this option.

If the federal proposal is approved, the option would be available to all states regardless of whether a state uses the

- The proposed option allows states to move from using a health insurance exchange to a privatized system of enrollment via insurers and web-brokers.
- The proposal could eliminate "no-wrong door" shopping across all ACAcompliant coverage, and would promote access to coverage alternatives.
- Comments on the proposed rule are due by Dec. 30, 2020 and can be submitted <u>here</u>

federally facilitated exchange (FFE), operates its own state-based exchange (SBEs), or uses a hybrid model (SBE-FPs). [https://www.federalregister.gov 26534/patient-protectionand-affordable-care-acthhs-notice-of-benefit-andpayment-parameters-for-2022-and].

#### What is enhanced direct enrollment (EDE)?

The concept of direct enrollment (DE) is not new. Since the exchanges first became operational in 2014, there has always been an option allowing insurers and webbrokers to enroll eligible individuals into coverage. DE was designed to supplement the capacities of the exchanges by giving insurers and brokers a way to still reach out to individuals eligible for coverage and the federal advance premium tax credits (APTCs) and cost-sharing reductions (CSRs). In its early stages, DE was conducted by routing applicants from insurer or broker websites to the exchange, where the individual would complete an application to determine eligibility for coverage and subsidies. Once the application was complete, the individual would be routed back to the insurer or broker to complete enrollment.

In 2018, HHS established a new process for states using the FFE called enhanced direct enrollment (EDE), which allows individual seeking coverage to enroll directly with insurers or web-brokers without ever interacting with an exchange. The insurer or web-broker's system interacts with an exchange behind the scenes, transferring the information necessary to determine an individual's eligibility for coverage without that individual ever having to leave the insurer or web-broker website.

Since establishing the EDE option, participation by insurers and web-brokers has grown significantly. As of November 2020, 32 insurers and eight web-brokers were certified to conduct enhanced direct enrollment

[https://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Marketplaces/EDE-ApprovedPartners]. In addition, three companies had been approved to serve as a DE technology vendor, providing insurers or brokers with the technology necessary to do enhanced direct enrollment. According to HHS, <u>one-</u>

<u>third of all FFE enrollments [https://www.cms.gov/files/document/cms-9914-p.pdf]</u> are conducted through a DE or EDE entity.

#### **Development of the New EDE-Exchange Option**

The proposed rule establishes a process so that a state can opt to have all enrollments go through EDE entities certified in the state, eliminating the option for residents to enroll via a health insurance exchange. The exchange (whether the state uses an FFE or SBE) would still exist in states that adopt this model, but would be limited to providing the back-end functionality necessary to determine a consumer's eligibility for coverage, as well as maintenance of a general website with basic comparative information about the QHPs that may be available to a consumer.

This new option (referred to as FFE-DE or SBE-DE, depending if it is implemented by a state using the FFE or an SBE) would effectively eliminate the existence of a central, "one-stop shop" where applicants are presented with all available QHPs that they can compare, shop for, and enroll in. There is no requirement in the proposed rule that EDEs provide complete information about all the QHPs available to an applicant, though the proposed rule does include an inquiry from HHS about adding a requirement that web-brokers include information somewhere about the QHPs an individual cannot enroll in via its website. Further, EDEs may include information about alternative coverage products, such as short-term, limitedduration health insurance plans (short-term plans). A comparison between the model and traditional exchange are detailed in the table below.

The option to eliminate use of an exchange and adopt a model similar to the proposed rule's FFE-DE was <u>first proposed by Georgia</u> [https://www.nashp.org/georgia-proposes-new-changes-to-its-individual-marketand-medicaid-program-in-two-federal-waivers/] and was recently <u>approved</u> [https://www.cms.gov/CCIIO/Programs-and-Initiatives/State-Innovation-Waivers/Section 1332 State Innovation Waivers-/1332-GA-Approval-Letter-<u>STCs.pdf]</u>. The Georgia Plan, called the Health Access Model, will move all "frontend functions" of an exchange (consumer outreach, customer services, and plan shopping, selection, and enrollment) to private entities, including insurers and webbrokers. These entities will interact with a state system that coordinates with HHS to determine applicants' eligibility for federal subsidies. The federal government will

then transfer subsidy payments directly to insurers with qualified enrolled individuals, as it does now.

In its application [https://medicaid.georgia.gov/document/document/modified-1332-waiver/download]\_, Georgia officials state that a privatized system will provide its residents with "better access [and] improved customer service," suggesting that competition and market incentives will drive private web-brokers to offer improved plan selection and enrollment assistance and local, customized customer service to attract the uninsured. The market incentives are primarily described as the commissions that web-brokers are paid for enrolling individuals into coverage. The state will also develop a website, which will contain information about all the health coverage options available in the state, and direct consumers as to where they can enroll in coverage including state-approved carriers and web-brokers. Georgia's waiver was <u>approved [https://www.cms.gov/CCIIO/Programs-and-Initiatives/State-Innovation-Waivers/Section 1332 State Innovation Waivers-/1332-GA-Approval-Letter-STCs.pdf]\_in November 2020.</u>

Similar to the Georgia plan, the Centers for Medicare & Medicaid Services (CMS) states [https://www.cms.gov/newsroom/press-releases/cms-proposed-rule-seeksreduce-exchange-fees-again-lower-premiums-plans-using-federal-enrollment] that use of EDEs through its proposed new model could enable the existence of "more curated, customized consumer experience designed to target diverse populations who need coverage." The proposed rule also notes the ability of EDE entities to provide consumers with a "broader array" of options including ancillary products (e.g., vision, accident coverage), and alternative coverage products not sold through the exchanges, such as short-term plans. The proposed rule indicates these features may be especially important for consumers who do not qualify for federal subsidies, including individuals who are offered individual coverage health reimbursement accounts (HRAs) by their employers. (For more on individual coverage HRAs, read the NASHP blog, New Federal Health Reimbursement Proposal Adds New Variables to State Health Insurance Markets [https://www.nashp.org/new-federal-healthreimbursement-proposal-adds-new-variables-to-state-health-insurance-markets/] ).

The proposal also would lower the user fee charged to issuers in states that opt to run the FFE-DE to 1.5 percent (the FFE fee is proposed to be 2.25 percent in 2022). The assumption is that savings from the lower user fee would be used by insurers to

lower premiums or support enhancements to EDE platforms, though it is not a stated requirement in the HHS proposal. The proposed rule also suggests that states and the federal government could save money by no longer operating the full FFE or SBE models. It is assumed that instead, insurers and web-brokers would directly bear these operational costs, and may be able to do so at lower cost assuming their already enhanced technological capabilities.

The rule also indicates the potential for greater efficiency if consumers are allowed to enroll through various EDE entities available in a state rather than the "choke points" that may occur when a consumer only has access to one enrollment vehicle. However, because eligibility would still be conducted by exchanges, albeit on the backend, it is unclear how much efficiency could actually be attained through this method. It should also be noted that nothing currently prohibits an FFE state from having operational EDEs, and states could continue to function with EDEs and the exchange working in tandem.

As detailed in the table below, EDEs are required to meet many of the basic requirements similar to an exchange, including provisions to display accurate and complete information about the QHPs sold through their websites. However, none are required to clearly display all QHP options available to a consumer, and may only display some QHP options or even purposefully direct consumers away from QHP options. This is the case even if the consumer may be eligible for a state's Medicaid program or federal subsidies that would help them to purchase an ACAcompliant QHP. In a report issued by the Center for Budget and Policy Priorities [https://www.cbpp.org/sites/default/files/atoms/files/3-15-19health.pdf], several DEs were found to use tools that directed consumers away from QHPs and towards short-term plans. Such alternative forms of coverage do not meet all the coverage requirements enacted under the ACA, including guaranteed protections for individuals with pre-existing conditions, limits on cost-sharing, and provisions of essential health benefits (EHB). But, brokers, on average, are paid higher commissions for enrollment in short-term coverage than QHPs, which may influence DE practices.

If finalized as proposed, states looking to explore the new FFE-DE or SBE-DE option may decide to enact legislation or regulation to more strictly regulate EDEs, including prohibitions on practices that may divert individuals into coverage that

may not best suit their financial, health, or family needs. States may also wish to consider policies to assure that EDEs do not negatively alter their risk pools by, for instance, diverting healthier individuals into alternatives that do not participate in insurer risk pools such as short-term plans.

The chart below provides additional details about the differences between the DE models and the health insurance exchanges. Comments on the rule are due by Dec. 30, 2020 and can be submitted <u>here</u>

[https://www.federalregister.gov/documents/2020/12/04/2020-26534/patientprotection-and-affordable-care-act-hhs-notice-of-benefit-and-payment-

oarame	eters-fo	or-202	2-and	
			J.	

	Health Insurance Exchange (Traditional)	Direct Enrollment (DE)	Enhanced Direct Enrollment (EDE)
Definition	Enrollment platform through which individuals may shop, apply for, and enroll in qualified health plans (QHPs).	Process that allows individuals to enroll in a QHP directly through a DE entity (insurers or web-brokers), though eligibility applications are still completed and processed by an exchange.	A process that allows individuals to enroll in a QHP directly through a DE entity (insurers or web-brokers) without directly interacting with an exchange.
Operated by:	States (SBEs), federal government (FFE), or both (SBE- FPs)	DE entities (either a CMS- approved QHP issuer website or CMS- approved web-broker website)	DE entities – either a CMS- approved QHP issuer website or CMS-certified web-broker website.
Accountability and auditing	FFE and SBEs must comply with regular federal audits. In addition,	DE entities must complete CMS certification before	EDE entities must complete CMS certification before selling exchange products. Certification includes

https://www.nashp.org/federal-insurance-rule-change-proposes-an-insurer-broker-alternative-to-state-exchanges/

	many states conduct separate audits of their SBEs to ensure accountability.	selling exchange products.	enhanced process for certifying compliance with privacy and security standards for transfer of enrollee data, as well as compliance with annual audits.
Eligibility and En	rollment Process		
For private insurance coverage	An individual shops for and applies for coverage through the exchange. The exchange determines eligibility for QHPs, APTCs, and CSRs. If eligible, the individual may select and enroll in a QHP.	The individual shops for coverage through the DE partner. Upon applying, the individual is transferred to the exchange, where they complete their application to determine eligibility for QHPs, APTCs, or CSRs. Once completed, the individual is redirected back to the DE entity to select and enroll in a health plan.	Individual shops for and applies for coverage through the DE entity. If eligible, the individual may select and enroll in a QHP though the DE website. The DE entity's system interacts "behind the scenes" with an exchange. The latter conducts the determination of eligibility for APTCs, CSRs, or QHPs.
For Medicaid coverage	An exchange determines applicant's eligibility for Medicaid; provides "no wrong door" portal for eligible individuals to	When the individual is transferred to the FFE, the FFE will assess or determine the applicant's eligibility for Medicaid. If eligible, the FFE will send a notification to the	The exchange will assess or determine the applicant's eligibility for Medicaid as it processes the applicant's information sent via the DE partner. If eligible, the FFE will send a notification to the applicant, the DE partner, and

1/13/202

or State Health Po...

Federal Insura	<b>0</b> 1		
	States using the	partner, and the state	Individual is not automatically
	FFE may opt to	Medicaid office.	enrolled in Medicaid coverage
	have the exchange	Individual is not	and may be directed to
	only assess an	automatically enrolled in	alternative coverage options.
	applicant's	Medicaid coverage and	
	eligibility for	may be directed to	
	Medicaid, after	alternative coverage	
	which the	options.	
	applicant is		
	directed to the		
	state Medicaid		
	agency to enroll.		
All available	Yes	No	No, the proposed rule
All available QHP options	Yes	No	No, the proposed rule suggests a new requirement
All available QHP options	Yes	No	No, the proposed rule suggests a new requirement that web-brokers would have to identify to consumers QHPs
All available QHP options	Yes	No	No, the proposed rule suggests a new requirement that web-brokers would have to identify to consumers QHPs not sold through it platform.
All available QHP options Display non-	Yes	No Yes, non-QHP products	No, the proposed rule suggests a new requirement that web-brokers would have to identify to consumers QHPs not sold through it platform. Yes, non-QHP products must
All available QHP options Display non- QHP options	Yes	No Yes, non-QHP products must be displayed on a	No, the proposed rule suggests a new requirement that web-brokers would have to identify to consumers QHPs not sold through it platform. Yes, non-QHP products must be displayed on a separate
All available QHP options Display non- QHP options (including	Yes	No Yes, non-QHP products must be displayed on a separate section of the	<ul> <li>No, the proposed rule</li> <li>suggests a new requirement</li> <li>that web-brokers would have</li> <li>to identify to consumers QHPs</li> <li>not sold through it platform.</li> <li>Yes, non-QHP products must</li> <li>be displayed on a separate</li> <li>section of the website than</li> </ul>
All available QHP options Display non- QHP options (including short-term	Yes	No Yes, non-QHP products must be displayed on a separate section of the website than QHPs.	<ul> <li>No, the proposed rule</li> <li>suggests a new requirement</li> <li>that web-brokers would have</li> <li>to identify to consumers QHPs</li> <li>not sold through it platform.</li> <li>Yes, non-QHP products must</li> <li>be displayed on a separate</li> <li>section of the website than</li> <li>QHPs.</li> </ul>
All available QHP options Display non- QHP options (including short-term plans)	Yes	No Yes, non-QHP products must be displayed on a separate section of the website than QHPs.	No, the proposed rule suggests a new requirement that web-brokers would have to identify to consumers QHPs not sold through it platform. Yes, non-QHP products must be displayed on a separate section of the website than QHPs. Proposed rule suggests a new
All available QHP options Display non- QHP options (including short-term plans)	Yes	No Yes, non-QHP products must be displayed on a separate section of the website than QHPs.	<ul> <li>No, the proposed rule</li> <li>suggests a new requirement</li> <li>that web-brokers would have</li> <li>to identify to consumers QHPs</li> <li>not sold through it platform.</li> <li>Yes, non-QHP products must</li> <li>be displayed on a separate</li> <li>section of the website than</li> <li>QHPs.</li> <li>Proposed rule suggests a new</li> <li>requirement that EDE entities</li> </ul>
All available QHP options Display non- QHP options (including short-term plans)	Yes	No Yes, non-QHP products must be displayed on a separate section of the website than QHPs.	<ul> <li>No, the proposed rule</li> <li>suggests a new requirement</li> <li>that web-brokers would have</li> <li>to identify to consumers QHPs</li> <li>not sold through it platform.</li> <li>Yes, non-QHP products must</li> <li>be displayed on a separate</li> <li>section of the website than</li> <li>QHPs.</li> <li>Proposed rule suggests a new</li> <li>requirement that EDE entities</li> <li>build three distinct sections of</li> </ul>
All available QHP options Display non- QHP options (including short-term plans)	Yes	No Yes, non-QHP products must be displayed on a separate section of the website than QHPs.	<ul> <li>No, the proposed rule</li> <li>suggests a new requirement</li> <li>that web-brokers would have</li> <li>to identify to consumers QHPs</li> <li>not sold through it platform.</li> <li>Yes, non-QHP products must</li> <li>be displayed on a separate</li> <li>section of the website than</li> <li>QHPs.</li> <li>Proposed rule suggests a new</li> <li>requirement that EDE entities</li> <li>build three distinct sections of</li> <li>their websites, one for the</li> </ul>
All available QHP options Display non- QHP options (including short-term plans)	Yes	No Yes, non-QHP products must be displayed on a separate section of the website than QHPs.	<ul> <li>No, the proposed rule</li> <li>suggests a new requirement</li> <li>that web-brokers would have</li> <li>to identify to consumers QHPs</li> <li>not sold through it platform.</li> <li>Yes, non-QHP products must</li> <li>be displayed on a separate</li> <li>section of the website than</li> <li>QHPs.</li> <li>Proposed rule suggests a new</li> <li>requirement that EDE entities</li> <li>build three distinct sections of</li> <li>their websites, one for the</li> <li>sale of on-exchange QHPs.</li> </ul>
All available QHP options Display non- QHP options (including short-term plans)	Yes	No Yes, non-QHP products must be displayed on a separate section of the website than QHPs.	<ul> <li>No, the proposed rule</li> <li>suggests a new requirement</li> <li>that web-brokers would have</li> <li>to identify to consumers QHPs</li> <li>not sold through it platform.</li> <li>Yes, non-QHP products must</li> <li>be displayed on a separate</li> <li>section of the website than</li> <li>QHPs.</li> <li>Proposed rule suggests a new</li> <li>requirement that EDE entities</li> <li>build three distinct sections of</li> <li>their websites, one for the</li> <li>sale of on-exchange QHPs,</li> <li>one for the sale of insurance</li> </ul>

Privacy - Terms

(which may also include

QHPs), and one for excepted

			benefits products (e.g., vision, long-term care).
Display of ancillary products (e.g., vision, accident insurance)	No	Yes	Yes
Required health	plan details that must b	e displayed	

Estimated premiums (total and net, including APTCs/CSRs)	Yes	Yes (for QHPs)	Yes (for QHPs)
Summary of benefits	Yes	Yes (for QHPs)	Yes (for QHPs)
Provider directory	Yes	Yes (for QHPs)	Yes (for QHPs)
Health plan metal level	Yes	Yes (for QHPs)	Yes (for QHPs)
Quality ratings	Yes	Yes (for QHPs)	Yes (for QHPs)
Enrollee satisfaction surveys	Yes	Yes (for QHPs)	Yes (for QHPs)
Shop and compare tools (sorting by	Yes	Yes (for QHPs)	Yes (for QHPs)

premium, deductible, etc.)			
Marketing and ou	itreach requirements		
Marketing requirements	Exchanges (FFE or SBE) are required to conduct marketing and outreach to consumers.	Exchanges conduct marketing and outreach. The DE entity may supplement as it chooses.	EDE entities are expected to conduct marketing and outreach. There are no direct requirements governing EDE marketing other than a prohibition that brokers "refrain from marketing or conduct that is misleading, coercive, or discriminatory."

## Sign Up for Our Weekly Newsletter

EMAIL

NAME

**MMERGE10** 

STATE

CAPTCHA

	-	
	l'm not a robot	
-	J	reCAPTCHA
		Privacy - Terms

Submit

Michael Cohen, PhD Adam Rudin, FSA, MAAA Andy Large, FSA, CERA, MAAA Chia Yi Chin, ASA, MAAA Ksenia Whittal, FSA, MAAA Matt Sauter, ASA, MAAA Zach Davis, FSA, MAAA Van Phan, FSA, MAAA

## Summary of Provisions of HHS' Proposed 2022 Notice of Benefit and Payment Parameters and Other Key Regulations

On November 25, 2020, the Department of Health and Human Services (HHS) released the proposed Notice of Benefit and Payment Parameters for 2022 in the Federal Register.<sup>1</sup> The notice includes important proposed rules and parameters for the operation of the individual and small group health insurance markets in 2022 and beyond. This paper summarizes key provisions of the proposed notice and other related information recently released by HHS. Comments are due within 30 days of filing.

#### **Overview**

The following highlights the key changes included in the 2022 proposed Payment Notice. More information on these and other proposed changes follow.

1. Direct-Enrollment Flexibilities: HHS proposes allowing states to end statesponsored online enrollment portals (e.g., opt out of Healthcare.gov) and allow for enrollees to only have the ability to enroll into an on-Exchange plan through direct enrollment entities. HHS also proposes to provide DE entities with more flexibility as to what information they share with potential enrollees.

- 2. Risk Adjustment: HHS has proposed several updates to the risk adjustment model Hierarchical Condition Categories (HCCs), the data used to recalibrate the model, the risk adjustment coefficients, the risk adjustment data validation (RADV) program, and the risk adjustment user fee.
- **3.** User Fees: HHS proposes to lower user fees to issuers to 2.25% for issuers in the FFE and 1.75% in SBE-FPs.
- 4. **PBM Reporting:** HHS proposes to require PBMs (or issuers without a PBM) to report key information about prescription drugs, such as prescription drug rebate information.
- 5. MLR Changes: HHS proposes to change the definition of prescription drug rebates to include all direct and indirect remuneration received by an issuer, including discounts or charge backs. Issuers will need to deduct

<sup>&</sup>lt;sup>1</sup> Department of Health and Human Services, "Proposed Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2022", https://www.HHS.gov/files/document/HHS-9914-p.pdf

these amounts from incurred claims starting in 2022 if the proposal is finalized.

- 6. 1332 Waiver Regulation: HHS proposes to incorporate its 2018 guidance on 1332 Waiver into regulation.
- Actuarial Value Calculator: HHS has proposed that there would be no changes to the 2022 Actuarial Value Calculator relative to 2021.

#### Exchange Establishment Standards (Direct Enrollment)

HHS proposes two major changes to increase the importance of direct enrollment (DE) for the Marketplaces. First, HHS proposes to allow states to elect not to have a state-sponsored online portal (i.e., Healthcare.gov or a state exchange portal) for enrollment and instead only have enrollment via DE. If a state selected this type of Exchange model while a state would still provide supporting functions, individuals could only enroll in Exchange coverage through a DE entity. This would be available for State-Based Exchanges (SBE) in 2022 and for Healthcare.gov states in 2023. These new exchange types will have "-DE" appended to the end of its current acronym (SBE-DE, FFE-DE, and SBE-FP-DE)

The other major proposed change would allow for greater flexibility in how DE entities display information on QHPs. The proposal would allow DE entities not to list as much information on QHPs that it cannot sell. For example, if a webbroker does not have a relationship with a particular issuer, it would not have to display certain information about the plan. The current regulations require that product choices be separated across three different web pages by product type as follows:

- QHPs On-Exchange
- Off-Exchange QHPs and non-QHPs other than excepted benefits
- All other products, including excepted benefits

HHS proposes to relax this requirement under certain circumstances. In particular, On and off Exchange plans (other than excepted benefits) can be on the same page to accommodate HRA arrangements where an employee would need to compare on and off exchange options since there is an employer subsidy for the off exchange options and a potential federal subsidy for on-exchange options.

#### <u>User Fees</u>

HHS proposes to reduce user fees for issuers in states that utilize Healthcare.Gov. In particular, HHS proposes to charge issuers in FFE 2.25% (down from 3.0%) and 1.75% in SBE-FP states (down from 2.5%). If a state were to select the Exchange-DE option, HHS would only charge a user fee of 1.5%.

#### <u>Eligibility</u>

HHS proposes to allow individuals a special enrollment period if they did not receive timely notice of an event that triggers an enrollment period

HHS also proposes to increase SEP verification for State-Based Marketplaces. HHS proposes to require all Exchanges to verify at least 75% of all

enrollees claiming eligibility for a Special Enrollment Period, effective in 2024.

#### Data Collection for Pharmacy Benefit Managers

HHS proposes requiring PBMs (or QHP Issuers if they do not use a PBM) to report the following required data to HHS:

- Percent of all prescription drugs dispensed through retail vs. mail-order pharmacies,
- Generic dispensing rate
- Aggregate amount and type of rebates, discounts, or price concessions, excluding bona fide service fees (e.g., distribution service fee, inventory management fees, product stocking allowances, and administrative service agreement and patient care program fee)
- Aggregate amount of rebates, discounts, or price concessions that are passed through to the plan sponsor, and the total number of prescriptions dispensed
- Aggregate amount of the difference between the amount health plan pays the PBM and amount the PBM pays retail pharmacies and mail-order pharmacies (spread pricing)
- Civil Monetary Penalties are assessed for non-compliance.

#### Maximum Out of Pocket Updates

HHS is proposing that the maximum out-ofpocket (MOOP) amounts for standard plans<sup>2</sup> and cost sharing variations for 2022 are increased 6.4% from 2021 amounts of \$8,550/\$17,100 (single/family).

- Standard Plans: \$9,100/\$18,200 (single/family)
- 100%-150% FPL: \$3,000/\$6,000 (single/family)
- 150%-200% FPL: \$3,000/\$6,000 (single/family)
- 200%-250% FPL: \$7,250/\$14,500 (single/family)

The catastrophic plan's deductible and MOOP will be set to \$9,100/\$18,200 (single/family).

#### Issuer Requirements

HHS proposes to expand audit and compliance authority from APTC and CSR compliance, to also include, for FFE and SBE-FP states, reviews on exchange user fees, coverage effectuation and termination, and premium calculation. HHS may recoup any APTC, CSR, or user fees in the case of audit non-compliance.

HHS also proposes expanding this audit and compliance authority in states whose SBE or SBE-FP are not adequately enforcing the applicable standards. In any such case, the

<sup>&</sup>lt;sup>2</sup> Standard plans include platinum, gold, silver non-cost sharing variation, bronze metal offerings as well as catastrophic plans.

authority to de-certify a QHP would remain solely with the SBE or SBE-FP.

Beginning with the 2020 OEP, HHS has displayed QHP quality rating information (similar to MA STAR ratings), based on clinical quality measure and enrollee satisfaction survey data, to consumers shopping for coverage on HealthCare.gov platforms (FFE and SBE-FP) and SBEs. HHS is proposing to reduce the number of levels of the display hierarchy for 2022.

HHS also proposes to make the full results of the aforementioned QHP enrollee satisfaction survey available as a Public Use File for each benefit year, beginning with 2021 benefit year results during 2022 OEP (as opposed to the current limited information available).

#### **Payment Disputes**

HHS is proposing to extend the window during which issuers may report APTC payment inaccuracies to HHS from the current 90-day window to up to three years after payments are received, as long as they are reported within 15 days of discovery, and a good-faith effort is made to research and identify such inaccuracies.

#### **RADV** Appeals

HHS is clarifying that the 30-day window to request an appeal of the second RADV audit begins on the date of release of the report on RADV Adjustments to the Risk Adjustment Transfers for the particular benefit year.

#### Member Enrollment

HHS proposes requiring QHP issuers to accept premium payments on behalf of an enrollee from

a Health Reimbursement Arrangement (HRA) or Qualified Small Employer HRA (QSEHRA) by paper or cashier's check, money order, Electronic Funds Transfer, or Pre-Paid debit card.

#### <u>Risk Adjustment</u>

HHS proposes several updates to the risk adjustment program in the payment notice.

#### Risk Adjustment Model Recalibration

HHS will continue to use three consecutive years of EDGE Server data to recalibrate the risk adjustment model annually. However, they are proposing to use the three most recent consecutive years of data available at the time of the annual NBBP to contain draft coefficients – effectively using one-year lagged data from the current regulation. The intention is to have the coefficients in the proposed rule be final to help plans incorporate this information into pricing and promote stability.

#### Model Updates to Improve Predictive Power

HHS proposes including a two-stage specification in both the adult and child models and to separately add severity and transplant indicators that would interact with HCC count factors. Limiting the HCC count factor to interact with only severity and transplant indicators seeks to limit the potential for gaming and capture the compounding costs of multiple HCCs. The current HCC severity interaction terms would be removed as well.

HHS also proposes removing the current 11 enrollment duration factors (EDFs) and replace them with six EDFs (up to six months)

attributable to only those members with one or more payment HCCs.

The preceding changes seek to improve the predictive power of the model for both low and high cost enrollees.

Similar to previous benefit years, HHS proposes an adjustment to the Hepatitis C prescription drug class (RXC) to mitigate overprescribing incentives and better reflect the average cost of Hepatitis C treatments in the 2021 benefit year adult models. HHS proposes to adjust the plan liability associated with Hepatitis C drugs to reflect future market pricing of Hepatitis C drugs before solving for the adult model coefficients

Finally, HHS is proposing that risk score adjustments for CSR plans will continue for the 2022 benefit year as finalized in the 2019 and 2020 payment notices

#### **Premium Credits**

HHS proposes that statewide average premiums would be reduced for any premium credits (as a reduction to the applicable benefit year premiums) and therefore reflect actual premiums billed to members. These lower premiums must also be reported to the EDGE Server.

#### State Flexibility Requests

Alabama was the only state to request a reduction of risk adjustment transfers in 2022<sup>3</sup>. HHS proposes to allow states to request a

reduction in transfers for up to three years beginning in 2023.

#### Audit and Compliance Review of Reinsurance-eligible Plans

HHS proposes several amendments to clarify and expand its compliance review authority, establishing timeframes for issuers to respond to audit notices, reports, inquiries, and requests for supplemental information, and the process for issuers to request extensions to respond.

#### Audit and Compliance Review of Risk Adjustment Covered Plans

Consistent with the proposals for reinsuranceeligible plans and in addition to the HHS-RADV process, HHS also proposes amendments for reviewing risk adjustment covered plans.

#### EDGE Discrepancy Materiality Threshold

HHS is proposing increasing the materiality threshold for EDGE server data issues from \$10,000 to \$100,000. This means the amount in dispute must equal or exceed \$100,000 or one percent of the total estimated transfer amount in the applicable state risk pool for reconsideration requests.

#### Risk Adjustment User Fee

HHS estimates the 2022 risk adjustment user fee will be \$0.25 PMPM, unchanged from 2021.

<sup>&</sup>lt;sup>3</sup> Alabama requested a 50% reduction in transfers for both Individual and Small Group in 2022. In 2020-2021, Alabama only requested this reduction for the Small Group market.

#### Risk Adjustment Data Validation (RADV)

#### **RADV Exemptions**

HHS proposes to codify RADV exemptions for issuers with only small group market carryover coverage and sole issuers in a state market risk pool.

#### **RADV IVA Demonstrations**

HHS proposes IVA entities must demonstrate they are reasonably free of conflicts. Specifically, the IVA entity must 1) not have or previously have had a role in establishing any relevant internal controls of the issuer's risk adjustment or EDGE server data process for the applicable year and 2) not have served in any capacity as an advisor regarding the risk adjustment or EDGE server data submission for the applicable year.

#### **Discrepancy and Appeals**

HHS clarified that issuers are not permitted to use the discrepancy or administrative appeal process to contest IVA findings. Plans should review and discuss IVA findings with the IVA entity prior to submitting and attesting those results to HHS.

HHS proposes to shorten the SVA discrepancy reporting window to 15 days, beginning with the 2020 benefit year RADV.

#### Collections, Disbursements, and MLR Reporting

HHS is proposing to revert to the previous schedule for the collection and disbursements of RADV adjustments. This will result in collections and disbursements to occur in the same calendar year in which HHS-RADV results are released, beginning with the 2019 benefit year RADV.

For example, 2021 RADV results would be released in early summer 2023, and issuers will be instructed to report these amounts in the 2022 MLR reporting year (submitted by July 31st, 2023). Collections and disbursements of RADV charges and allocations for the 2021 RADV results will begin in summer or fall of 2023.

If finalized, RADV results for 2019 and 2020 will be released in 2022, and issuers will report the results for 2021 MLR (reported by July 31st, 2022).

#### Minimum Loss Ratio (MLR) Changes

HHS proposes to require insurers to deduct prescription drug rebates and other price concessions from incurred claims under the MLR rules starting in the 2022 MLR reporting year. HHS defines prescription drug rebates and other price concessions to mean all direct and indirect remuneration received or receivable by an issuer and entities providing pharmacy benefit management services to the issuer, related to the provision of a prescription drug covered by the issuer. This deduction applies regardless of the entity from whom the issuer receives the remuneration (e.g., pharmaceutical manufacturer, wholesaler, retail pharmacy, or other vendor).

HHS also proposes to adopt the public health emergency (PHE) data reporting and rebate requirements developed in the September 2020 interim final rule. Under this rule, issuers must account for temporary premium credits as a reduction in earned premium for MLR rebate calculations.
## Wakely

HHS proposes to continue this flexibility going forward with the following changes:

- A safe harbor under which an issuer that prepays at least 95% of the total rebate owed to enrollees in the given MLR report will not be subject to penalty. Members enrolled over multiple years would get the current year's rebate plus the remaining balance after prepayment from the prior year. For members no longer enrolled, the remaining balance after prepayment would be issued.
- Allowing premium credits to be applied no later than October following the MLR reporting year.

#### 1332 Regulations

HHS proposes to codify the existing guidance issued in October 2018 regarding 1332 waiver applications into regulation (no modifications from current guidance). In particular, this would codify the current Administration's interpretation of the 1332 guardrails and would require notice and comment for the new Biden Administration to change the 1332 waiver rules.

#### The 2022 Actuarial Value Calculator (AVC)

In a separate release<sup>4</sup>, HHS proposes that there will be no changes in the 2022 AVC as compared to the 2021 AVC.<sup>5</sup> That is, the calculated Actuarial Value of any plan in the 2022 AVC will be the same as it was in the 2021 AVC.<sup>6</sup> HHS intentionally used a 0% trend from 2021 to 2022 due to the uncertainty in future healthcare utilization patterns surrounding the COVID-19 pandemic.

If you have any questions or to follow up on any of the concepts presented here, please contact any of the following authors: Michael Cohen at <u>michael.cohen@wakely.com</u> Adam Rudin at <u>adam.rudin@wakely.com</u> Andy Large at <u>andy.large@wakely.com</u> Chia Yi Chin at <u>chiayi.chin@wakely.com</u> Ksenia Whittal at <u>ksenia.whittal@wakely.com</u> Matt Sauter at <u>matt.sauter@wakely.com</u> Zach Davis at <u>zach.davis@wakely.com</u> Van Phan at <u>van.phan@wakely.com</u>

We Help You Navigate The Maze. We are the premier source for healthcare actuarial consulting, helping clients understand the complex and evolving world of healthcare, using the best tools, talent, and data... <u>wakely.com</u>

<sup>&</sup>lt;sup>4</sup> https://www.cms.gov/cciio/resources/regulations-and-guidance/#plan-management

<sup>&</sup>lt;sup>5</sup> HHS did update the AVC edit that will allow for the Maximum allowed Out-of-Pocket Costs input to go up to at least \$9,100, consistent with the what in this proposed notice.

<sup>&</sup>lt;sup>6</sup> Wakely has tested numerous plan designs in the Draft 2022 AVC and have found no differences from the Final 2021 AVC thus far.

Guidance for the Brookings community and the public on our response to the coronavirus (COVID-19) »

Learn more from Brookings scholars about the global response to coronavirus (COVID-19) »

# $\ensuremath{\textcircled{B}ROOKINGS}$ Achieving an equitable national health system for America

Stuart M. Butler Wednesday, December 9, 2020

**Editor's Note:** 

This brief is part of the **Brookings Blueprints for American Renewal & Prosperity** project.

# Blueprints for American Renewal & Prosperity



#### Contents

- <u>Summary</u>
- <u>Challenge</u>
- Limits of historic and existing policies
- Policy recommendations
- <u>Conclusion</u>

## Summary

he American health system is rife with gaps and inequities. The result is inadequate or no insurance and services for millions of families and unacceptable differences in resources and health conditions related to income, race, and location. Resources are misallocated, the health care infrastructure in many communities is inadequate, and our financial support for health coverage is disjointed and inefficient.

It is time to move towards a health system in America that provides adequate, affordable, and accessible care to all U.S. residents, and that reaches this goal by refining existing programs, correcting the subsidy system, and using the power of federalism. Achieving this goal requires us to:

- Create an effective, grassroots community health system by expanding health clinics, creating other local points of access, focusing on social determinants of health, and addressing gaps in Medicaid.
- Reform the tax treatment of employment-based coverage to create universal subsidies that allow effective choices of coverage in an arrangement that could be described as "Medicare Advantage for All."

• Use program flexibility and state innovation to create a truly national system with appropriate state variation.

#### Back to top ↑

## Challenge

The COVID-19 pandemic has laid bare the profound weaknesses of the American health care system, in particular the enormous inequities that pervade it. The virus has highlighted these gaps and made them worse. It has underscored the fact that decades of widespread dependence on employment-based coverage – a byproduct of the tax treatment of health spending – means that Americans must change or lose their coverage if they change or lose their jobs. Layoffs during the pandemic meant that as many as <u>7.7</u> million workers and 6.9 million dependents lost health coverage as well as a paycheck and have had to scramble to try to find alternative affordable insurance. The pandemic has also exacerbated the sharp differences in health services and outcomes between racial and income groups that have long existed in the system. And it has shown the weakness of our public health workers.

Redesigning this system will be no easy task. Health care is a polarizing issue, and in this enormous country there are big differences in attitudes and approaches to health coverage. But COVID-19 has focused attention on the need to address the gaps while preserving popular features of the current system. Accomplishing that will not be easy, but there is a pathway that combines liberal and conservative principles and so could attract White House and bipartisan congressional support.

#### Back to top ↑

## Limits of historic and existing policies

While the United States can claim to provide among the world's highest quality health care, the country has struggled for decades to create a health <u>system</u> for all its residents. Most other developed countries have established systems that enshrine broad national principles of universal coverage and are relatively consistent in ensuring at least basic care throughout the nation. The American "system," however, is a collection of mini-systems, each based on different eligibility criteria, different budgeting frameworks, and different financial obligations by patients. We have a federal-state system for the poor which varies across the country (Medicaid). There is a national social insurance program for older people (Medicare). We have yet another system for some working people (tax advantaged employer-sponsored coverage). Meanwhile, millions of other working people obtain services through another system (state-level exchange plans). And still millions of households fall between eligibility criteria for these programs or cannot afford coverage, and so they remain uninsured.

The inequities and gaps in this system are a national disgrace. One result is significant differences in the medical resources and outcomes associated with different population groups. For instance, <u>Hispanics</u> and <u>Black Americans</u> have significantly <u>worse health</u> than whites in America. Local conditions as well as inadequate health resources exacerbate these differences; people raised in medically under-resourced and minority areas tend to <u>experience poorer health</u> throughout their lives when compared with others. Community conditions, including schools and other local services, transportation, and air quality, are an important factor in this pattern.

Another feature is inequities and gaps associated with employment. Only <u>89 percent of</u> <u>workers</u> are employed in firms that offer health insurance. For them, the full value of their compensation in the form of employer-sponsored insurance (ESI) – with the employer share valued at an average of nearly \$16,000 in 2020 for family coverage – is free of federal, state, and payroll taxes (known as a "tax exclusion"). But this tax break is much more valuable to highly paid workers than to low-paid employees who pay little or no federal income tax. Moreover, even this regressive tax break is unavailable to part-time workers or others who cannot afford to purchase family coverage offered by the employer. The availability of ESI and the regressive tax subsidy varies widely by <u>size and type of</u> <u>employer</u>. Virtually all large firms offer tax-subsidized coverage. Meanwhile, for small (3-199 employee) firms, and in the retail, agriculture, and service sectors – where there is a higher proportion of minority and lower-paid employees – only about half offer insurance to their employees.

It is true that workers without the offer of ESI may be eligible for progressive, incomerelated federal subsidies for exchange plans created by the Affordable Care Act (ACA), but only if their incomes are between 100 percent and 400 percent of the poverty rate (i.e. between \$12,760 and \$51,040 for an individual in 2021). The ACA sought to help by requiring all states to make Medicaid available to more families, but the U.S. Supreme Court struck down that provision and several states declined federal funds to expand Medicaid coverage, leaving many of their residents without any affordable coverage.

Thus, while landmark pieces of legislation—including those that created Medicare and Medicaid in the 1960s and the ACA—have provided good health coverage to millions of Americans, it has been in a piecemeal way and unacceptable gaps and inequities remain. It is time for decisive and consistent action to address this situation.

#### Back to top ↑

## **Policy recommendations**

**Strategic principles for action.** There are five broad principles of design and approach that would achieve a more equitable and effective system and likely would command broad support in the country. They should undergird a bold plan to strengthen our health system.

• <u>The system should guarantee adequate, affordable, and accessible care to all U.S.</u> <u>residents</u>. While there are significant differences of opinion on exactly what services should be available to everyone and how a system should be organized, the idea of at least basic services that are realistically available and affordable to all is broadly accepted in America.

- <u>There must be a strong community health system with an emphasis on social</u> <u>determinants of health</u>. We have learned that for effective and equitable health care to be made available, especially in lower-income and minority neighborhoods, there must be robust local health institutions backed by Medicaid and other coverage sources. Attention must also be paid to the non-medical factors that influence health, such as housing and transportation.
- States must be allowed to adapt and innovate within national goals and a national framework. State-level experimentation—within agreed national boundaries—is essential for the system to adapt and improve over time. By receiving waivers from federal rules, states have over the years done much to expand care and explore better health delivery systems.
- <u>There needs to be horizontal equity in financial assistance</u>. The degree of tax relief or direct assistance for working-age households to pay for insurance or care varies widely depending on employment and other factors; it needs to be consistent. Similarly situated households should receive similar financial help, wherever they reside and wherever they work.
- It is better to build on or adapt existing programs and institutions than attempt radical change. Most Americans are generally skeptical about large changes in the health care delivery system, even when the result is likely to be an improvement. Fortunately, there are ways to modify existing structures and programs to move towards greater effectiveness and equity.

Building on these strategic principles, we must commit to addressing the inequities and shortcomings of the current system by building on its strengths and modifying key features in line with the strategic principles. That suggests an approach with three key elements: first, creating an effective grassroots population health system; second, achieving equitable subsidies for insurance by moving from employer-sponsored insurance to "Medicare Advantage for All;" and third, creating a national system that encourages a degree of state variation.

### Create an effective grassroots population health system

An equitable and effective health system requires attention both to the availability of medical resources and a stronger focus on community-based strategies to address "upstream" social factors that are linked to health.

Action: Expand community health centers. The first step should be to <u>expand the</u> <u>system of community health centers</u> in underserved areas and provide greater long-term funding certainty. These clinics serve roughly <u>one out of every 12 U.S. residents</u>. With direct support from the federal government, local support, and Medicaid and Medicare funding, the clinics provide a broad range of primary care services to families, including uninsured and undocumented patients. Providing free care to some families often strains the business model of clinics; those that offer good service to the uninsured tend to attract more patients who are unable to pay, which can jeopardize their finances—a classic case of "no good deed goes unpunished." Many health centers also partner with other community institutions to tackle social determinants, such as housing needs and social services.

The clinic system is the core provider of primary care in most low-income and underinsured communities. Moreover, the system has attracted bipartisan support for many years. Thus, building on it could attract broad political support.

As a key tool to address inequities, federal funding for such Federally Qualified Health Centers (FQHCs) needs to be expanded, with an emphasis on areas with greatest need.<sup>[1]</sup> While direct federal funding for community health centers has been affected in 2020 by COVID-19 spending and uncertainties in the congressional budgeting process, in recent years it has averaged just under \$6 billion (clinics also receive payments for services to patients through Medicaid, Medicare etc.). That commitment needs to increase for centers to play their full role as the primary care system for millions of U.S. residents. In addition, federal, state, and local agencies should take a <u>variety of steps</u> to enable different programs and private entities to coordinate funds to enable FQHCs to become hubs for both medical services and for addressing the social determinants affecting their patients' health. Local nonprofit hospitals could also provide more help in this funding task if there were clearer <u>federal guidance</u> for using community benefit funds to support clinics. Action: Make additional access points available. In addition to the system of community health centers, we need to encourage the creation and expansion of other health hubs and health access points in underserved areas that would be more convenient to families. This includes financing school-based clinics to provide a broader range of services to children and to their parents as well as <u>housing-health partnerships</u>.

The federal and state governments can foster the creation of more access points in several ways. It can expand the federal <u>Accountable Communities for Health</u> initiative, which helps communities deliver health services in a variety of settings and in combination with other needed services. It can also remove uncertainty about federal regulation. For instance, there is often local hesitation to be creative in siting health facilities in housing projects, community centers, and other locations, out of sometimes misplaced concerns about privacy laws, legal liability, and other practical issues. The federal government, along with states, could help calm these concerns by providing greater clarity on the rules and by issuing "safe harbor" guidance on the best approaches. Helpful, too, would be state and local programs to encourage primary care workers to come to high needs communities, such as <u>Maryland's Health Enterprise Zone</u> program.

Many of these approaches would be enhanced by greater use of <u>community health workers</u> and <u>organizations</u> that help link families more effectively with the health system. Both government and private sources are needed to build out this important part of the health system infrastructure. Better linkages and communication would also be enhanced by making permanent some of the COVID-19 emergency payment and flexibility granted for the use of <u>telehealth services</u>, which make access to health providers easier for many families.

Action: Focus on social determinants. Another necessary step is to create a better balance between spending on medical services—clinical health interventions—and on non-medical services targeting social determinants, especially within communities exhibiting poorer health. We have learned that an individual's health is significantly influenced by neighborhood conditions, such as the quality of <u>housing</u>, the availability of transportation, <u>childhood</u> and adult stress levels, nutritious food, and <u>other non-clinical factors</u>. In all neighborhoods and families, these factors influence health outcomes and

contribute to chronic conditions, and so in under-resourced areas, including poorer neighborhoods and in many Black, Latino and Native American communities, the deleterious impact on health is greatest. Thus, addressing these health influencers will be disproportionately beneficial for many communities with poor health status.

Focusing on social determinants does require more research for policy and budgeting to be efficient. While there has been a <u>sharp increase in research</u> in recent years, it is still often very <u>difficult to determine</u> with confidence the exact relationship between investing in different policy approaches and the degree of health improvement. Government and philanthropy need to support stepped-up research in this area.

It will also be necessary to make changes in department budgets and to explore budgeting tools to allow funds to be <u>used more flexibly</u> through a <u>variety of techniques</u>. Special bodies, like <u>the U.S. Interagency Council on the Homeless</u> or state-level <u>Children's</u> <u>Cabinets</u>, coordinate cross-department spending and are models for addressing social determinants. Waivers from federal rules are also a valuable tool (see below). Currently the U.S. is an outlier among developed countries in the ratio of spending on medical care —especially hospital and outpatient procedures—compared with social services. To improve the health status of minorities and others who are more likely to live in underresourced communities, government at all levels must make it easier for health programs to devote more of their resources to housing, nutrition, transportation, and other health-related non-clinical services. Jurisdictions can build on such examples as Congress and the Trump Administration giving <u>Medicaid waivers</u> to enable states to combine medical and other services for certain populations.

Action: Create an option for non-expansion states. The federal-state Medicaid program is the crucial financing and health services foundation of the health system for lower-income households, and so a necessary step to advance equity and quality is to enhance Medicaid's effectiveness. One way to do this is for states to introduce more <u>comprehensive managed care</u>, which allows more integration of medical and other services to improve enrollee health. But even more urgent is the task of addressing the gap in available services to many lower-income families within so-called "non-expansion states." This gap arose when, in 2012, the U.S. Supreme Court ruled that the federal government could not require a state to accept federal funds to expand Medicaid eligibility for many low-income adults previously not qualified for coverage in that state. More than a dozen states declined to do so and <u>12 have still not agreed</u> to the expansion. The ACA exchange plan subsidy structure was based on all states expanding Medicaid.

For the states that still resist Medicaid expansion, a solution could be to provide these states with the federal funds foregone by not expanding Medicaid in order to enroll low-income households in ACA exchange plans or to allow these states to create their own programs that could achieve the same goals and coverage as the ACA's Medicaid expansion. States that have already expanded Medicaid would not be given this opportunity. It could be challenging to do that while maintaining the incentive for expansion states to continue their enhanced Medicaid programs, but experts with <u>different political philosophies</u> have suggested ways that challenge might be overcome.

## Achieve equitable subsidies for insurance: Transition from employersponsored insurance to Medicare Advantage for All?

In addition to better access for underserved communities, an equitable and effective health system also has horizontal financial equity—in other words, functionally equivalent assistance for all to help afford adequate insurance and care regardless of employment and geography.

Action: Replace the tax exclusion with universal tax credits. Over the last 30 years, a variety of proposals have been offered by Republicans and Democrats to create a system of subsidies that is more consistent across income levels, irrespective of type of employment and more progressive in relationship to income. The ACA's exchange plan subsidies, expanded Medicaid, and the special so-called "Cadillac" tax on generous ESI plans—twice delayed and then repealed by Congress—all moved in that direction.

A subsidy system that achieves a horizontally equitable, dependable, and progressive system of support for families to afford health coverage and costs could be achieved by gradually replacing the ESI tax exclusion and ACA exchange credits with a universal system of income-adjusted, refundable, advanceable, federal tax credits.<sup>[2]</sup> Many

<u>Republican</u> lawmakers, as well as Democrats, over the years have been attracted to progressive tax credits for insurance. Currently, the individual tax exclusion for ESI involves over <u>\$270 billion</u> in annual foregone federal tax revenue. This enormous and regressive tax break could be gradually transformed into a system of progressive credits that would leave most middle-class workers little affected but provide more financial help to lower-paid workers. Such credits could be used for the cost of health insurance plans that meet federal standards (including insurance combined with Health Savings Accounts), as well as plans offered through ACA exchanges. Ideally the refundable credits would begin to kick in at the level of income where eligibility for Medicaid ceases; indeed, a version of the refundable credit system could be part of an alternative to Medicaid expansion in non-expansion states. A more <u>modest, transitional proposal</u>, advanced by President-elect Joe Biden and others, would be to eliminate the "firewall" around ACA exchange subsidies (which denies exchange subsidies to households that are eligible for affordable ESI) and allow households with an offer of ESI to instead enroll in subsidized exchange plans.

With this equitable subsidy system in place, all working families would receive similar assistance, linked to need, to afford adequate health coverage without regard to their place or sector of employment, size of employer, and whether they worked part-time or seasonally. Coverage could be obtained through ACA exchanges or from another source meeting federal insurance standards. The principal gainers from this subsidy system would be lower-paid employees, minorities, people sporadically in the workforce, and those often changing jobs—precisely those households who today experience the highest levels of uninsurance.

Under this reform, the health insurance role of most employers would not end, <u>but it</u> <u>would change</u>. Generally, employers would retain their bookkeeping function of making plans available and handling payroll deductions to facilitate payments to plans, as well as making withholding adjustments in paychecks to reflect an employee's eligible credits. Employers could continue to sponsor insurance—that is, pay for it as part of compensation; in this case the value would be added to the employee's taxable compensation but also would be eligible for the employee's refundable tax credit. This subsidy reform would substantially eliminate the structural inequity associated with employment-based coverage. Working families would be able to get the same choices of insurance and the same financial assistance whether they worked for a large firm, a small firm, were self-employed, worked part-time, or were temporarily unemployed, and whether they worked in the service sector, agriculture, or a Fortune 500 company.

Action: Move to Medicare Advantage for All. Structuring a subsidy system in this way would not only help achieve horizontal equity. It could also help the country edge towards a health system in which the <u>form</u> of coverage ultimately is similar for the vast majority of U.S. residents, whatever their income, work status, or age. This would be a system with choice among managed health care plans in which enrollees receive federal (and for some, state) subsidies to help pay for premiums, and with plans also receiving risk-adjusted capitated payments to reflect the insurance risk of enrollees with different health histories. Medicare Advantage plans already have a structure like this. And with about <u>90</u> percent of Medicaid beneficiaries in managed care plans and about two-thirds of workers with ESI <u>enrolled in some form of managed care</u> or network coverage <u>similar to Medicare Advantage plans</u>, the future structure of coverage would evolve into something that might best be described as "<u>Medicare Advantage for All</u>." By incorporating key features of existing programs and plans in this way, the proposed reform would be a gradual change in the coverage systems Americans are familiar with, not a radical departure.

#### Create a national system with state variation

A national system of health care does not have to look the same everywhere. What it must do is conform everywhere to national goals and values: adequate, affordable, accessible care for all.

A degree of variation is both necessary and desirable, and America's system of federalism can enable our health system to build consensus and to evolve. In contentious areas of policy, federalism can allow ideas to be introduced in some states and observed by others, <u>paving the way for broader acceptance</u>. The western states, for instance, created the momentum for women's suffrage, and state action and experience helped break down opposition to same-sex marriage. Similarly in health care, concerns and skepticism about approaches to health system design, from reinsurance pools to questions about the effectiveness of some social determinants of health, can be field-tested first at the state level rather than facing an "all or nothing" political test at the national level. The earlier example of states being permitted to expand Medicaid or introduce a variant to achieve the same objective is another example of using federalism to ease the pathway to reform. Allowing states to explore alternative ways of reaching the same goal and then comparing the results increases the likelihood of future consensus.

Action: Make greater use of waivers. The waiver authority granted by Congress in Medicaid (Section 1115 waivers) and the ACA (Section 1332), together with other program waivers, are important federalism tools that allow states to request temporary variations in the operation of these programs so they can explore alternative ways to achieve program objectives. Waivers have been <u>used extensively in Medicaid</u>, with states often adopting other states' approaches, and have been the driver of broad changes in the program over time. The more recent ACA waiver authority also led to <u>several state</u> <u>requests</u> under the Trump Administration, although Congress needs to clarify that states can <u>integrate different health programs</u> under 1332 waivers. Existing waiver authority should be used more extensively by the Biden Administration, and Congress should enact more waiver authority in housing, social services, and other programs to allow more crosssector initiatives that seek to improve health outcomes.

While waivers, and federalism in general, constitute a powerful and beneficial tool to adapt and innovate, there does need to be appropriate safeguards to assure that the goals of a more equitable and efficient health system are achieved everywhere. Waiver authority is set in statute, but the extent of that authority is largely interpreted by the administration in power, and some analysts argue that certain waiver requests have <u>exceeded the statutory authority</u>. Moreover, the granting of waiver requests typically reflects the philosophy and goals of the White House rather than a "let a thousand flowers bloom" vision of state-led innovative federalism. That shortcoming of waiver authority could be addressed by <u>widening the waiver process</u> to permit alternative waiver application routes, including waivers recommended by a commission representing states, Congress, and the administration.

#### Back to top ↑

## Conclusion

A byproduct of the COVID-19 pandemic is a better understanding today of the structural weaknesses of the U.S. health system and a growing appreciation and acceptance of what a reformed system should look like. Still, Americans hesitate to embrace big change in health care, even when they agree on the need for it. Fortunately, reform does not require a wholesale abandonment of the current system and the implacable opposition that likely would be triggered if that were attempted. There are many programs and elements of the current system we can build on and make consistent. Moreover, many of the key ideas discussed in this report have their roots in both political parties, and so, with genuine outreach to leading lawmakers on Capitol Hill, the Biden Administration could achieve bipartisan progress on health reform. Moreover, structural change does not have to come in the form of one giant bill; it can be achieved through a series of bills and administrative actions. Indeed, with a clear, shared vision of the objectives, some bold leadership, and a willingness to build on or remodel some existing parts of today's system, there is a bipartisan path to an equitable, inclusive, and comprehensive American health system.

#### Back to top ↑

#### Footnotes

- 1. <u>1</u> Disclosure, the author is an unpaid board member of an FQHC system in the Washington, D.C. area.
- 2. <u>2</u> A refundable tax credit means that if a household's calculated available tax credit exceeds its pre-credit tax liability, the household receives a government payment for the difference, The Earned Income Tax Credit is an example. And advanceable credit is one that can be integrated into paycheck withholding, so the recipient does not have to wait until tax filing to claim it.

## How Has the Pandemic Affected Health Coverage in the U.S.?

Daniel McDermott (https://www.kff.org/person/daniel-mcdermott/), Cynthia Cox (https://www.kff.org/person/cynthia-cox/) (https://twitter.com/cynthiaccox), Robin Rudowitz (https://www.kff.org/person/robin-rudowitz/) (https://twitter.com/RRudowitz), and Rachel Garfield (https://www.kff.org/person/rachel-garfield/) (https://twitter.com/RachelLGarfield) Dec 09, 2020



Job losses caused by the coronavirus pandemic have threatened to disrupt health coverage for millions of people as most working-age adults get coverage for themselves and their families through their work. Tracking real-time changes in coverage and the uninsured rate is difficult to do with much precision because the large national surveys that produce these estimates lag by months or years, and private surveys generally lack sufficient sample to measure coverage changes precisely. Many real-time surveys have faced challenges of high rates of survey <u>nonresponse (https://www.census.gov/content/dam/Census/library/workingpapers/2020/demo/sehsd-wp2020-10.pdf)</u> (not responding to the survey or particular questions) particularly among populations most likely affected by the economic downturn, including the Census Bureau's Household Pulse Survey. However, various sources of administrative data allow us to piece together what might be happening to health coverage rates amid the pandemic.

#### Declines in employer sponsored insurance are far less than overall declines in

**employment.** First, using administrative data insurers file with state regulators (compiled by Mark Farrah Associates TM), we can see how enrollment in employer plans has changed through the end of September. Although <u>employment rates</u>

<u>(https://www.bls.gov/charts/employment-situation/employment-levels-by-industry.htm)</u> fell by 6.2% from March to September, enrollment in the fully-insured group market decreased by just 1.5% over the same period.

If we extrapolate this finding to the entire group market, including self-insured employer plans, this would suggest that a total of roughly 2 to 3 million people may have lost employer-based coverage between March and September. To be very clear, this is only a rough estimate. We do not have reliable data for self-insured employers (which insure about 6 in 10 people with employer coverage and tend to be larger), and those employers may have made different decisions than fully-insured employers did about layoffs and whether and how to maintain coverage for employees.

Loss of employer-based coverage may have been offset by strong enrollment in Medicaid and Marketplaces. Many of those who lost job-based health coverage would have <u>qualified (https://www.kff.org/coronavirus-covid-19/issue-brief/eligibility-for-aca-health-coveragefollowing-job-loss/)</u> for Medicaid or for a special enrollment opportunity to purchase individual market health coverage (either on- or off- exchange). Preliminary administrative data for the Medicaid program shows enrollment <u>increased by 4.3 million</u> (https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chipenrollment/) people (6.1%) from February through July 2020. More recent data for 30 states show that <u>enrollment in managed care (https://www.kff.org/coronavirus-covid-19/issue-brief/growthin-medicaid-mco-enrollment-during-the-covid-19-pandemic/)</u> plans increased by about 5 million, or 11.3%, from March to September 2020. Nationally, MCOs cover over two-thirds of Medicaid

beneficiaries. States attribute these increases to rising unemployment (and loss of employer sponsored insurance) as well as the "maintenance of eligibility" (MOE) requirements tied to a 6.2 percentage point increase in the federal match rate (FMAP) authorized by the Families First Coronavirus Response Act (FFCRA) – which prevents states from disenrolling Medicaid beneficiaries if they accept the additional federal funding.

Using the same administrative data above (from Mark Farah Associates TM), we find that enrollment in the individual market was fairly steady from March to September 2020. In normal years, there is typically more attrition during these months as more people leave the market than come in during special enrollment periods (SEP). However, SEP enrollment was higher this year in <u>healthcare.gov (https://www.cms.gov/CCIIO/Resources/Forms-Reports-and-Other-Resources/Downloads/SEP-Report-Nov-2020.pdf)</u> and <u>state based exchanges</u> (<u>https://www.coveredca.com/newsroom/news-releases/2020/07/29/california-to-give-consumers-more-timeto-sign-up-for-health-care-coverage-by-extending-special-enrollment-deadline-during-covid-19-pandemic/).</u>

While much is unknown, a review of administrative data suggest that the uninsured rate may not have changed much during the pandemic to date. There is still much we do not know, and these administrative data do not account for other changes like people aging on to Medicare and population growth. Nonetheless, it appears that the decline in employer-based health insurance coverage may have been offset by gains in Medicaid and largely steady enrollment in the individual market.

There are several possible explanations for the relatively modest decrease in employerbased coverage despite massive job losses. First, many of the people who have lost employment likely were never enrolled in coverage through their job in the first place; <u>lower wage workers (https://www.kff.org/report-section/ehbs-2019-section-3-employee-coverageeligibility-and-participation/#figure39</u>) are less likely to be covered by their employer's plan and, similarly, job losses (https://www.bls.gov/charts/employment-situation/employment-levels-byindustry.htm) have been highest and most sustained among industries that tend to have <u>lower coverage offer rates (https://www.kff.org/report-section/ehbs-2019-section-2-health-benefits-offerrates/attachment/table-2-3-22/)</u> (e.g., retail, service, hospitality). Second, many people who lost their jobs may have been able to retain their health coverage temporarily. A number of employers elected to keep furloughed or laid off workers <u>enrolled in their firm's plan</u> (https://www.bls.gov/brs/2020-results.htm) at least in the short term. In addition, an unknown number of permanently laid off employees may have elected COBRA (which would be classified as group coverage) at their own expense, although this number is likely small due to the high costs of such coverage. Employment rates are starting to recover but a larger share of people filing unemployment claims say their job loss is permanent compared to earlier in the pandemic, suggesting there may be more coverage loss to come.

That the uninsured rate may not have substantially changed this year could be taken as both good news and bad news. A largely flat uninsured rate would be good news because health insurance coverage rates tend to fall whenever there is an economic downturn in the United States. Between many employers maintaining coverage and the Affordable Care Act along with Medicaid serving as a safety net for those who did lose coverage, the uninsured rate in the U.S. does not appear to have risen nearly as much as it <u>could have (https://www.kff.org/coronavirus-covid-19/issue-brief/eligibility-for-aca-health-coveragefollowing-job-loss/</u>), given the scale of employment losses.

The bad news is that, if the uninsured rate has indeed held steady, there are still tens of millions of people without health coverage during the worst pandemic to hit the country in one hundred years. Despite some recent legislation and administrative action aimed at protecting the uninsured from some of the costs associated with COVID-19 testing and treatment, those without coverage still face tremendous financial and health risks.

<u>Four out of ten (https://www.kff.org/policy-watch/millions-of-uninsured-americans-are-eligible-for-free-aca-health-insurance/)</u> people who were uninsured before the pandemic could be getting health insurance coverage for free, either through Medicaid or a zero-premium bronze plan on the exchange. Open Enrollment for 2021 coverage on the ACA exchange markets is now in its fifth week and <u>early figures (https://www.cms.gov/newsroom/fact-sheets/federal-health-insurance-exchange-weekly-enrollment-snapshot-week-</u>

<u>four#:~:text=Week%20Four%2C%20November%2022%20%2D%20November%2028%2C%20202&text=Every</u> <u>%20week%20during%20Open%20Enrollment,and%20some%20Stat</u>) show that, while overall enrollment is strong, new enrollment is about the same as past years. The Trump Administration has <u>drastically reduced (https://www.kff.org/health-reform/issue-brief/consumerassistance-in-health-insurance-evidence-of-impact-and-unmet-need/)</u> funds for ACA outreach and marketing activities, as well as for navigators who help people enroll in Marketplace coverage. President-elect Biden has vowed to reinstitute funding for ACA marketing, outreach, and navigator programs. The federal Open Enrollment period will have ended by the time Biden takes office, but he could open a new SEP without limitations on who qualifies to enroll.

#### GET THE LATEST ON HEALTH POLICY Sign Up For Email Alerts

Enter email address...

SIGN UP >

#### **FOLLOW KFF**

Twitter

Facebook

Instagram

Email Alerts

Feeds

## KFF

#### © 2021 KAISER FAMILY FOUNDATION

Powered by WordPress.com VIP

CITATIONS AND REPRINTS PRIVACY POLICY

The Henry J. Kaiser Family Foundation Headquarters: 185 Berry St., Suite 2000, San Francisco, CA 94107 | Phone 650-854-9400

Washington Offices and Barbara Jordan Conference Center: 1330 G Street, NW, Washington, DC 20005 | Phone 202-347-5270

www.kff.org | Email Alerts: kff.org/email | facebook.com/KaiserFamilyFoundation | twitter.com/kff



## **State Use of Patient-Centered Outcomes Research in Telehealth Policymaking**

By Amanda Attiya, Christina Cousart, and Maureen Hensley-Quinn Dec. 8, 2020

The adoption and use of telehealth have exploded across states, spurred by the COVID-19 pandemic, the need for social distancing, and swift federal and state action to enable how telehealth is delivered and covered by insurers. These changes will have a lasting impact on how health care is delivered, affecting payers, medical providers, and patients across the health care system.

As states address the ongoing effects of COVID-19 and look ahead to a post-pandemic world, patient-centered evidence that can support the evaluation of telehealth service delivery is critical and welcome. State policymakers need to weigh the advantages and disadvantages of telehealth services, including their impact on access, costs, and patient outcomes in determining the sustainability of policies.

#### Background

For several years, with funding from the Patient-Centered Outcomes Research Institute (PCORI), the National Academy for State Health Policy (NASHP) has worked to support states to incorporate comparative effectiveness research and patient-centered outcomes research into policymaking. To continue this work – and recognizing the interest of states in this topic and PCORI's growing portfolio of telehealth research<sup>1</sup> – NASHP established an affinity group of state policymakers who met quarterly to discuss telehealth initiatives and research from July 2019 through September 2020.

The project created opportunities for state official participants to discuss key issues related to telehealth, including the policy implications of emerging findings, especially as states made rapid adjustments in response to the emerging COVID- For more information, read NASHP's:

- Lessons from States on Advancing Evidencebased State Health Policymaking for the Effective Stewardship of Health Care Resources and
- <u>A Roadmap for State</u> <u>Policymakers to Use</u> <u>Comparative</u> <u>Effectiveness and</u> <u>Patient-Centered</u> <u>Outcomes Research to</u> <u>Inform Decision Making</u>

19 pandemic. This report shares themes that emerged from NASHP's work with this group, including opportunities and challenges state policymakers face in the development of evidence-based telehealth policies.

#### Evolution of Telehealth and its Acceleration under COVID-19

Prior to the pandemic, adoption of telehealth — the application of electronic systems or technologies to support the delivery of health care services at a distance — had been steadily increasing across the United States.<sup>2</sup> However, actual use of telehealth services was still sporadic, influenced by various factors including:

- Existence of the infrastructure necessary for health systems and providers to employ telehealth tools (e.g., electronic records systems, widespread access to broadband);
- Implementation of policies by different payers (public and commercial) that enable telehealth adoption, including defining what counts as a telehealth visit (using remote video or telephone to connect providers with patients) and reimbursement structures for telehealth services;
- Use of telehealth to increase access in a particular region or community, especially as a means to address physician shortages; and
- Patient and provider capacity and/or their desire to use telehealth tools and services.

The emergence of COVID-19 and subsequent mandates to socially distance required the federal government, states, health insurers, and providers to make swift changes to enable greater ability for health care to be delivered remotely. These changes included:

- Relaxing point-of-service requirements so care could more easily be delivered in patients' homes, rather than requiring patients to initiate a telehealth visit from a specified location such as a primary care provider's office to connect with a specialist;
- Broadening the types of services that could be provided via telehealth, such as audio or telephone visits;
- Accepting use of new tools and technologies for the delivery of care (including greater use of video services supported by Microsoft, Apple, Google, Zoom, etc.); and
- Changing reimbursement policies to ensure providers are paid for telehealth delivery at the same rate as services delivered in-person (payment parity).

These changes accelerated telehealth adoption and utilization by both providers and patients. Looking ahead, state policymakers must now contend with important questions as they deliberate whether and how policies should be sustained. These include questions about ensuring privacy and security protections, especially regarding health information; understanding the comparative effectiveness and quality of services delivered remotely; and better understanding of how increased utilization of telehealth impacts health care capacity and costs.

#### **Rapidly Changing Technology Poses Barriers to Adoption of Research**

Technology improvements continue to occur at an accelerated pace as tech companies compete to create products that are faster, smarter, and more user-friendly. As technology advances, so have Americans' utilization of tech tools and services. By 2019, 90 percent of US adults were internet users (up from just 52 percent in 2000). In addition, 96 percent of US adults owned a mobile phone and 81 percent used smartphones — representing significant growth considering that Apple's iPhone, which popularized the product, had only hit the market in 2007.<sup>3,4</sup>

This rapidly changing technology poses a significant challenge for researchers exploring how a specific technological intervention affects patients' access to and experience with health services. Over the course of just a few years, certain methods of using technology may become irrelevant or outdated as new devices emerge. Furthermore, states report that technological improvement has led to greater patient familiarity with various technologies that could trigger an increased ability and willingness by patients to adopt new technological interventions.

For example, when examining the research report, <u>Comparing Two Methods of Caring for Black</u> <u>and Hispanic Adults with Heart Failure after They Leave the Hospital</u>,<sup>5</sup> NASHP's Affinity Group participants speculated that the use of specific home telemonitoring equipment described in the study may have been perceived as intimidating and/or intrusive to study participants, whereas newer, more familiar technologies that are now more available may have elicited better use by study participants. By the time a multi-year patient-centered study releases results about a particular tool or technology, new technologies and/or changing patient attitudes may limit the value of results for that particular telehealth intervention.

It is impractical for states and providers to hold off on implementing new and promising or — as in the case with COVID-19 — necessary telehealth interventions until researchers can issue results from in-depth studies. To this end, state policymakers have noted the challenge of balancing the need for fast-paced decision-making with their desire to develop evidence-based policies. They recommend that findings be framed to be broadly applicable to developing circumstances and the development of synthesized meta-analysis that share general conclusions related to the success or impact of telehealth.

#### Patient and Provider Satisfaction May Impact Long-term Adoption

Increased familiarity and ability to handle technology do not necessarily mean that *all* patients have a preference for care delivered via telehealth. While states reported that there has been an increased level of comfort with telehealth since the beginning of the pandemic, concerns remain, especially regarding patient and provider concerns related to privacy and safety.

These attitudes may affect long-term adoption of telehealth tools, mitigating their utility even if evidence suggests use of the technology may lead to improved health outcomes or lower costs. Officials noted that even if evidence around a given intervention points to improved health outcomes and lower costs, states will only consider investment if the intervention is supported by patients and providers. Some states have enacted patient satisfaction surveys to collect data to direct their future decisions surrounding telehealth, but more comprehensive research will be needed to help assess long-term patient and provider attitudes regarding telehealth as well as to understand the most effective strategies for allaying those concerns.

#### **Ensuring Telehealth Maintains Care Quality**

There is strong pressure on states to maintain policies that increase access, but states want to ensure these policies will not sacrifice quality or effectiveness of care. In response to COVID-19, states relaxed many standards for telehealth services, some operating under a belief that "some

service is better than none," in the case of patients who are unable to leave their homes or visit physician's offices. Some of these changes included:

- Relaxation of which technologies were allowed to be used for telehealth visits (eg., Zoom, Google Meet, Skype);
- Broadening licensing requirements to allow for delivery of telehealth from out-of-state providers;
- Eliminating or limiting point-of-service restrictions to allow for delivery from various service sites directly to patient's homes, even when the patient or provider had no prior relationship; and
- Acceptance of audio-only services as a telehealth visit.

As state policymakers review these policies, a leading question is whether quality of care can and will be on par with in-person care delivery if these policies are maintained.

As officials look to evidence to use to evaluate these policies, there is a need for studies that make clear and direct comparisons to services delivered remotely versus those delivered inperson. One study, *Comparing a Smartphone Program with a Peer-Led Program to Help People with Serious Mental Illness Manage their Symptoms*,<sup>6</sup> by Dror Ben-Zeev, PhD, particularly caught the interest of state members in NASHP's Telehealth Affinity Group because it provided a clear and direct comparison between use of a telehealth intervention and counseling delivered in-person. Specifically, the study compared use of an online program involving a smartphone app with a treatment program involving in-person group sessions. Both programs proved equally effective in helping patients manage symptoms. Affinity group participants were particularly interested that the online program, despite being significantly less intensive, did not sacrifice quality.

State officials also desire more specificity in identifying which part of an intervention led to its success. In several cases, telehealth studies focus on a multi-part intervention, including use of in-person and remote tools or the use of multiple telehealth interventions, such as remote visits paired with a smart device. But studies involving multiple tools or steps sometimes lack clarity about which piece of the intervention led to a specific outcome. Researchers could improve on the real-world applicability of their findings by identifying which portion of a studied intervention would be most effective if implemented. This would allow policymakers to draw more concise conclusions from a study's results.

#### **Evaluating How Telehealth Impacts Equity**

States are committed to implementing and continuing telehealth policies that expand access and improve care, especially those that may address health disparities. However, states are also wary of initiating or maintaining policies that exacerbate inequities. Among these concerns include access to modern technology, including broadband services, especially in rural or low-income communities. The Federal Communications Commission estimates approximately 21.3 million Americans lack access to broadband services, and the majority of these individuals reside in rural America.<sup>7,8</sup> State officials raised concerns that the existing digital divide will only make

accessing quality health care even more difficult if telehealth services become more of the "norm" for how certain types of care is delivered.

To address this, states expressed a desire for more detailed research findings into the geographic and demographic makeup of populations targeted in a study. Other data points of interest include understanding language access barriers and more information about the technological capacity of study participants, their age, and income. By having more refined demographic information, states can more easily scale and apply research findings to their unique populations.

#### The Need for Enhanced Cost and Benefit Data on Telehealth Interventions

While emerging evidence about the effectiveness of telehealth interventions is of interest to state officials, among the most critical data sought is information about costs and related cost-benefit analysis. For example, while examining results from the study, <u>Does a Video Chat Referral</u> <u>Process Help Families with Children Who Have Medicaid to Initiate Mental Health Care?</u>,<sup>9</sup> affinity group members indicated that a more in-depth explanation of the benefits of increased mental health care screening and access would have aided their ability to use the findings to enact future policies or programs.

This is especially important as adopting new technologies and initiatives could lead to substantial costs for states. Policymakers appreciate data that shows how interventions will result in not only better health outcomes for their patients, but also overall lower health costs. Such data is critical for policymakers as they evaluate the value of large-scale infrastructure investments, such as expansion of broadband services or spending on a discrete technology that could be quickly outdated in a few years.

#### Future Telehealth Research and Data Needs

In addition to the issues identified above, state officials noted many ongoing and future telehealth issues that they will be closely evaluating. Some of the focus areas they identified include:

- A robust evaluation of medical service billing codes used for telehealth to inform development of a more universal and streamlined system;
- Understanding the differences between remote services delivered via audio and video, including cost and quality benefits of care delivered by either method;
- Evaluating the effect of payment parity on telehealth utilization and overall health care costs;
- Strategies to improve use of telehealth interventions to address behavioral health needs;
- Understanding the baseline conditions for providers and patients that lead to best practices in telehealth adoption and utilization; and
- How telehealth may strengthen or worsen fraud, waste, and abuse in the health care system.

In a society in which technology is increasingly integrated into the lives of both patients and practitioners — including use of audio, video, email, and smart technologies — more information is needed to understand how telehealth interventions and technologies can be more

effectively used and how – or whether – they should be paid for. Research into these areas could provide invaluable resources to policymakers as they make critical decisions in the coming months and years, but only if it can be framed and presented in the context of current technologies and societal needs.

#### Notes

**Acknowledgements:** NASHP would like to acknowledge the invaluable assistance of Robyn Liu, MD, over the course of the project, and thank state officials from Washington, Connecticut, West Virginia, Oregon, Alabama, New York, Georgia, Nevada, and Virginia whose work with NASHP over the 20-month project helped identify and develop the concepts in this brief. Finally, the authors would like to thank Greg Martin, our PCORI project officer, for his many contributions and guidance. This project was funded through a Patient-Centered Outcomes Research Institute (PCORI) Eugene Washington PCORI Engagement Award (EADI-12772).

<sup>&</sup>lt;sup>1</sup> "Telehealth." Patient-Centered Outcomes Research Institute, 2020. <u>https://www.pcori.org/topics/telehealth</u>.

<sup>&</sup>lt;sup>2</sup> Barnett, Michael L, Kristin N Ray, and Jeff Sauza. "Trends in Telemedicine Use in a Large Commercially Insured Population, 2005-2017." *Jama Network*, November 27, 2018. https://doi.org/10.1001/jama.2018.12354.

<sup>&</sup>lt;sup>3</sup> "Demographics of Mobile Device Ownership and Adoption in the United States." Pew Research Center: Internet, Science & Tech. Pew Research Center, June 12, 2019. <u>https://www.pewresearch.org/internet/fact-sheet/mobile/</u>.

<sup>&</sup>lt;sup>4</sup> "Demographics of Internet and Home Broadband Usage in the United States." Pew Research Center: Internet, Science & Tech. Pew Research Center, June 12, 2019. <u>https://www.pewresearch.org/internet/fact-sheet/internet-broadband/</u>.

<sup>&</sup>lt;sup>5</sup> Pekmezaris, Renee. "Comparing Two Methods of Caring for Black and Hispanic Adults with Heart Failure after They Leave the Hospital." Patient-Centered Outcomes Research Institute, September

<sup>2018. &</sup>lt;u>https://www.pcori.org/research-results/2013/comparing-two-methods-caring-black-and-hispanic-adults-heart-failure-after</u>.

<sup>&</sup>lt;sup>6</sup> Ben-Zeev, Dror. "Comparing a Smartphone Program with a Peer-Led Program to Help People with Serious Mental Illness Manage Their Symptoms." Patient-Centered Outcomes Research Institute, September

<sup>2018. &</sup>lt;u>https://www.pcori.org/research-results/2014/comparing-smartphone-program-peer-led-program-help-people-serious-mental</u>.

<sup>&</sup>lt;sup>7</sup> Broadband Deployment Report: Digital Divide Narrowing Substantially." Federal Communications Commission, May 29, 2019. <u>https://www.fcc.gov/document/broadband-deployment-report-digital-divide-narrowing-substantially-</u><u>0</u>.

<sup>&</sup>lt;sup>8</sup> "The 2018 Microsoft Airband Initiative An Update on Connecting Rural America." Microsoft News, December 3, 2018. <u>https://news.microsoft.com/rural-broadband/</u>.

<sup>&</sup>lt;sup>9</sup> Coker, Tumaini. "Does a Video Chat Referral Process Help Families with Children Who Have Medicaid to Initiate Mental Health Care?" Patient-Centered Outcomes Research Institute, December

<sup>2018. &</sup>lt;u>https://www.pcori.org/research-results/2013/does-video-chat-referral-process-help-families-children-who-have-medicaid</u>.



Home (https://www.shvs.org/) About (https://www.shvs.org/about/)
Resources for States (https://www.shvs.org/resource/?tag=shran,shvs&topic=&type=)
Expert Perspectives (https://www.shvs.org/updates/) Contact (https://www.shvs.org/contact/)
COVID-19 (https://www.shvs.org/covid19/)
Health Equity (https://www.shvs.org/health-equity-resources)

DEC, 04, 2020

## Proposed 2022 Notice of Benefit & Payment Parameters: Implications for States

#### Sabrina Corlette, Georgetown University's Center on Health Insurance Reforms

On November 25, 2020, the U.S. Departments of Health & Human Services (HHS) and Treasury released the proposed 2022 "Notice of Benefit & Payment Parameters (https://publicinspection.federalregister.gov/2020-26534.pdf)" (NBPP), the annual rule governing core provisions of the Affordable Care Act (ACA), including the operation of the marketplaces, standards for insurers, and the risk adjustment program. A complete summary of the NBPP is available via a 3-part Health Affairs blog series here (https://www.healthaffairs.org/do/10.1377/hblog20201127.118789/full/), here (https://www.healthaffairs.org/do/10.1377/hblog20201127.58803/full/), and here (https://www.healthaffairs.org/do/10.1377/hblog20201128.581622/full/). This expert perspective focuses on several provisions that have implications for state oversight of insurance markets and the state-based marketplaces. If this NBPP is finalized as proposed, these provisions may be revised or reversed by a future administration through a formal rulemaking process. Comments on the proposed rule are due by December 30, 2020.

## **Marketplace Issues**

Privacy - Terms

## New "Direct Enrollment" Exchanges

HHS' Centers for Medicare & Medicaid Services (CMS) is proposing to create a new category of health insurance marketplace (referred to as the "exchange" in federal rules), called a "Direct Enrollment" (DE) marketplace. CMS' asserted goal is to provide states with what it says is a lower cost, private-sector alternative to HealthCare.gov.

The DE marketplace builds on already-existing efforts to expand the use of web-brokers and insurers to facilitate eligibility determinations and enrollment in qualified health plans (QHPs) through the marketplace. According to CMS, fully one-third of HealthCare.gov enrollments are currently conducted through DE.[1]

CMS proposes to establish a process for states to establish a DE marketplace in which one or more private sector entities, such as web-brokers or insurers, would perform almost all of the functions currently performed by the federally facilitated marketplace (FFM). Residents of the state could no longer use the HealthCare.gov platform. Rather, they would enroll through websites run by private sector companies. Either the state or these "approved" private sector companies would need to continue to run a Navigator program and a toll-free telephone hotline. CMS would continue to be responsible for remitting applicable advance premium tax credits (APTCs) to insurers, while the IRS would continue to administer APTC reconciliation on tax returns. HealthCare.gov would remain to provide "supporting functions" such as the processing of data matching, special enrollment period verification, casework, and eligibility appeals. The state would also need to provide a "basic website" that lists "basic QHP information," but the site could provide links to the privately run websites for eligibility determinations and enrollment.

This is a model similar to that promoted by Georgia in its Section 1332 waiver application (https://www.cms.gov/CCIIO/Programs-and-Initiatives/State-Innovation-Waivers/Section\_1332\_State\_Innovation\_Waivers-

#Section\_1332\_State\_Application\_Waiver\_Applications) and approved by CMS on November 1, 2020. However, if the NBPP's proposed DE marketplace is finalized, a state would not need to submit a Section 1332 waiver application to replace HealthCare.gov with these alternative pathways to enrollment. CMS predicts that in states choosing the DE marketplace option, the "vast majority" of consumers will enroll through these private sector entities.

CMS is proposing that the new DE marketplace model would not be limited to FFM states, but a state-based marketplace (SBM) using the federal platform (SBM-FP) or its own enrollment platform could also seek to establish a DE marketplace. SBMs would be able to implement such a model beginning in plan year 2022, while states using HeathCare.gov would be able to implement it beginning in plan year 2023.

## **User Fees**

CMS is proposing to significantly reduce the marketplace user fees generated to fund operations, including maintenance of HealthCare.gov, outreach, the Navigator program, plan management functions. For the FFM, the agency proposes reducing the fee from 3.0 2.25 percent of total monthly premiums, while for the SBM-FPs they propose reducing the Privacy - Terms

from 2.5 to 1.75 percent. For states that elect the DE marketplace, CMS proposes a user fee of 1.5 percent, noting that the marketplace would no longer be providing many consumer-facing enrollment-related activities. Such user fee reductions, if finalized, could significantly limit future efforts to institute improvements in marketplace functionality, consumer assistance, and marketing.

Additionally, CMS is proposing to end the option currently available to SBM-FP states to have CMS collect an additional user fee on their behalf, and then remit it back to the state to cover the state's costs, such as plan management and consumer outreach and assistance. CMS argues that this arrangement is too burdensome and costly. Beginning in 2022, the SBM-FP would have to collect the state share of user fees directly from insurers.

## **New Navigator Program Standards**

CMS proposes to allow marketplace Navigators and certified application counselors (CACs) to use web-brokers that meet certain standards instead of HealthCare.gov to assist consumers seeking marketplace coverage. Previously, Navigators and CACs were prohibited from using these sites. SBMs would have the option, but are not required, to similarly lift the prohibition on assisters' use of web-broker sites.

## **Program Integrity and Verification**

#### **Special Enrollment Periods**

In 2018, the FFM began requiring consumers to provide pre-enrollment verification of their eligibility for a special enrollment period (SEP). These documentation requirements can be burdensome for many consumers and inhibit legitimate enrollment. However, in this rule, the administration proposes requiring the SBMs to conduct such pre-enrollment verifications. Specifically, they would require SBMs to conduct SEP verification for at least 75 percent of new enrollments for consumers not already enrolled in a marketplace plan. However, recognizing that some SBMs may need additional time to implement this requirement, they propose delaying implementation until 2024.

#### **Audit Authority**

The administration proposes to expand HHS' audit authority over insurers participating in the FFM and SBM-FP regarding proper payment of premium tax credits and user fees. They further propose that, in a SBM state that fails to "substantially enforce" federal standards with respect to premium tax credits and user fees, HHS would enforce compliance, including the ability to impose civil monetary penalties on insurers. The administration is seeking comment on how best to coordinate with SBMs, SBM-FPs, and state departments of insurance with respect to the oversight of insurer compliance on these issues.

## Section 1332 "State Innovation" Waivers

The Trump administration issued guidance (https://www.healthaffairs.org/do/10.1377/hblog20181023.512033/full/) in October 2018 gave states new flexibilities to pursue applications to waive provisions of the ACA. This Privacy - Terms guidance changed the way CMS reviews section 1332 waiver applications and loosened the ACA's statutory "guardrails," which require that any state waiver proposal (1) provide coverage at least as comprehensive as under the ACA, (2) provide coverage at least as affordable as under the ACA, (3) provide coverage to at least comparable number of state residents as under the ACA, and (4) not increase the federal deficit. For example, under the 2018 guidance, CMS would no longer assess a state waiver application based on projected actual enrollment in affordable, comprehensive coverage, but on whether a comparable number of people would have *access* to such coverage, whether they enroll or not.

The proposed rule attempts to incorporate these new flexibilities into federal regulations.

## **Special Enrollment Periods**

#### Newly ineligible for APTCs

The administration is proposing to allow individuals currently enrolled in a marketplace plan to switch to a new QHP at a lower metal level if they become newly ineligible for APTCs. For example, an individual enrolled in a Gold-level plan who experienced a change in income or household size that rendered them ineligible for APTCs would be able to switch to a lower-premium Bronze-level plan. The administration is seeking comment from SBMs in particular to ascertain whether this new policy would impose "significant" additional burdens. They also ask for comment on whether this additional flexibility for enrollees could increase the risk of adverse selection.

#### Lack of timely notice

The administration is proposing to allow individuals who did not receive timely notice of a triggering event to have a SEP window within 60 days of the date that he or she knew, or reasonably should have known, of the triggering event. This SEP would also apply for off-marketplace enrollment.

#### **Cessation of employer contributions to COBRA premiums**

The administration is proposing to clarify that, if an employer ceases to contribute to an individual's premiums for COBRA continuation coverage, it would serve as a SEP triggering event for both on- and off-marketplace individual coverage. CMS is also considering whether an employer's reduction in COBRA premium contributions should also constitute a triggering event. In such a case, the administration seeks comment on whether it should adopt a threshold for the level of reduction in employer contributions that would trigger the SEP.

## **Insurance Reform Issues**

## **Risk Adjustment**

In 2019, the administration began allowing states to annually request a reduction in the amounts transferred among insurers under the ACA's risk adjustment program. To date, '' only state to request such an adjustment is Alabama. For 2022, HHS is proposing to allov states to submit requests to reduce these transfer amounts for up to three years at a tin Privacy - Terms

HHS argues that such multi-year requests will promote "greater predictability and stability" in state markets, and reduce the burden on states having to submit annual requests. However, recognizing that market conditions can change from year to year, HHS would reserve the right to require states to submit supplemental evidence supporting the request, after the initial approval. HHS also would retain the ability to terminate or modify the request at any point.

## **Annual Reporting of State Benefit Mandates**

In last year's NBPP, HHS imposed a requirement that states submit an annual report documenting any state-mandated benefits for QHPs that are in addition to those required under the essential health benefits (EHB) benchmark plan. Under the ACA, states must defray any additional premium costs associated with these additional benefits. States are also required to report to HHS state-mandated benefits that are not in addition to EHB. The 2022 proposed rule maintains this requirement, and maintains July 1 as the deadline for submitting the report.

## **Changes to the EHB Benchmark Plan**

The proposed rule sets a deadline of May 6, 2022 for states to submit a request to change its EHB benchmark plan for the 2023 plan year. However, HHS encourages states to submit this application at least 30 days prior to the submission deadline, and to ensure they've completed the required public comment period before the May 6<sup>th</sup> deadline.

HHS has also released its draft annual Letter to Issuers

(https://www.cms.gov/files/document/2022-draft-letter-issuers.pdf) in the FFM, with public comments due by December 23, 2020, a 2021 calendar (https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/Proposed-Key-

Dates-Table-for-CY2021.pdf) with key dates QHP insurers, and a draft bulletin (https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/Draft-Rate-Review-Bulletin-for-CY2021.pdf) with timelines for 2022 single risk pool rate filings.

[1] There are two forms of DE. "Classic" DE enables a consumer to start a marketplace application through an approved web-broker or issuer, but the user is redirected to HealthCare.gov for the determination of eligibility for APTCs or other subsidized coverage. "Enhanced" DE allows consumers to complete all steps in the application, including the eligibility determination and enrollment, via an approved web-broker or issuer.

## Millions of Uninsured Americans are Eligible for Free ACA Health Insurance

<u>Cynthia Cox (https://www.kff.org/person/cynthia-cox/)</u> (https://twitter.com/cynthiaccox) and <u>Daniel McDermott (https://www.kff.org/person/daniel-mcdermott/)</u> Nov 24, 2020



This year has brought millions of job losses due to the COVID-19 pandemic. As cases now spike again and some states reverse course to limit non-essential activities, the next couple of months could bring new, permanent employment losses. As difficult as the next few months will be, one bit of good news is that most uninsured people are eligible for financial assistance under the Affordable Care Act (ACA), and they can sign up now while ACA Open Enrollment for 2021 lasts through December 15, 2020.

There is no reliable measure of the current uninsured rate, but we do know there were <u>29</u> <u>million (https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/)</u> uninsured people in the United States as of 2019. That number has almost certainly grown in 2020 due to the COVID-19 pandemic and subsequent economic recession, but it will be months before we have reliable government surveys to measure the true impact.

As the chart below shows, most of the uninsured in a typical year are eligible for financial help to buy coverage, and of those, most are actually eligible for a free or nearly free plan. Before the pandemic, about one in four uninsured people were eligible for Medicaid and another third were eligible for financial assistance on the Marketplaces, meaning, in total, 57% of the uninsured could get financial help to access coverage. In fact, most of those eligible for help can get free (or nearly free) insurance coverage. The 24% of uninsured people who are eligible for Medicaid (6.7 million people) generally would pay no premium to sign up, and another 16% of the uninsured (4.5 million people) are eligible for a Bronze plan with a \$0 premium.



SOURCE: KFF analysis based on 2019 Medicaid eligibility levels and 2018 American Community Survey.

In other words, 4 out of 10 uninsured people – about 11.2 million people in 2018 and likely at least that many now – in the U.S. can get virtually free insurance, largely under the ACA. (Another 17%, or 4.7 million, can get insurance for significantly reduced price, also under the ACA). As our <u>earlier estimates (https://www.kff.org/private-insurance/issue-brief/how-many-of-the-uninsured-can-purchase-a-marketplace-plan-for-free-in-2020/</u>) have found that the vast majority of those losing job-based coverage in 2020 are eligible for ACA coverage, the number of uninsured eligible for free coverage is likely even larger now.

As shown above, about 4.5 million uninsured people are eligible for a zero-premium Bronze plan on the ACA Marketplace (ranging from 4.2 – 4.7 million in the last three years as premiums have held mostly flat). Deductibles in these plans are high, typically about \$6,500 for a single person. However, many uninsured consumers who qualify for a zero-premium

bronze plan are also eligible for cost sharing reductions, which bring down out-of-pocket costs for low-income enrollees who choose to enroll in a silver plan. Most people eligible for cost-sharing assistance would be best off signing up for a Silver plan with a monthly premium payment (which premium subsidies substantially reduce).

Nonetheless, if the options are to either remain uninsured or pay nothing to sign up for a Bronze plan, the choice would likely be clear to most people, if they were aware of it. Few people will ever reach a \$6,500 deductible, so worst-case scenario, enrollees end up paying fully out-of-pocket for all of their health care, just as they would if they were uninsured (though they would at least benefit from lower negotiated rates from their insurer). Those who do have that high level of health spending are clearly sick enough that they would benefit greatly from the financial protection that comes with health insurance. Given that we are in the midst of a pandemic, most potential enrollees cannot predict whether they will be in that group that has high health spending. A typical <u>hospital admission</u> (https://www.healthsystemtracker.org/chart-collection/how-costly-are-common-health-services-in-the-united-<u>states/</u>) in the U.S. is \$24,000 and an admission for COVID-19 treatment could be <u>substantially more (https://www.healthsystemtracker.org/brief/potential-costs-of-coronavirus-treatmentfor-people-with-employer-coverage/</u>) expensive. Incurring \$6,500 of medical expenses before a plan's full benefits kick in is a much better alternative to risking tens of thousands of dollars of medical debt, especially if there is no cost to sign up.

Like all ACA-compliant health plans, Bronze plans come with other valuable benefits. All plans must cover the full cost of a wide range of preventive care services for their enrollees, without applying a deductible or copayment. These services include many forms of health screenings and immunizations, as well as contraception. Additionally, some bronze plans voluntarily cover some primary care services before the deductible.

#### Unfortunately, a large share of the population is unaware

(https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2019.01420?journalCode=hlthaff) that the ACA offers financial assistance to buy insurance. Many people who lost employer-based coverage during the pandemic may also be unfamiliar with these options, since they have never had a reason to interact with the Marketplaces or Medicaid. The Trump administration has also <u>reduced funding (https://www.kff.org/private-insurance/issue-brief/data-note-further-reductions-in-navigator-funding-for-federal-marketplace-states/)</u> for marketing and outreach activities by nearly 90% and cut funding for Navigator programs that help enroll people in coverage by 84%. President-elect Biden has vowed to reverse these actions, and may tie that outreach to an extended Open Enrollment or broader Special Enrollment or period runs from November 1 through December 15, but it extends into January in most states that operate their own health insurance exchanges. There is no deadline to sign up for Medicaid.

Two weeks into the current Marketplace Open Enrollment period for 2021, signups in federal exchange states <u>appear strong (https://www.cms.gov/newsroom/fact-sheets/federal-health-insurance-exchange-weekly-enrollment-snapshot-week-two)</u>, but the vast majority of signups are from returning enrollees. We still are not seeing a surge of signups from new enrollees relative to past years, but many people who are uninsured may be surprised at what they find if they look at their options.

#### GET THE LATEST ON HEALTH POLICY Sign Up For Email Alerts

Enter email address...

SIGN UP >

#### **FOLLOW KFF**



Feeds

## **KFF** © 2021 KAISER FAMILY FOUNDATION

Powered by WordPress.com VIP

CITATIONS AND REPRINTS PRIVACY POLICY

The Henry J. Kaiser Family Foundation Headquarters: 185 Berry St., Suite 2000, San Francisco, CA 94107 | Phone 650-854-9400

Washington Offices and Barbara Jordan Conference Center: 1330 G Street, NW, Washington, DC 20005 | Phone 202-347-5270

www.kff.org | Email Alerts: kff.org/email | facebook.com/KaiserFamilyFoundation | twitter.com/kff
October 2020

# Federal Policy Options to Realize the Potential of APCDs

Matthew Fiedler and Christen Linke Young

USC-Brookings Schaeffer Initiative for Health Policy

This report is available online at: https://www.brookings.edu/research/federal-policy-options-to-realize-the-potential-of-apcds/



Leonard D. Schaeffer Center for Health Policy & Economics



Economic Studies at BROOKINGS

### **EDITOR'S NOTE**

This white paper is part of the USC-Brookings Schaeffer Initiative for Health Policy, which is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics. The Initiative aims to inform the national health care debate with rigorous, evidence-based analysis leading to practical recommendations using the collaborative strengths of USC and Brookings. The Commonwealth Fund provided a grant to the Brookings Institution to support the writing of this report.

#### **ACKNOWLEDGEMENTS**

The authors thank Kathleen Hannick and Spoorthi Kamepalli for excellent research assistance and Brieanna Nicker for excellent editorial assistance.

# **Executive Summary**

An all-payer claims database (APCD) is a system that collects health care claims and related data from all (or nearly all) entities that pay for health care services in a geographic area, including private and public health plans. Today, 23 states have APCDs, and they are valuable tools that virtually anyone with a stake in the health care system—including consumers, employers, health care providers, health insurers, researchers, and policymakers—can use to better understand the system and find ways to improve it. Indeed, in the states that have them, APCDs can provide a comprehensive picture of health care spending, health care delivery, and health insurance enrollment, and they offer insights that no other data can replicate, particularly with respect to private health insurance markets.

Unfortunately, today's APCDs have important limitations. Most prominently, a 2016 Supreme Court decision, *Gobeille v. Liberty Mutual Insurance Co.*, held that states may not require data collection from non-governmental self-insured group health plans. Because self-insured plans represent 61% of enrollment in employer coverage—and about one-third of all covered people—this decision left a large gap in state APCDs.

Current APCDs also have limitations that predate the *Gobeille* decision and arise from the fact that they are state entities that operate independently of one another. Because each state has its own data submission protocols and data access procedures, combining data from multiple states is challenging, which can frustrate efforts to compare experiences in different states. Further, because APCDs are state-controlled, federal policymakers have no automatic access to APCD data. Relying on a patchwork of state APCDs also forfeits potential economies of scale, which increases administrative costs for both payers and APCDs themselves and may prevent APCDs from making valuable investments in public reporting or data quality. Further, half the U.S. population lives in a state without an APCD.

Federal policymakers have multiple options to address the limitations of current APCDs:

- Enable state collection of self-insured data: Federal policymakers can directly restore state APCDs' ability to collect data from self-insured plans. Congress could enact simple legislation that would achieve this objective. Alternatively, the Supreme Court's decision in *Gobeille* described a legal pathway by which the federal government could authorize states to collect these data on its behalf without new legislation. In either case, policymakers could choose to limit the ability to collect data from self-insured plans to state APCDs that meet certain conditions, like collecting data in a uniform format to reduce administrative burden on payers or providing adequate researcher access to the data.
- **Create a national APCD:** The federal government could also build a national APCD that would collect data from all payers in all states. The federal government and outside researchers could then access this rich national dataset, subject to appropriate privacy safeguards. Data from a national APCD could also be shared with state APCDs, which might need to adapt their systems to accept it, but would then be freed from the burden of collecting data themselves and could focus their limited resources on high-value efforts to support broader use of the data.

In designing such a system, policymakers would need to pay careful attention to privacy and data security concerns. A national APCD could adopt security procedures like those that govern existing federal health care databases. It could also implement data access procedures similar to those that govern Medicare claims data today; in particular, it could bar users from disclosing anything other than aggregated results, require them to abide by rigorous data security practices, limit their access to only those data elements required for their planned analyses, and require them to access and analyze data in a secure computing environment controlled by the federal government. Policymakers could also bar an APCD from holding direct individual identifiers, although such restrictions would need to be crafted carefully to avoid reducing the APCD's capabilities.

The federal government already has the authority to collect these data and could do so without new legislation, although such an initiative is more likely to be pursued and completed if Congress directs and funds the work. Policymakers could also consider housing this initiative within a non-profit, rather than a federal agency, as proposed in legislation recently considered in the Senate Health, Education, Labor, and Pensions Committee, although such an approach poses some governance concerns and would likely require new legislation.

• Expand state APCD coverage and harmonize state APCDs: Policymakers could also pursue a hybrid approach that would expand, improve, and harmonize the existing network of state APCDs. In this model, policymakers would take three steps: (1) authorize state APCDs to collect self-insured data; (2) provide grants to states to encourage creation of new APCDs; and (3) require state APCDs to collect data through a standardized process and share their data with a federal "clearinghouse," similar to the federal clearinghouse that currently exists for state hospital encounter data. The clearinghouse could support research projects that require data from multiple states and facilitate use of these data by federal policymakers, while the grants might encourage more states to create APCDs. However, some states would likely continue to lack APCDs under this approach, and each state APCD would still need to invest in its own infrastructure for collecting and maintaining claims data. The federal government likely already has the authority to pursue this approach, but as with creating a national APCD, such an initiative is more likely to be undertaken with Congressional support.

We believe that creating a national APCD is the best of these approaches. With a small investment of resources relative to total US health care spending, policymakers could create a tool that offers a comprehensive picture of the health care system that no existing data source can come close to matching, thereby accelerating efforts by a wide range of public and private actors to better understand and ultimately improve American health care. While efforts to expand the number of state APCDs and harmonize existing APCDs could also improve on the status quo (and the pre-*Gobeille* status quo) and might encounter somewhat less stakeholder opposition, such a project would achieve less than creating a truly national APCD, and we view it as a decidedly second-best alternative.

If the political will cannot be summoned to pursue these larger projects, either Congress or federal agencies should act swiftly to at least restore states' ability to collect self-insured data. While not cost free, this is a fairly simple undertaking that will make existing APCDs more useful and comprehensive. It would allow state APCDs to maximize their own potential, hopefully building a constituency for creating a better national infrastructure over the longer-term.

Stakeholders might raise objections to the policy approaches we recommend here, but policymakers should not be deterred from moving forward. Payers might raise concerns about the burden of reporting data to APCDs, but since payers already provide similar data to many entities, including state APCDs, under the status quo, the incremental burden associated with these proposals would likely be modest. There is also an ongoing debate about whether disclosure of payers' negotiated prices, including through an APCD, could put upward pressure on prices. While the evidence on this question is mixed, policymakers could prevent disclosure of negotiated prices if they wished, albeit not without reducing the utility of APCD data in important respects. Privacy and security concerns are also sometimes raised in response to options that involve the federal government holding claims data. However, APCDs do not appear to present any novel privacy or security issues relative to other government undertakings, and these concerns can be addressed using privacy and security standards similar to those that have proven successful in protecting other sensitive data, like Medicare claims data. We also note that some stakeholders sell data products that would become less valuable if APCD data became more robust and widely available, which may lead them to oppose APCD expansion, but this concern likely should not factor into policymakers' decisions.

# Contents

A Primer on APCDs1
What is an APCD?1
Uses of APCD Data 3
Stakeholder Objections to APCDs5
Administrative Burden
Upward Pressure on Negotiated Prices 6
Privacy and Security
Data Uses
Unstated Stakeholder Objections
Limitations of Existing APCDs
The <i>Gobeille</i> Decision and its Consequences8
The Court's Decision in <i>Gobeille v. Liberty Mutual</i> 8
Consequences of the <i>Gobeille</i> Decision9
Limitations of Relying on a Patchwork of State APCDs10
Challenges in Combining Data from Multiple States 10
Incomplete Geographic Coverage11
Inaccessibility to Federal Policymakers11
Inability to Exploit Economies of Scale12
Federal Policy Options12
Enable State Collection of Self-Insured Data15
Legislative De-Preemption15
Agency De-Preemption16
Create a National APCD 18
Architecture of a National APCD19
Uses of APCD Data 20
Role of Existing State APCDs21
Privacy and Security Safeguards 22
Funding Requirements24
An Alternative Governance Structure: Housing a National APCD Within a Non-Profit
Harmonize State APCDs and Create a Federal Clearinghouse for APCD data
A Note on "Federated" Alternatives to APCDs 28
Conclusion 29

# A Primer on APCDs

We begin this report by providing a brief overview of what an all-payer claims database (APCD) is, what APCDs can be used for, and the main objections raised against APCDs. Readers interested in more background on state APCDs may wish to refer to more comprehensive introductions elsewhere.<sup>1</sup>

#### What is an APCD?

An APCD is a system that seeks to collect health care claims and related data from all (or nearly all) entities that pay for health care services in a geographic area, including private health insurance plans, Medicare, and Medicaid. All existing APCDs operate at the state level, and 23 states accounting for half the U.S. population currently have an APCD in operation or active implementation, as illustrated in Figure 1.<sup>2</sup> Several more states have APCD-like entities for which data submission is voluntary but which still reach a meaningful fraction of the state's insurance market.<sup>3</sup>



# Figure 1. States with APCDs, 2020

Note: California, Georgia, Hawaii, Indiana, and New Mexico APCDs are in implementation. Source: Adapted from APCD Council

<sup>&</sup>lt;sup>1</sup> Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payer-claims-databases-primer-states</u>; Jo Porter, Denise Love, Amy Costello, Ashley Peters, Barbara Rudolph, "All-Payer Claims Database Development Manual: Establishing a Foundation for Health Care Transparency and Informed Decision Making," *All-Payer Claims Database Council*, February 2015, <u>https://www.apcdcouncil.org/manual</u>.

<sup>&</sup>lt;sup>2</sup> For additional details on the data underlying Figure 1, see All-Payer Claims Database Council, "Interactive State Report Map," <u>https://www.apcdcouncil.org/state/map</u> (last visited October 19, 2020). The APCD Council reports that West Virginia began development of an APCD for which implementation has since stalled.

<sup>&</sup>lt;sup>3</sup> The states are Texas, Wisconsin, Michigan, Oklahoma, and South Carolina. All-Payer Claims Database Council, "Interactive State Report Map," <u>https://www.apcdcouncil.org/state/map</u> (last visited October 19, 2020).

#### Box I: Glossary

- Group health plan. A health benefit plan offered by an employer to its employee.
- Insured group health plan. A product sold to an employer under which an insurance company assumes responsibility for paying enrollees' health care claims.
- Self-insured group health plan. A group health plan in which the employer is directly responsible for paying its employees' health care claims. Self-insured group health plans can (and generally do) hire an outside contractor, typically an insurance company, to handle the major administrative functions of the plan, including constructing provider networks and processing claims.
- Administrator. The entity who administers the benefits of a self-insured group health plan. Administrators are usually, but not always, a third-party under contract with the group health plan. Also called a third-party administrator when administration is conducted under a separate contract.

Most APCDs are directly operated by a state agency, but a few states delegate operation of their APCDs to a non-governmental entity.<sup>4</sup> Even where an APCD is operated by a state agency, the work of collecting, cleaning, and maintaining data from payers is frequently contracted out to a vendor.<sup>5</sup>

In all states with APCDs, state law compels health insurers and the state's Medicaid program to submit data to the APCD. Most state APCDs also obtain Medicare data via agreements with the federal government. Importantly, as we discuss in much greater detail below, federal law has prevented states from placing similar requirements on most self-insured group health plans since 2016, and it appears that states are unable to collect data for most self-insured enrollees. Because self-insured plans represent about 61% of enrollment in employer coverage and about one-third of all people with coverage, the "all payer" label is something of a misnomer as applied to existing state APCDs.<sup>6</sup> Further, state APCDs do not collect data from certain other payers, like the Federal Employee Health Benefits Program, TRICARE, or the Veterans Administration.

The core of an APCD is health care claims data. A health care claim is generated for each service an insurer pays for and contains a variety of useful information, including the type of service, the patient that received the service, the provider that delivered the service, the date of delivery, the diagnosis that precipitated the service, and—crucially—what the insurer paid for the service as well as what the enrollee paid in cost-sharing. Prescription drug claims contain similar information. APCDs generally also collect various related information held by payers that is useful for analytic purposes, which may include enrollee demographic characteristics like age and zip code, as well as characteristics of enrollees' coverage such as network characteristics and plan premiums.

<sup>&</sup>lt;sup>4</sup> For additional detail on each state APCD's governance structure, see All-Payer Claims Database Council, "Interactive State Report Map," <u>https://www.apcdcouncil.org/state/map</u> (last visited October 19, 2020).

<sup>&</sup>lt;sup>5</sup> Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payerclaims-databases-primer-states</u>; Jo Porter, Denise Love, Amy Costello, Ashley Peters, Barbara Rudolph, "All-Payer Claims Database Development Manual: Establishing a Foundation for Health Care Transparency and Informed Decision Making," *All-Payer Claims Database Council*, February 2015, <u>https://www.apcdcouncil.org/manual</u>.

<sup>&</sup>lt;sup>6</sup> For estimates of the share of employer market enrollment in self-insured plan see "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-section/ehbs-2019-section-10-plan-funding/</u>. The share of total enrollment in self-insured plans was calculated using the estimates of total employer market enrollment available at Kaiser Family Foundation, "Health Insurance Coverage of the Total Population," *Kaiser Family Foundation*, <u>https://www.kff.org/other/state-indicator/total-population/</u> (last visited September 15, 2020). In practice, states also generally exempt insurers with very limited enrollment from reporting to the APCDs. See Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payer-claims-databases-primer-states</u>.

APCDs fund themselves through a combination of mechanisms, including direct state funding, federal grant funding, and fees on data users.<sup>7</sup> We are unaware of a data source that provides comprehensive information on APCDs' budgets, but three APCDs for which recent budget information is readily available have annual budgets ranging from \$1.6 million to \$4.4 million.<sup>8</sup> Extrapolating these estimates nationwide implies that existing APCDs incur combined operating costs of less than \$100 million. For context, \$100 million amounts to less than 0.003% of national health expenditures in 2018 – or about \$1 per \$37,000 in health care spending.<sup>9</sup> While APCD budgets do not include the costs that payers incur to report to APCDs, this figure suggests that if the uses of APCD data described in the next section facilitate even tiny reductions in health care spending or equivalent improvements in other aspects of health care system performance, then state investments in APCDs generate benefits that greatly exceed their costs.

## Uses of APCD Data

Health care claims provide comprehensive information on what health care items and services (insured) people receive and how much is paid for those items and services. Consequently, claims can support many different types of analyses that have the potential to improve the health care system:<sup>10</sup>

• **Public reporting:** Many state APCDs use the data they hold to produce public reports on their states' health care systems. Some examine levels of and trends in health care utilization, spending, and quality in the state, which may be helpful to a variety of stakeholders, including individuals, the press, employers, providers, and insurers in understanding the current state of the health care system and making decisions related to it.<sup>11</sup> Others examine specific issues of current interest, such as opioid prescribing patterns, the effects of COVID-19 on the health care system, and the utilization of low-value services.<sup>12</sup> Some also use APCD data to create consumer-facing price transparency tools that allow patients to compare the prices charged by competing providers.<sup>13</sup>

<sup>&</sup>lt;sup>7</sup> Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payer-claims-databases-primer-states</u>.

<sup>&</sup>lt;sup>8</sup> "2019 Colorado All Payer Claims Database Annual Report", *Center for Improving Value in Health Care*, February 2020, <u>https://www.civhc.org/wp-content/uploads/2020/02/CO-APCD-Annual-Report-FY19.pdf</u>; "Washington All-Payer Claims Database 2019 Accomplishments," *Washington All-Payer Claims Database*, January 2020,

https://www.ofm.wa.gov/sites/default/files/public/dataresearch/healthcare/pdf/2019 WA APCD accomplishments.pdf; "Collaborations in the Commonwealth, 2019 Annual Report & Strategic Plan Update," *Virginia Health Information*, http://www.vhi.org/About/annual report.pdf (last visited September 17, 2020).

 <sup>&</sup>lt;sup>9</sup> "National Health Expenditure Data," *Centers for Medicare & Medicaid Services*, December 17, 2019, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData.</u>
 <sup>10</sup> For a review of a large number of applications of APCD data, see All Payer Claims Database, "APCD Showcase: States Leading by Example," <u>https://www.apcdshowcase.org/</u> (last visited September 17,2020).

<sup>&</sup>lt;sup>11</sup> "Annual Cost Trends Report," *Massachusetts Health Policy Commission*, <u>https://www.mass.gov/service-details/annual-cost-trends-report</u> (last visited September 17, 2020); Washington Office of Financial Management, "Washington State HEDIS Quality Measures (claims based) - Data Dashboard," <u>https://www.ofm.wa.gov/washington-data-research/health-care/health-care-access-utilization-and-quality/washington-state-hedis-quality-measures-claims-based-data-dashboard</u> (last visited September 17, 2020); "2018 Vermont Health Care Expenditure Analysis," *Green Mountain Care Board*, July 8, 2020,

https://gmcboard.vermont.gov/sites/gmcb/files/Misc/2018 VT Health Care Expenditure Analysis Final %20July %2 08 %202020.pdf.

<sup>&</sup>lt;sup>12</sup> "2016 Virginia Low Value Services Report," Virginia Health Information, February 2017,

https://www.vhi.org/apcd/Virginia%20Low%20Value%20Services%20Report.pdf; Utah Department of Health, "Preliminary COVID-19 Healthcare Trends: A Snapshot from Utah's All Payer Claims Database," August 25, 2020, http://stats.health.utah.gov/latest-news/preliminary-covid-19-healthcare-trends/; "Prescribing Opioids in Colorado," Center for Improving Value in Health Care, March 2019, https://www.civhc.org/wp-content/uploads/2019/02/Opioid-Spot-Analysis-March-2019.pdf.

<sup>&</sup>lt;sup>13</sup> Florida Health Price Finder, "Learn More About Getting The Most Out Of Your Health Care Dollars,"

<sup>&</sup>lt;u>https://pricing.floridahealthfinder.gov/</u> (last visited September 17, 2020); New Hampshire Health Cost, "Compare Health Costs & Quality of Care," <u>https://nhhealthcost.nh.gov/</u> (last visited September 17, 2020).

- **Research:** APCDs can—and typically do—make the data they collect available to outside researchers, generally for a fee, with restrictions to protect patient privacy.<sup>14</sup> State APCDs have supported research on a wide variety of topics, such as the effect of tiered networks on hospital choice and health care spending, the effect of Medicaid expansion on continuity of coverage, and the utilization of telehealth services.<sup>15</sup>
- **Direct policy applications:** APCD data can also directly support policy design and implementation. At the policy design stage, APCD data can give policymakers a better picture of their states' health care systems and help inform estimates of the potential consequences of policy changes. For example, New Hampshire used APCD data to better understand how the prices paid by commercial payers compared to the prices paid by its Medicaid program as part of an effort to redesign its Medicaid fee schedules, while Washington State used APCD data to inform the provider payment rate requirements under its new "public option."<sup>16</sup>

APCD data also has applications in policy implementation. For example, APCD data has been used to determine out-of-network payment standards under state laws that address surprise billing.<sup>17</sup> APCD data can also be used by state attorneys general to monitor for anti-competitive conduct in health care markets or evaluate proposed provider or insurer mergers.

APCDs have at least two important advantages over other claims data sources (or, at least, they would if they included data from all self-insured group health plans). First, APCDs can offer a more complete picture of the commercially insured population than other commercial claims databases, such as the databases maintained by IBM Marketscan, Optum (a subsidiary of United Healthcare), Blue Health Intelligence (a Blue Cross Blue Shield affiliate), and the non-profit Health Care Cost Institute (which, in its current incarnation, contains claims data contributed by Aetna, Humana, and United Healthcare, but will soon encompass data from Aetna, Humana, and Blue Health Intelligence). All of these databases capture a non-random subset of the commercial insurance market, and the subset of the market each database captures often changes over time; this introduces potential for bias in estimating marketwide averages and trends. This incomplete coverage, as well as limitations that contributing payers place on the use of their data, also limits the value of these databases for understanding how and why performance varies across different commercial payers and the factors that shape employers' and individuals' choices among competing insurance options.

Second, the fact that APCDs aspire to encompass all payers allows them to support analyses that would not be possible with databases that include only a subset of a state's insurance market. For example, APCDs can be used to study trends in insurance enrollment in the state's insurance market as a whole,

https://www.apcdcouncil.org/publication/releasing-apcd-data-how-states-balance-privacy-and-utility.

<sup>14 &</sup>quot;Releasing APCD Data: How States Balance Privacy and Utility," All-Payer Claims Database, March 2017,

<sup>15</sup> Elena Prager, "Health Care Demand Under Simple Prices: Evidence From Tiered Hospital Networks," Northwestern University, 2017, https://faculty.kellogg.northwestern.edu/models/faculty/m download document.php?id=523 https://link.springer.com/article/10.1007/s11606-019-05101-8;

Jiani Yu, Pamela J. Mink, Peter J. Huckfeldt, Stefan Gildemeister, and Jean M. Abraham, "Population-Level Estimates Of Telemedicine Service Provision Using An All-Payer Claims Database," 37 HEALTH AFFAIRS 1931, December 2018, https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2018.05116.

<sup>&</sup>lt;sup>16</sup> Denise Love, William Custer, and Patrick Miller, "All-Payer Claims Databases: State Initiatives to Improve Health Care Transparency," The Commonwealth Fund, September 2010,

https://www.commonwealthfund.org/sites/default/files/documents/ media files publications issue brief 2010 sep 1439 love allpayer claims databases ib v2.pdf; Christina Cousart, "How Washington State Is Reducing Costs and Improving Coverage Value – A Q&A with its Health Benefit Exchange CEO," National Academy for State Health Policy, August 5, 2019, https://www.nashp.org/how-washington-state-is-reducing-costs-and-improving-coverage-value-a-ga-withits-health-benefit-exchange-ceo/.

<sup>&</sup>lt;sup>17</sup> Colorado Department of Regulatory Agencies, "Out-of-Network Health Care Provider Reimbursement," https://www.colorado.gov/pacific/dora/out-network-health-care-provider-reimbursement (last visited September 17, 2020): Washington State Office of the Insurance Commissioner. "Arbitration and using the Balance Billing Protection Act Data Set," https://www.insurance.wa.gov/arbitration-and-using-balance-billing-protection-act-data-set (last visited September 17, 2020).

potentially with far greater precision and granularity than survey data sources.<sup>18</sup> They can also be used to study how often people transition among different types of coverage and what the consequences of those transitions may be for the cost and quality of patient care.<sup>19</sup>

APCDs are also a useful complement to state hospital encounter databases, which collect encounter records directly from hospitals.<sup>20</sup> Hospital encounter databases generally do not collect information on non-facility-based outpatient care or prescription drug utilization, nor do they collect information on the prices paid for health care services. Thus, they paint an incomplete picture of care patterns and are not suitable for analyzing health care spending. (On the other hand, encounter databases do capture utilization by uninsured people, which APCDs do not since APCDs collect data from insurers.)

## Stakeholder Objections to APCDs

While APCDs have significant potential to inform the public, facilitate research, and directly support policymaking, they do have detractors. We discuss several common objections to APCDs, including that they create administrative burdens for payers, could place upward pressure on prices by disclosing confidential negotiated prices, could threaten privacy, or may be applied in an overly broad array of circumstances. We also briefly discuss concerns that often go unstated but may be important motivators of stakeholder opposition.

#### Administrative Burden

Payers frequently express concern that submitting data to APCDs is burdensome.<sup>21</sup> Concerns about burden are raised particularly frequently by groups representing self-insured group health plans, who argue that being required to submit to state APCDs, as opposed to a single national APCD, burdens self-insured plans that have enrollees in multiple states.<sup>22</sup> They often also note, likely correctly, that any associated administrative costs will ultimately be passed along to consumers as higher premiums or, in the case of self-insured plans, higher plan administration fees. (For self-insured plans, the plan administrator, rather than the employer itself, generally handles APCD submission).

Our conversations with stakeholders indicated that submitting to an APCD involves three main steps. First, the insurer or plan administrator must extract the required information from its data systems and put that information in the format required by the APCD. Historically, each state's APCD has set its own data submission format, although in recent years the APCD Council has worked with state APCDs to develop a Common Data Layout that may be used in more states in years to come.<sup>23</sup> Second, the submitting entity must actually transmit those data to the APCD, a process that generally uses standard technical protocols. Finally, the submitting entity must respond to any post-submission quality control inquiries. Our stakeholder conversations indicated that it is common for a payer to be required to submit data multiple times, either because the payer's data fails automated data quality checks at the time of submission or because the APCD's post-submission quality control checks identify issues that require resubmission.

<u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf</u>. <sup>22</sup> The ERISA Industry Committee, "Comments on the "Lower Health Care Costs Act of 2019," June 5, 2019,

<sup>&</sup>lt;sup>18</sup> Center For Health Information And Analysis, "Enrollment in Health Insurance," <u>https://www.chiamass.gov/enrollment-in-health-insurance/</u> (last visited September 17, 2020).

<sup>&</sup>lt;sup>19</sup> Sarah H. Gordon, Benjamin D. Sommers, Ira Wilson, Omar Galarraga, and Amal N. Trivedi, "The Impact of Medicaid Expansion on Continuous Enrollment: a Two-State Analysis," 34 JOURNAL OF GENERAL INTERNAL MEDICINE 1919 (June 21, 2019), <u>https://link.springer.com/article/10.1007/s11606-019-05101-8</u>.

<sup>&</sup>lt;sup>20</sup> Almost all states maintain these databases for inpatient stays, and most states also have such databases for emergency department visits and hospital-based outpatient surgeries. See, "HCUP Fact Sheet," *Healthcare Cost and Utilization Project*, <u>https://www.hcup-us.ahrq.gov/news/exhibit\_booth/HCUPFactSheet.pdf</u> (last visited September 17, 2020). <sup>21</sup> "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018,

https://www.eric.org/uploads/doc/resources/06-05-19%20ERIC%20Comments%200n%20HELP%20Draft%20Final.pdf. <sup>23</sup> All-Payer Claims Database, "Common Data Layout," <u>https://www.apcdcouncil.org/common-data-layout</u> (last visited September 17, 2020).

We are unaware of any estimates of the cost of submitting data to an APCD. We note, however, that the activities involved in APCD submission are relatively routine for insurers and plan administrators. Data like these are shared with various vendors associated with day-to-day operation of health plans. Notably, many insurers and plan administrators also submit essentially identical data to commercial or non-profit databases (e.g, IBM Marketscan, Blue Health Intelligence or the Health Care Cost Institute). The incremental cost in submitting to an APCD may, therefore, be modest. In any case, we discuss steps federal policymakers could take to minimize these costs below.

#### Upward Pressure on Negotiated Prices

Another commonly expressed concern is that APCDs may result in public disclosure of the prices negotiated between health care providers and health insurers and that this disclosure may put upward pressure on negotiated prices.<sup>24</sup> That upward pressure could arise in two ways.<sup>25</sup> First, price disclosure may facilitate tacit collusion by providers by making it harder for a provider that lowers its price to hide that fact from its competitors. Second, in some cases, price disclosure could change the landscape of provider-insurer negotiations in ways that increase prices; for example, providers could become more reluctant to accept low prices from any given insurer for fear that other insurers will see that they are willing to accept low prices and demand low prices too, or a low-priced provider could learn that an insurer is willing to pay other providers higher prices and demand similarly high prices.

On the other hand, there are also ways that making price information more broadly available could reduce negotiated prices. First, as noted above, some states use APCD data to drive consumer-facing tools designed to enable patients to seek out lower-priced providers. If consumers did shift to lower-priced providers, this could lower prices directly and could put pressure on providers to reduce prices. Second, in some cases, price disclosure could change the landscape of provider-insurer negotiations in ways that reduce prices, rather than increase them as discussed in the last paragraph; for example, insurers could become less willing to pay any given provider high prices for fear that other providers will see that they are willing to pay high prices and demand high prices too, or an insurer that currently pays a provider a high price could learn that the provider accepts lower prices from other insurers and demand a similarly low price.

Some recent empirical research has suggested that greater price transparency may, on net, cause small reductions in prices, but the effects of price disclosure may be context-dependent, and this question is far from settled.<sup>26</sup> In any case, if federal policymakers are concerned that price disclosure may have downsides, they could take steps to limit APCDs' ability to disclose provider-level price information, although this would inhibit some uses of APCD data.

<sup>&</sup>lt;sup>24</sup> "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018, <u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf</u>; Chamber of Commerce of the United States of America, Letter to Senators Alexander and Murray regarding the Lower Health Care Costs Act, June 17, 2019,

https://www.uschamber.com/sites/default/files/190617\_lowerhealthcarecostsact\_senatehelpcommittee.pdf. <sup>25</sup> For an overview of the economic logic and evidence behind these arguments, see "Amendments to the Minnesota Government Data Practices Act Regarding Health Care Contract Data," *Office of Policy Planning, Bureau of Competition, Bureau of Economics*, June 29, 2015, <u>https://www.ftc.gov/system/files/documents/advocacy\_documents/ftc-staffcomment-regarding-amendments-minnesota-government-data-practices-act-regarding-healthcare/150702minnhealthcare.pdf.</u>

<sup>&</sup>lt;sup>26</sup> Christopher M. Whaley, "Provider Responses to Online Price Transparency," 66 JOURNAL OF HEALTH ECONOMICS 241 (July 2019), <u>https://www.sciencedirect.com/science/article/abs/pii/S0167629618310476</u>; Zach Y. Brown, "Equilibrium Effects of Health Care Price Information," 101 REVIEW OF ECONOMICS AND STATISTICS 699 (October 2019), <u>https://www.mitpressjournals.org/doi/full/10.1162/rest\_a\_00765?casa\_token=OIb1ZgME8\_gAAAAA%3AWwnoEMMIsD\_7YhOPSIJ5otMLz31TUuQNvUiHhq69VWIet8GqIF5Q7YYNmXFjxxlzdR22\_xrOEbsq.</u>

#### Privacy and Security

Stakeholders also frequently raise concerns about the privacy of claims information submitted to an APCD,<sup>27</sup> fearing disclosure of individual-level information, such as through a computer systems breach or as a result of researcher misconduct.<sup>28</sup> While this is indeed a theoretical possibility, these concerns can be addressed through appropriate data privacy security safeguards. Indeed, we are unaware of any significant claims data breaches in the Medicare and Medicaid programs, both of which hold similarly sensitive claims records and use them for similar purposes. We discuss how federal policymakers might approach privacy and security protection in the context of a national APCD later in this paper.

#### Data Uses

Stakeholders also sometimes raise concerns about the fact that APCDs generally make data broadly available for public reporting, research, and policymaking, rather than restricting use of the data to a narrow set of pre-specified "use cases." This open-ended mandate makes some stakeholders – particularly those whose activities are subject to more careful scrutiny through an APCD – uncomfortable. However, much of the value of an APCD arises from its ability to offer a flexible tool to support a broad array of efforts to better understand and ultimately improve the health care system. Because the health care system is complex and because circumstances change over time, any attempt to pre-specify the full set of potential applications of APCDs would likely leave out many high-value applications of APCD data.

A related concern, while not always made explicit, is that a government entity ought not have access to this type of health care data, particularly in the context of the broad mandate envisioned for APCDs. There is little that policymakers can do to mitigate this concern while still realizing the potential of APCDs. We do note, however, that even before the advent of state APCDs, state governments held claims data for their Medicaid programs and the federal government held claims data for the Medicare program, so it is routine for government entities to collect and hold claims data, albeit generally for the purposes of direct program administration.

#### Unstated Stakeholder Objections

While the preceding objections to APCDs are the ones most often raised publicly, some stakeholders' views of APCDs may also reflect more parochial concerns. First, some health care providers may worry that broader availability of data on the prices of health care services may engender support for policies to reduce those prices. Second, as noted above, many insurers currently sell their claims information or data products derived from that claims information to third parties. For example, Blue Cross Blue Shield plans do so through their Blue Health Intelligence affiliate, while United Healthcare does the same through its Optum subsidiary, and many plans also sell data to data warehouses like IBM Marketscan that then resell those data to other entities. Plans may worry that broader availability of data through APCDs would reduce the prices they can demand. Third, some dominant insurers may worry that if information on prices and utilization in their markets become more widely available, other insurers could use that information to enter those markets or otherwise compete more effectively. In general, there is not a strong policy rationale for changing APCD policy to address parochial concerns like these, but policymakers should be aware that stakeholders may harbor them.

https://www.uschamber.com/sites/default/files/190617\_lowerhealthcarecostsact\_senatehelpcommittee.pdf.

<sup>&</sup>lt;sup>27</sup> Federation of American Hospitals, Letter to Senators Alexander and Murray Regarding the Lower Health Care Costs Act, June 5, 2019, <u>https://www.fah.org/fah-ee2-uploads/website/documents/FAH\_Respone\_-</u>

<sup>&</sup>lt;u>HELP Health Care Cost Reduction Discussion Draft %28FINAL%29.pdf;</u> "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018,

https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf; Chamber of Commerce of the United States of America, Letter to Senators Alexander and Murray regarding the Lower Health Care Costs Act, June 17, 2019,

<sup>&</sup>lt;sup>28</sup> Peter Swire, "Possible Privacy, Cybersecurity, and Data Breach Issues in the Proposed National Medical Claims Database Under Section 303 of S. 1895," September 27, 2019, <u>https://peterswire.net/wp-content/uploads/Swire-white-paper.S-1895-privacy-security.2019.pdf</u>.

# Limitations of Existing APCDs

Existing APCDs generate real benefits but also have limitations that reduce their utility for public reporting, research, and policymaking. One limitation—which has received increasing attention from federal policymakers—stems from the Supreme Court's 2016 decision in *Gobeille v. Liberty Mutual Insurance Co.*, which held that states could not require data collection from non-governmental self-insured group health plans.

But existing APCDs also have other limitations that predate the *Gobeille* decision and arise from the fact that current APCDs are state entities that operate almost entirely independently of one another. These limitations, particularly the fact that it is challenging to combine data from multiple APCDs, reduce APCDs' utility in many applications, especially at the federal level, while also increasing administrative costs. This section discusses each set of limitations in turn.

#### The Gobeille Decision and its Consequences

*Gobeille* was a 6-2 decision, with Justices Roberts, Kennedy, Thomas, Breyer, Alito, and Kagan in the majority. This section considers the Court's holding and the decision's impact on APCDs.

#### The Court's Decision in Gobeille v. Liberty Mutual

The federal Employee Retirement Income Security Act of 1974 (ERISA) regulates benefits offered by employers, including employer health plans (also called group health plans). ERISA includes a famously broad preemption clause that bars states from implementing any laws that "relate to" employee benefits.<sup>29</sup> However, ERISA also specifies that state laws that "regulate[] insurance" are not preempted by federal law,<sup>30</sup> leading to an uneasy arrangement where states have jurisdiction over the sale of insured health benefits to employers, but not over the employer's group health plan itself. As a result, states can generally use their authority to regulate insurance to control *insured* employer health benefits, but state law cannot reach self-insured group health plans. And self-insurance is common: 61% of people with health coverage from an employer were in a self-insured plan in 2019.<sup>31</sup>

While ERISA does place limits on how states interact with self-insured group health plans, the scope of ERISA preemption was unclear. For a number of years, states took the position that APCD data collection did not violate ERISA. As a practical matter, state laws generally placed the reporting obligation on the entity that administered benefits and paid claims, which for almost all self-insured group health plans is a third-party (generally an insurance company), not on the plan itself. Thus, states could maintain that the data collection laws were not "related to" a group health plan as the Supreme Court has defined that concept in jurisprudence dating back to the 1990s.<sup>32</sup>

However, in 2011, a self-insured plan directed its administrator not to submit data to Vermont, the administrator was subpoenaed by the state, and the self-insured plan then sued, claiming that the requirement to submit to the state's APCD was preempted by ERISA. The Second Circuit agreed.<sup>33</sup> The case reached the Supreme Court, and in March 2016 the Supreme Court held that ERISA preempted state laws that required data submission associated with a self-insured plan.<sup>34</sup>

<sup>&</sup>lt;sup>29</sup> 29 U.S.C. § 1144(a).

<sup>&</sup>lt;sup>30</sup> 29 U.S.C. § 1144(b)(2).

<sup>&</sup>lt;sup>31</sup> "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-section/ehbs-2019-section-10-plan-funding/</u>.

<sup>&</sup>lt;sup>32</sup> Given the Court's prior decisions, this argument was more plausible than it may initially seem. The Court has criticized "uncritical literalism" in applying the phrase "relate to," and demanded a more contextual inquiry into whether a state law duplicates ERISA requirements in assessing preemption. See, e.g., Brief for Petitioner, *Gobeille v. Liberty Mutual Insurance Co.*, <u>https://www.scotusblog.com/wp-content/uploads/2015/09/14-181ts.pdf</u>.

<sup>&</sup>lt;sup>33</sup> Liberty Mutual Insurance Co. v. Donegan, 746 F.3d 497 (2d Cir. 2014).

<sup>&</sup>lt;sup>34</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. \_\_\_\_ (2016)

The Court's majority opinion concluded that state laws requiring administrators to submit data about self-insured plans were "related to" a group health plan within the meaning of ERISA. Under the Court's prior ERISA jurisprudence, one important question was the extent to which the state law overlapped with "the objectives of the ERISA statute." The Court emphasized that ERISA included record-keeping and reporting requirements and that while current ERISA regulations did not directly compel self-insured plans to submit claims data to federal regulators, the statute provided authority for the federal government to require submission of additional data.<sup>35</sup> Given this overlap between the "objectives" of ERISA and these state laws, the states' reporting requirements were preempted.

The scope of federal data collection authority was also addressed in a separate concurrence by Justice Breyer. Breyer noted that federal law allowed the government to collect information related to health care claims that was very similar to the data state APCDs were collecting, and he wrote to emphasize that this federal authority provided a pathway for states to access the data they sought. He noted that the federal government could collect claims data and conduct analysis on behalf of the states, share data with the states, or "delegate" authority to collect data to "a particular state."<sup>36</sup>

## Consequences of the Gobeille Decision

Today, state APCDs are continuing to collect and analyze data from insured group health plans, which represent about 39% of the employer market nationally.<sup>37</sup> State APCDs can also require data collection from self-insured non-federal governmental health plans (i.e., state and local government employee health plans), which are not regulated under ERISA or affected by ERISA preemption These plans account for a significant fraction of total enrollment in most states since state government and public universities are major employers almost everywhere in the country. Finally, states generally allow voluntary submission from self-insured plans (other than governmental plans).

We are unaware of any comprehensive data on how many self-insured plans still submit to APCDs, but fragmentary evidence suggests that states are receiving a limited amount of data. For example, Maryland reports that it collects data for 25-30% of self-insured enrollees, primarily from governmental plans, and Massachusetts estimates that it collects data for about 25% of self-insured enrollees.<sup>38</sup> Our conversations with stakeholders suggest that some large employers, particularly those that have an institutional connection to the APCD mission like health systems or universities, do opt in to data-sharing with state APCDs and that some states have also worked with Chambers of Commerce or other local stakeholders to encourage employers to opt in. However, stakeholders suggest that these efforts have borne limited fruit, and data collection from non-governmental self-insured plans is fairly limited and non-representative.

Nor are there obvious steps states could take to substantially increase submission by self-insured plans. States could try to require third-party administrators to submit self-insured plan data unless the employer affirmatively opts out of submission, but given that many plan administrators may prefer not to submit data for the various reasons discussed above, opt outs would likely be common. Alternatively, states could require that any insurance company that wished to sell *insured* health benefits in the state must incorporate submission to the state APCD into its contracts with employers for which it administers self-insured plans. But this strategy would not reach all self-insured plans, and courts might conclude that this type of regulatory bank shot was also preempted under ERISA.

section/ehbs-2019-section-10-plan-funding/.

<sup>&</sup>lt;sup>35</sup> Id. ("The State's law and regulation govern plan reporting, disclosure, and—by necessary implication—recordkeeping. These matters are fundamental components of ERISA's regulation of plan administration.")

<sup>&</sup>lt;sup>36</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. \_\_\_\_ (2016) (Breyer, J., concurring). <sup>37</sup> "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-</u>

<sup>&</sup>lt;sup>38</sup> The Maryland Health Care Commission, "MCDB Data Release," January 14, 2020,

https://mhcc.maryland.gov/mhcc/pages/apcd/apcd\_data\_release/apcd\_data\_release\_mcdb.aspx; "Massachusetts All-Payer Claims Database, 2014-2018 Documentation Guide," *Center for Health Information and Analysis*, February 2020, https://www.chiamass.gov/assets/docs/p/apcd/apcd-8.0/APCD-Release-8-Documentation-Guide.pdf.

The loss of self-insured data makes state APCDs less useful than they were prior to *Gobeille* in at least four important respects:

- **Loss of comprehensiveness:** APCDs that lack complete self-insured data are not true allpayer databases since, as noted earlier, about one-third of all covered people are enrolled in self-insured group health plans. That large gap makes it difficult or impossible to use the APCD to track aggregate insurance enrollment or to study transitions among different coverage types, eliminating one of the major advantages of APCDs relative to other data sources.
- **Loss of representativeness:** The enrollees omitted when APCDs lose access to self-insured data are a non-random subset of people with employer coverage. Notably, large employers are far more likely to be self-insured; in 2019, just 17% of health insurance enrollment was in self-insured plans among firms with fewer than 200 workers, compared to 80% for firms with 200 or more workers.<sup>39</sup> The share of workers in self-insured plans also varies widely by industry and region, presumably in part reflecting variation in the firm size distribution across those categories. Consequently, state APCDs that lack self-insured data may offer a skewed picture of the market as a whole and will generally be unsuitable for studying how claims spending varies across firms of different types, particularly larger and smaller firms.
- **Smaller sample sizes:** Due to the large number of covered lives in self-insured plans, exclusion of self-insured data from state APCDs also substantially reduces the size of those databases. Smaller samples sizes can create problems for many analyses but are particularly problematic for efforts to measure the efficiency or quality of care at the provider level since the total number of patients seen by many providers (across all plan types) is often modest.
- **Inability to study differences between insured and self-insured plans**: APCDs that lack data from self-insured plans cannot be used to compare insured and self-insured plans. Because of ERISA preemption, insured health plans are subject to many state regulations that self-insured plans are not, so comparing outcomes under the two types of plans can provide useful insights about the effects of those regulations.<sup>40</sup> Some research has also found that health insurance companies behave differently when acting as third-party administrators for self-insured plans than when they sell insured coverage, a pattern that merits greater study.<sup>41</sup>

#### Limitations of Relying on a Patchwork of State APCDs

The *Gobeille* decision was a significant blow to state APCDs, but even the APCDs that existed before the decision fell short of realizing APCDs' full potential. Because existing APCDs are run by the states, they operate independently of one another and do not exist everywhere. In several ways, this state of affairs has made existing APCDs less effective than they could be in supporting public reporting, research, and policymaking, while increasing administrative costs for both payers and governments.

#### Challenges in Combining Data from Multiple States

Many potential applications of APCD data require combining data for multiple states. Most prominently, research aimed at learning about the effects of state policies commonly involves comparing outcomes in states that have implemented a particular policy to states that have not and thus requires data for multiple states. In other cases, data from multiple states may be necessary to achieve adequate statistical power, particularly when studying phenomena that operate at the provider

<sup>&</sup>lt;sup>39</sup> "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-section/ehbs-2019-section-10-plan-funding/</u>.

 <sup>&</sup>lt;sup>40</sup> See, e.g., Colleen L. Barry, Andrew J. Epstein, Steven C. Marcus, Alene Kennedy-Hendricks, Molly K. Candon, Ming Xie, and David S. Mandell, "Effects Of State Insurance Mandates On Health Care Use And Spending For Autism Spectrum Disorder," 36 HEALTH AFFAIRS 1754 (October 2017), <u>https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2017.0515</u>.
 <sup>41</sup> Stuart V. Craig, Keith Marzilli Ericson, and Amanda Starc, "How Important Is Price Variation Between Health Insurers?," *The National Bureau of Economic Research*, October 2018, <u>https://www.nber.org/papers/w25190</u>.

or geographic market level (since, in these cases, the relevant metric of sample size is the number of providers or markets represented in the data set). Similarly, communities interested in understanding in broad terms how their health care systems compare to others will often benefit greatly from being able to compare to communities in other states. Even studies with a purely local focus will sometimes require data from multiple state APCDs if a metropolitan area of interest crosses state boundaries.

Unfortunately, despite the benefits of combining data from multiple state APCDs, we are aware of few studies that have done so (and even those studies that do combine data from multiple state APCDs generally only use data from a small number of APCDs).<sup>42</sup> The dearth of such studies likely reflects two main barriers. First, and likely most important, while most state APCDs allow researchers to access their data if certain conditions are met, as noted earlier, each state has its own application process, its own restrictions on how data can be used, and its own fees for data access. Consequently, accessing multiple states' databases may require a substantial investment of both time and funds. Second, each state APCD collects and stores data in slightly different ways. Thus, adding an additional state to a research project generally requires substantial additional researcher effort to account for the idiosyncratic features of that particular state's data. For both these reasons, research projects that use more than one state database are likely to be prohibitively difficult in most cases.

#### Incomplete Geographic Coverage

Currently, 27 states lack APCDs, and half the country's population lives in a state without an APCD. The most direct consequence of the fact that some states lack APCDs is that these states cannot use APCD data to support research and policy efforts aimed at improving their own health care systems.

But the fact that many states lack APCDs also impedes national efforts to improve the health care system. For example, researchers have used APCD data to evaluate state-level policies, which can offer lessons that are useful to other states and to federal policymakers.<sup>43</sup> APCD data cannot support such studies in states that lack them. And even where barriers to combining data from multiple states can be overcome, the lack of truly national data constrains the sample sizes available to researchers.

Incomplete APCD coverage also limits the utility of APCDs for federal policymaking, even if the data access concerns considered below can be overcome. For example, as noted earlier, some states have used their APCDs to set out-of-network payment standards in legislation addressing surprise billing. But because APCDs do not exist everywhere, that option is not available to federal policymakers. Instead, they have ended up pursuing other approaches to setting payment standards, such as having each insurer compute a standard based on its own data, which have important downsides.<sup>44</sup>

#### Inaccessibility to Federal Policymakers

APCD data may be of use to federal policymakers in areas well beyond surprise billing. The comprehensive picture they provide of the commercial health insurance market can help inform policy analysis and policy development work by both the executive branch and legislative agencies like the

<sup>&</sup>lt;sup>42</sup> For a couple of notable exceptions, see Sarah Gordon, Benjamin Sommers, Ira Wilson, Omar Galarraga, and Amal N. Trivedi, "The Impact of Medicaid Expansion on Continuous Enrollment: a Two-State Analysis," 34 JOURNAL OF GENERAL INTERNAL MEDICINE 1919 (June 21, 2019), <u>https://link.springer.com/article/10.1007/s11606-019-05101-8</u>; Maria de Jesus Diaz-Perez, Rita Hanover, Emilie Sites, Doug Rupp, Jim Courtemanche, and Emily Levi, "Producing Comparable Cost and Quality Results From All-Payer Claims Databases," 25 AMERICAN JOURNAL OF MANAGED CARE 138 (May 2, 2019), <u>https://www.ajmc.com/journals/issue/2019/2019-vol25-n5/producing-comparable-cost-and-quality-results-from-allpayerclaims-databases</u>.

<sup>&</sup>lt;sup>43</sup> See, e.g., Keith Marzilli Ericson, Amanda Starc, "How Product Standardization Affects Choice: Evidence From The Massachusetts Health Insurance Exchange," 50 JOURNAL OF HEALTH ECONOMICS 71, December 2016, https://www.sciencedirect.com/science/article/abs/pii/S0167629616302156.

<sup>&</sup>lt;sup>44</sup> Loren Adler, Matthew Fiedler, Paul B. Ginsburg, and Christen Linke Young, "Comments on the Lower Health Care Costs Act of 2019," *Brookings Institution*, June 6, 2019, <u>https://www.brookings.edu/opinions/comments-on-the-lower-healthcare-costs-act-of-2019/;</u> Loren Adler, Matthew Fiedler, Paul B. Ginsburg, and Christen Linke Young, "Comments on the No Surprises Act," *Brookings Institution*, May 29, 2019, <u>https://www.brookings.edu/opinions/comments-on-the-no-surpriseact/</u>.

Congressional Budget Office. APCD data may also be useful for various "operational" purposes, including anti-trust enforcement by the Department of Justice and Federal Trade Commission.

Unfortunately, because existing APCDs are controlled by the states, they are not routinely available to federal policymakers. To our knowledge, no state provides a specific process by which a federal government agency can gain access to APCD data, although a federal agency might be able to access data through the process available to researchers. Even where processes do exist, federal agencies will face the same challenges researchers face in trying to combine data from multiple states, although their greater resources may increase their ability to overcome them.

#### Inability to Exploit Economies of Scale

The existence of multiple state APCDs also necessitates some administrative duplication. Each state must develop its own data submission policies and protocols, build and maintain its own data systems, manage and clean its own data, as well as produce its own publications and statistical reports based on the data collected.<sup>45</sup> For their part, payers that operate in multiple states incur higher costs to conform to each state's data submission requirements and respond separately to post-submission inquiries regarding data quality issues. The development of the APCD Council's Common Data Layout (CDL), which was described above, may reduce duplicative effort in some areas, but will not in others, and it remains to be seen how widely the CDL will ultimately be adopted.<sup>46</sup>

Because APCD budgets are relatively modest and there is reason to believe that payers' submission costs are modest too, the aggregate cost of this duplication may be small, at least relative to the potential benefits of APCDs and health care spending. Rather, the more important way that state APCDs' limited scale negatively affects their work may be by preventing them from making certain types of investments. For example, as noted earlier, APCD data can be used to produce reports on aggregate trends in health care spending, prices, utilization, and quality across different service types or geographic areas, which can be valuable to a broad array of users, ranging from researchers and policymakers to employers and health insurers. Investing in the staff to produce these types of reports may sometimes be challenging for states, particularly small states. But because producing these types of reports for many geographic areas is only modestly more resource intensive than producing them for a single geographic area, these types of investments would likely be more feasible for an APCD with broader geographic scope.<sup>47</sup> For similar reasons, APCDs with broader geographic scope may be able to justify investing more in efforts to improve data quality since those efforts could be leveraged across a larger database. States' limited financing capacity may also lead APCDs to rely too heavily on fees from data users, which may reduce the data's accessibility for research purposes.

# Federal Policy Options

Recent years have seen bipartisan federal interest in improving APCDs (see Box 2), which suggests that changes in federal policy toward APCDs are indeed possible. In this section, we consider steps federal policymakers could take to make progress in this area. We consider three broad approaches.

The first approach would, through either legislative or administrative action, restore state APCDs' ability to require submission of data for self-insured plans, allowing state APCDs to once again provide a comprehensive picture of how health care services are received and paid for in their states. However, this approach would not address the various other limitations of the existing APCDs discussed above or would address these other limitations in an incomplete or cumbersome way.

<sup>&</sup>lt;sup>45</sup> In practice, some vendors serve multiple state APCDs, which may reduce duplication to some degree.

<sup>&</sup>lt;sup>46</sup> All-Payer Claims Database, "Common Data Layout," <u>https://www.apcdcouncil.org/common-data-layout</u> (last visited September 17, 2020).

<sup>&</sup>lt;sup>47</sup> Notably, the Health Care Cost Institute has produced reports with a national scope.

#### Box 2: Recent Federal Proposals Related to APCDs

Federal policymakers of both parties have shown interest in making APCDs more effective. Most of those proposals have been primarily focused on addressing the problems created by the *Gobeille* decision, but some would also have helped address other problems with current APCDs.

In July 2016, just three months after the *Gobeille* decision, the Obama Administration promulgated a proposed regulation updating its data collection standards for all employee benefits. It did not propose specific language related to the collection of APCD-like information but did seek public comments on what changes it should make to health plan reporting "in light of the Supreme Court's recent decision in *Gobeille v. Liberty Mutual Insurance Co.*" <sup>48</sup> Commenters, including those representing both self-insured plans and APCDs, took this as an indication that the Department of Labor was considering policy along the lines indicated in Justice Breyer's concurrence that would allow state APCDs to regain access to self-insured plan data.<sup>49</sup> The federal government subsequently delayed the update process and withdrew this rule in the fall of 2019,<sup>50</sup> seemingly due to general concerns about regulatory burden not specific to APCDs.

A more concrete proposal was introduced in the summer of 2019 by Senators Lamar Alexander (R-TN) and Patty Murry (D-WA), leaders of the Senate Health, Education, Labor, and Pensions (HELP) committee.<sup>1</sup> In their Lower Health Care Costs Act, they proposed creation of what would essentially be a national APCD, containing data from all states and housed in a non-profit entity. Under their proposal, self-insured plans would be required to submit data to this system. These data would be available to state APCDs on the condition that they provide state-level data on Medicaid and insured plans. States could also require insured plans and other payers to submit data directly. The proposal established a process for research use and provided \$15 million per year in funding.<sup>51</sup>

In addition, in early 2020, Representative Dan Lipinski (D-IL) proposed legislation that focused narrowly on removing the barriers to APCDs created by the *Gobeille* decision. His bill would have simply modified ERISA to allow state APCDs to resume collecting data from self-insured plans.<sup>52</sup> This legislation also included federal grants to support new and existing state APCDs.

Two additional approaches aim to address both the problems created by the *Gobeille* decision and the limitations of relying on an uncoordinated patchwork of state APCDs that pre-dated *Gobeille*. Policymakers could build a national APCD, which could fully address all of the limitations of existing APCDs discussed above. Alternatively, policymakers could seek to harmonize existing state APCDs and make state APCD data available through a federal clearinghouse, which would address some, but not all, of these limitations.

Table 1 summarizes these three potential changes to federal policy toward APCDs, as well as two other prominent proposals. The remainder of this section discusses these proposals in much greater detail.

https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201910&RIN=1210-AB63.

<sup>&</sup>lt;sup>48</sup> Employee Benefits Security Administration, Internal Revenue Service, Pension Benefit Guaranty Corporation, "Proposed Revision of Annual Information Return/Reports," 81 Fed. Reg. 47533 (July 21, 2016),

https://www.federalregister.gov/documents/2016/07/21/2016-14893/proposed-revision-of-annualinformationreturnreports.

 <sup>&</sup>lt;sup>49</sup> See, e.g., APCD Council, Comment Letter Regarding Employee Benefits Security Administration, Annual Reporting and Disclosure Proposed Rule, October 12, 2016, <u>https://www.regulations.gov/document?D=EBSA-2016-0010-0046</u>; BlueCross BlueShield Association, Comment Letter Regarding Employee Benefits Security Administration, Annual Reporting and Disclosure Proposed Rule, December 12, 2016, <u>https://www.regulations.gov/document?D=EBSA-2016-0010-0130</u>.
 <sup>50</sup> 29 C.F.R. § 2520, Fall 2019 Unified Agenda, "Revision of the Form 5500 Series and Implementing Related Regulations Under the Employee Retirement Income Security Act of 1974,"

<sup>&</sup>lt;sup>51</sup> The bill also authorized grants to states to establish and maintain APCDs but did not appropriate funds for this purpose.

	Administrative or legislative?	Allows state APCDs to collect self- insured data?	Pre-Gobeille Limitations of APCDs			
			Facilitates combining data from many states?	Expands APCD coverage?	Ensures federal gov't can access APCD data?	Benefits from economies of scale?
Policy Approaches Considered i	n This Paper					
Enable state collection of self- insured data	Either	Yes, directly	No (or limited)	No	No (or limited)	No (or limited)
Build a national APCD in a federal agency or non-profit	Either, but legislative path more likely	Yes, from national APCD	Yes	Yes, fully national	Yes	Yes
Harmonize state APCDs and create a federal clearinghouse	Either, but legislative path more likely	Yes, directly	Yes, with some limitations	Possibly, via grant funding	Yes	No (or limited)
Other Approaches	1				1	
Collect self-insured data nationally and share with state APCDs (Senate HELP proposal)	Either, but legislative path more likely and needed for grants	Yes, from national APCD	Yes, for self- insured data, other data with limitations	Yes, for self- insured data, but not for other data	Yes	Partially
"Federated" approach with payers holding their own data and executing research queries	Legislative	Only through research queries	No	No	No	No

# Table I: Comparison of Potential Federal Policy Changes to Improve APCDs

## Enable State Collection of Self-Insured Data

Policymakers that wish to restore something like the pre-*Gobeille* status quo could pursue one of two broad paths. The simplest approach would be for Congress to amend ERISA to restore states' ability to obtain data for self-insured plans, but agencies could achieve a similar outcome through rulemaking.

#### Legislative De-Preemption

The Supreme Court's decision in *Gobeille* was a statutory decision (that is, it was based on the Court's interpretation of the text of ERISA), so Congress could restore states' ability to require data submission from self-insured plans by simply amending ERISA. Specifically, the law's preemption clause could be modified to specify that state laws requiring data submission to an APCD are not preempted; Representative Lipinski (D-IL) introduced legislation doing exactly that in early 2020.<sup>52</sup>

Congress has changed the scope of ERISA preemption in a similar past instance: in 1981, the Supreme Court held that Hawaii's employer mandate as preempted by ERISA,<sup>53</sup> and in 1983, Congress modified ERISA's preemption clause to declare that the state law was exempt from preemption.<sup>54</sup> Further, such an approach would not represent a radical departure from how ERSIA's preemption clause has functioned historically. Since the 1990s, ERISA's preemptive scope has been fairly limited in health policy because it is an area of traditional state regulation,<sup>55</sup> so lawmakers need not worry that modifying the preemption clause in this way would disrupt the uniformity of the statutory scheme.

Congress could allow state APCDs to resume data collection with no restrictions. Alternatively, Congress could define the scope of de-preemption more narrowly, allowing states to avoid preemption only when state law meets certain criteria. In principle, this approach could help to address some of the limitations of state APCDs that predated *Gobeille* or ameliorate some stakeholder concerns. This would be a more significant departure from how ERISA's preemption clause has historically been drafted, but it is feasible.<sup>56</sup>

Congress may wish to consider this type of approach in two main areas:

• Data format and submission processes: To address concerns about the burden of data collection, Congress could condition de-preemption on states collecting data in a fairly standardized format. It would be unwise to legislate use of any specific format, such as the APCD Council's Common Data Layout, since that would preclude changes as technology improved. Rather, states could be required to collect data in a format established by federal agencies (likely the Department of Labor, in consultation with the Department of Health and Human Services) through regulation. This standardized format might naturally be the CDL initially but could evolve over time. The standardized format could also, in principle, make some allowance for states to collect state-specific data elements (as the CDL does).

<sup>&</sup>lt;sup>52</sup> Transparency and Accountability in Health Care Costs and Prices Act of 2020, H.R. 6004, 116th Congress (2020), <u>https://www.congress.gov/bill/116th-congress/house-bill/6004</u>.

<sup>&</sup>lt;sup>53</sup> Agsalud v. Standard Oil Co., 454 U.S. 801 (1981).

<sup>&</sup>lt;sup>54</sup> 29 U.S.C. § 1144(b)(5).

<sup>55</sup> See, e.g., Travelers.

<sup>&</sup>lt;sup>56</sup> Note that Justice Thomas has articulated Commerce Clause concerns about ERISA's preemption clause as a whole. For example, in his concurrence in *Gobeille*, he wonders about the extent to which "Congress can exempt ERISA plans from state regulations that have nothing to do with interstate commerce," and he has called upon the Court to reconsider its ERISA jurisprudence as a whole. *Gobeille v. Liberty Mut. Insurance Co.*, 577 U.S. \_\_\_\_ (2016) (Thomas, J., concurring). Legislation that conditions de-preemption on a variety of technical considerations may further exacerbate these concerns, though Justice Thomas's views do not appear to command a majority.

Similarly, Congress could also consider measures to standardize the process by which states submit data to APCDs. This could include standardizing the schedule on which payers are required to submit data or how payers transmit data, although the benefits of standardizing the latter may be small.<sup>57</sup> As with data submission formats, it would be unwise to legislate a particular schedule or transmission process, but Congress could direct the agencies to monitor specific aspects of the data submission process and provide authority for them to standardize elements of that process if opportunities to streamline it became apparent.

Congress could also consider limiting de-preemption to data collection from administrators that are either responsible for a minimum number of self-insured lives in the state or have any insured business in the state. For other administrators, the benefits of collecting the additional data may be small relative to the additional administrative burden created. However, it would be important that any exclusion threshold be set at a reasonably low level in order to ensure that APCDs remain representative of the state market.

Facilitating data use: Congress could also condition de-preemption on APCDs having a suitable process for making data available to federal policymakers, researchers, and potentially other data users to access data. For example, states could be required to provide access to federal policymakers, adopt a harmonized application process for researchers that makes it easier for researchers to obtain data from multiple states, or produce a minimum set of public reports with aggregate data on health care spending. As above, it would likely be unwise to specify the details of these requirements in legislation, so Congress may wish to grant general authority to federal agencies to establish requirements like these in regulation.

Implementing these types of standards would likely reduce the burden on submitting entities and might make it somewhat easier for policymakers and researchers to access data, although they would likely accomplish much less in either area than proposals that would create a national APCD infrastructure. On the other hand, conditions of this kind, particularly conditions that would mandate that states offer broader data access, may require changes in some state laws since not all states provide research use on the same terms. That could meaningfully delay or even block access to self-insured data by some state APCDs. Changes to data collection formats and processes would also involve some transition costs for states and for payers. Efforts by the agencies to define and oversee these standards would also carry some opportunity costs and distract agency staff from other priorities. All of these costs should be weighed against the benefits of greater standardization going forward.

#### Agency De-Preemption

In the absence of new federal legislation, federal agencies have authority to facilitate state collection of data from self-insured plans through regulation. The Supreme Court's majority opinion in Gobeille and Justice Breyer's concurrence both highlighted the federal government's authority under ERISA to establish reporting requirements for all employee benefits. The majority opinion noted that ERISA allows the Department of Labor to compel reporting of "such data or information [that] is necessary to carry out the purposes of" ERISA<sup>58</sup> and to use these data "for statistical and research purposes, and [to] compile and publish such studies, analyses, reports, and surveys."59 The Court also noted that the Affordable Care Act included new reporting requirements for group health plans that could encompass data related to health care claims.<sup>60</sup> This is perhaps a more expansive view of the ERISA data collection authorities than the Department of Labor has previously adopted, but the majority opinion reflects the Court's view that ERISA grants the agency authority to collect granular information from group health plans.

<sup>57</sup> States generally use routine technical transactions for submission and whatever burden exists arises from the mechanics of establishing a connection to the APCD, which should generally be relatively easy.

<sup>&</sup>lt;sup>58</sup> 29 U.S.C. § 1024(a)(2)(B). <sup>59</sup> 29 U.S.C. § 1026(a).

<sup>60 29</sup> U. S. C. § 1185d; 42 U. S. C. § 300gg-15a

Justice Brever's concurrence addresses these issues even more directly. He explicitly says that the authorities cited by the majority allow the Department of Labor to require self-insured plans to report data that mirrors the data collected by state APCDs. Further, he crafts what he views as a plausible path for state APCDs to continue to access self-insured data, mediated by the Department of Labor. This is consistent with a theme that Breyer has articulated in a series of concurrences beginning in the mid-1990s: that federal agencies can play an important role in helping courts to understand the preemptive scope of statutes under their jurisdiction.<sup>61</sup>

Specifically, Brever's concurrence envisions that federal government could collect APCD-like information and share the data with states, as appropriate, or the federal government could craft a path for states to access the data directly by "delegating" authority to the states:

I see no reason why the Secretary of Labor could not develop reporting requirements that satisfy the States' needs, including some State-specific requirements, as appropriate. Nor do I see why the Department could not delegate to a particular State the authority to obtain data related to that State, while also providing the data to the Federal Secretary for use by other States or at the federal level. Although the need for federal approval or authorization limits to some degree the States' power to obtain information, requiring that approval has considerable advantages. The federal agencies are more likely to be informed about, and to understand, ERISA-related consequences and health care needs from a national perspective. Their involvement may consequently secure for the States necessary information without unnecessarily creating costly conflicts.62

Federal agencies collecting data from self-insured plans and distributing it to the states is technically feasible, but it is a complex endeavor (discussed further below). However, many stakeholders and scholars believe that Justice Breyer's suggestion that the Department of Labor could "delegate" the authority to collect data to states is a promising alternative for agency action.<sup>63</sup>

Brever's opinion suggests two limits on the way such agency-based de-preemption must be structured, at least in his view. First, Breyer calls upon the agency to reflect an understanding of "ERISA-related consequences" of the action it is taking, which likely requires the Department of Labor to place at least some conditions on states' ability to collect data from group health plans. That is, blanket depreemption of any state data collection efforts related to group health plans may not reflect an appropriately nuanced assessment of what is an appropriate requirement for group health plans under ERSIA's preemption clause. Second, Breyer's concurrence envisions these data being available for use at the federal level. That is, if the information is being collected under the Department of Labor's

<sup>&</sup>lt;sup>61</sup> In a line of cases in which the Court has assessed whether the FDA's approval of and labeling requirements for a product preempts a state tort claim arising from injuries associated with that product, Breyer has emphasized the role that agency judgement can play in helping to understand the scope of preemption, and implicitly called upon agencies to provide that guidance. Medtronic v. Lohr, 518 U. S. 470 (1996) (Breyer, J., concurring in part and concurring in judgment), Wyeth v. Levine 555 U.S. 555 (2009) (Breyer, J., concurring). Cf. Bates v. Dow Agrosciences LLC, 544 U.S. 431 (2005) (Breyer, J., concurring) (addressing similar issues under the EPA's jurisdiction). But see [Sharkey].

 <sup>&</sup>lt;sup>62</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. (2016) (Breyer, J., concurring).
 <sup>63</sup> Sean Bland, Jeffrey Crowley, Lawrence Gostin, "Strategies for Health System Innovation After Gobeille v Liberty Mutual Insurance Company," 316 JOUNRAL OF THE AMERICAN MEDICAL ASSOCIATION 581 (August 9, 2016),

https://jamanetwork.com/journals/jama/article-abstract/2532230; Nicholas Bagley, "A modest proposal for fixing Gobeille," The Incidental Economist, April 20, 2016, https://theincidentaleconomist.com/wordpress/a-modest-proposalfor-fixing-gobeille/; Maura Calsyn, "Policy Options to Encourage All-Payer Claims Databases," Center For American Progress, April 20, 2018, https://www.americanprogress.org/issues/healthcare/reports/2018/04/20/449602/policyoptions-encourage-payer-claims-databases/; John Freedman, Linda Green, and Bruce Landon, "All-Payer Claims Databases - Uses and Expanded Prospects after Gobeille," APCD Council, December 2016,

https://www.apcdcouncil.org/publication/all-paver-claims-databases-%E2%80%94-uses-and-expanded-prospects-aftergobeille; APCD Council, Comment Letter Regarding Employee Benefits Security Administration, Annual Reporting and Disclosure Proposed Rule, October 12, 2016, , https://www.regulations.gov/document?D=EBSA-2016-0010-0046.

authority to determine what is necessary or appropriate under ERISA and the ACA, then the federal government must have some ability to access it.

Breyer's opinion thus suggests that the federal government could, for example, promulgate a regulation delegating to state APCDs the authority to collect claims data from group health plans, provided that the data is collected in the Common Data Layout using a routine electronic format for submission. As with legislative de-preemption, the Department of Labor could also consider limiting this delegation to data collection from plan administrators that are either responsible for at least a minimum number of self-insured lives in the state or have any insured business in the state. Similarly, the federal government could require APCDs that collect data to make the information available for research use, though that may require legislative changes in some states. Regardless of how other researchers access these data, federal agencies must reserve the ability to access the information themselves for enforcement or analysis purposes.

If the agencies pursued this approach, the authority underlying this regulation should follow the outline provided by the Court in *Gobeille*, invoking general ERISA authorities as well as the ACA. Specifically, as described above, ERISA requires plans to file an annual report,<sup>64</sup> and the Court majority explained that this language "permits the Secretary of Labor to 'requir[e] any information or data from any [plan] where he finds such data or information is necessary to carry out the purposes of" ERISA.<sup>65</sup> In addition, ACA section 1311(e)(3) describes a series of data elements related to plan enrollment and health care claims that plans offered through the Health Insurance Exchange must provide to their regulators, along with "other information as determined appropriate."<sup>66</sup> Language codified into other federal statutes requires group health plans as well as other types of insured health benefits to provide the 1311(e)(3) data elements to their regulators, including the Department of Labor for group health plans.<sup>67</sup> But because the 1311(e)(3) data elements are required of many types of health plans – not just group health plans – the 1311(e)(3) authority may not, on its own, confer authority to delegate collection under ERISA to the states. The ERISA authority cited by the Court majority in *Gobeille* more clearly plays that role.

## Create a National APCD

The preceding section considered policies that would restore something resembling the pre-*Gobeille* environment, with self-insured plans (and other payers) submitting data to independent state APCDs. These approaches could be implemented relatively quickly and would enable states to continue their ongoing work with complete data. In implementing this type of approach, Congress and federal agencies could take some steps to reduce administrative costs associated with submitting data to APCDs and perhaps modestly broaden access to these data. However, this approach will fall well short of addressing the other limitations of the existing patchwork of state APCDs, particularly the challenges in combining data from multiple states and the fact that many states lack APCDs. We turn now to approaches that would build a truly national APCD, with data collected from all payers and in all states.

A national APCD could, in principle, be implemented either legislatively or through agency action. As described above, the Supreme Court has suggested that existing statutes convey *authority* to the federal government to collect APCD-like data from insured and self-insured commercial health plans, and the federal government could directly furnish the national APCD with Medicare and Medicaid data. That said, collecting and maintaining these data would be a significant undertaking that would require an investment of funding and human capital. The required sums would likely not be large in the context of the federal health care budget, but building a national APCD would nonetheless be a major commitment requiring interagency effort from the Departments of Labor, Health and Human

<sup>64 29</sup> U.S.C. 1024

<sup>65</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. \_\_\_\_ (2016), quoting 29 U.S.C. § 1024(a)(2)(B).

<sup>&</sup>lt;sup>66</sup> 42 U.S.C. § 13031(e)(3).

<sup>&</sup>lt;sup>67</sup> 42 U. S. C. §§ 300gg–15a.

Services, and Treasury that would take resources away from other departmental priorities. Therefore, expansive federal data collection is most likely to occur if legislation mandates and funds such an effort. However, a motivated administration could likely undertake this initiative in the absence of Congressional action.

Below we describe the architecture of a national APCD, as we envision it. We describe the rules that would govern use of APCD data, privacy and security safeguards, funding requirements, as well as how the role of state APCDs would change following creation of a national APCD. We also address whether it would be preferable to house a national APCD in a non-governmental entity.

#### Architecture of a National APCD

The federal government would require all commercial payers to submit claims level data to a national APCD operated by a federal agency. Given the expertise of the Department of Health and Human Services (HHS) in maintaining Medicare claims and other health care data, it would be the best entity to actually possess and maintain this database. However, it would be appropriate for HHS to operate the project in consultation with the Department of Labor and the Department of Treasury, with which it shares jurisdiction over the requirements applied to health care payers.

Under this approach, all commercial payers – health insurance issuers, insured and self-insured group health plans, and non-federal governmental plans – that meet certain relatively low enrollment thresholds would be required to submit claims data. (Note that this differs from the scope of data collection contemplated by the Senate HELP committee, which required federal data collection only from self-insured payers.<sup>68</sup>) Information would be submitted in a standard format specified by the agencies. Quarterly data submission may best balance policymakers' and stakeholders' desire for current and actionable information with minimizing the burden such data collection places on payers. Federal agency staff or contractors would be responsible for accepting data and performing the same types of quality checks that are conducted by state APCDs today and would have authority to enforce data submission requirements.

The federal government would furnish claims data for major public coverage programs to the APCD. The Centers for Medicare and Medicaid Services (CMS) directly holds claims data for traditional Medicare and collects similar data from Medicare Part D plans and Medicare Advantage plans.<sup>69</sup> CMS also collects claims-level data for state Medicaid programs and Children's Health Insurance Programs via its Transformed Medicaid Statistical Information System (T-MSIS), although there are currently some questions about the quality of the T-MSIS data.<sup>70</sup> If those concerns persist, federal policymakers could consider instead obtaining Medicaid data via agreements with state APCDs, as we discuss below.

The Office of Personnel Management also likely has authority to facilitate collection of data from the Federal Employees Health Benefit Program. Since 2011, the agency has been investing in efforts to establish its own claims database; some carriers have opposed these efforts, but the agency insists it has legal authority to collect these data for its own purposes and for independent research.<sup>71</sup> Using the

<sup>&</sup>lt;sup>68</sup> See Lower Health Care Costs Act, S. 1895, 116th Congress § 303 (2019), <u>https://www.congress.gov/bill/116th-congress/senate-bill/1895</u>.

<sup>&</sup>lt;sup>69</sup> The encounter data collected from Medicare Advantage plans is currently believed to have some data quality problems. See "Report to the Congress: Medicare and the Health Care Delivery System," *MedPac*, June 2019,

<sup>&</sup>lt;u>http://www.medpac.gov/docs/default-source/reports/jun19\_ch7\_medpac\_reporttocongress\_sec.pdf?sfvrsn=0</u>. Ensuring that the national APCD had complete and accurate data would be another reason to continue efforts to improve the quality of these data.

<sup>&</sup>lt;sup>70</sup> "Update on Transformed Medicaid Statistical Information System (T-MSIS)," *Medicaid and CHIP Payment and Access Commission*, October 2019, <u>https://www.macpac.gov/publication/update-on-transformed-medicaid-statistical-information-system-t-msis/</u>.

<sup>&</sup>lt;sup>71</sup> See, "Privacy Impact Assessment for the Health Claims Data Warehouse (HCDW)," *Office of Personnel Management Office of Healthcare and Insurance*, May 8, 2018, <u>https://www.opm.gov/information-management/privacy-policy/privacy-policy/hcdw.pdf;</u> "Congressional Budget Justification and Annual Performance Plan," U.S. Office of Personnel Management,

same authority, policymakers would fold the current effort into the national APCD, which would likely reduce burdens on insurers since carriers submitting to the OPM database would likely be submitting data to the APCD for their other products. The Veterans Health Administration could likely provide its data to the national APCD as well. The Department of Defense maintains similar data for its workforce in the TRICARE Encounter Data system and provides some limited access to civilian researchers.<sup>72</sup> While similar to the information contained in an APCD, these data could have national security implications that limit the degree to which they can be shared; these issues are beyond the scope of this paper, but we believe the Department of Defense could likely share some limited data with a national APCD.

For all payers, we anticipate that the APCD would collect information similar to the information held by existing state APCDs, including the standard fields included on health care claims, patient demographic information, and certain plan characteristics.

#### Uses of APCD Data

We envision that the data held by a national APCD would be used for public reporting, research, and policymaking, like data held by state APCDs. In particular, agencies could produce routine reports on health care utilization, prices, and spending, as well as dimensions of health care quality that can be measured in claims data, both nationwide and disaggregated by geography. These reports would offer data users a sharper and more detailed picture of national trends, and the large sample sizes would particularly improve the ability to compare geographic areas. Agencies would also be able to conduct narrower analyses linked to current national priorities, just as state APCDs have produced analyses related to topics of current public and policy interest, such as the opioid epidemic.

Data in a national APCD would also be used to directly support policy design and implementation. Legislative agencies like the Congressional Budget Office, Government Accountability Office, Medicare Payment Advisory Commission, and Medicaid and CHIP Payment and Access Commission would access these data to conduct policy analysis and oversight through mechanisms similar to those they use to access Medicare and Medicaid data today. Executive branch policymakers could also use the data to conduct analyses to inform policy deliberations and, where relevant, for policy implementation. Use of APCD data for law enforcement or immigration enforcement purposes would be prohibited to avoid any risk of discouraging individuals from seeking appropriate health care (particularly care for substance use disorders), with narrow exceptions for anti-trust enforcement and investigations of health care fraud.

The national APCD would also make its data available to researchers. We expect that researchers could access APCD data in a manner similar to the way they access Medicare and Medicaid claims data today. Basic public use files that strip out all potentially identifying information could be made available through a simple process, and researchers could apply for access to more detailed data sets, subject to stringent privacy protections as described below. The existing Research Data Access Center (ResDAC)<sup>73</sup> that helps researchers apply for and use Medicare and Medicaid data could be expanded to support researchers seeking data from the national APCD.

<sup>72</sup> Office of the Assistant Secretary of Defense for Health Affairs (OSAD(HA),

TRICARE Management Activity (TMA), Human Research Protection Program (HRPP), "Guide for DoD Researchers on Using MHS Data," October 10, 2012, <u>https://health.mil/Reference-Center/Publications/2012/10/10/Guide-for-DoD-Researchers-on-Using-MHS-Data</u>.

February 2018, <u>https://www.opm.gov/about-us/budget-performance/budgets/congressional-budget-justification-fy2019.pdf;</u> Arthur Allen, "Insurers' Doubts Idle OPM Data Warehouse," *Politico*, December 13, 2017, <u>https://www.politico.com/story/2017/12/13/insurers-doubts-idle-opm-data-warehouse-294976</u>.

<sup>&</sup>lt;sup>73</sup> Research Data Assistance Center, "Find, Request and Use CMS Data," <u>https://www.resdac.org/</u> (last visited September 18, 2020).

A national APCD would need to develop rules about data access for organizations that may sell data products derived from APCD data. Medicare currently allows certain "Qualified Entities" (QE) to obtain Medicare data and sell products based on that data, provided that they also combine Medicare data with commercial claims data to produce certain public reports.<sup>74</sup> We believe that there is no reason to bar commercial entities from accessing data and packaging it in ways that may be valuable for downstream users and that a national APCD would ideally create a counterpart to the QE program that enables access to national APCD data, subject to appropriate requirements.

Across all of these uses, policymakers would need to decide whether users of APCD data would be permitted to publicly disclose provider- or payer-level estimates, particularly estimates of negotiated prices. Many state APCDs permit public disclosure of provider-or payer-level data, and the Trump Administration has recently proposed several policies intended to make health care prices more transparent, including requiring providers to make their negotiated prices public.<sup>75</sup>

The main potential advantage of allowing these types of disclosures is that it could support research on natural experiments that involve specific providers and insurers, which can provide insights about health care market dynamics that would otherwise be unavailable.<sup>76</sup> However, provider and payer stakeholders are likely to oppose such disclosures through an APCD. Further, as discussed earlier, some believe that disclosure of negotiated prices could put upward pressure on prices, which would be both substantively undesirable and, as a procedural matter, could lead the Congressional Budget Office to estimate that legislation creating a national APCD that allowed such disclosures would increase federal spending. That said, as also discussed above, other evidence suggests that greater price transparency may not meaningfully increase prices or may even put modest downward pressure on prices. On balance, we lean toward permitting APCD users to report provider- and payer-specific estimates but acknowledge that there are arguments against a permissive approach.

#### Role of Existing State APCDs

If the federal government created a national APCD, the role of state APCDs might change. In particular, we envision the federal government would share with a state APCD all data collected from that state shortly after federal receipt, including data for self-insured plans that state APCDs cannot collect today.<sup>77</sup> While states could continue collecting data from payers themselves, we anticipate that few state APCDs would choose to do so, provided that the federal government adopted appropriate quality control processes and prioritized delivering data to states in a timely fashion.<sup>78</sup> To make ceasing data collection more attractive for states, the federal government could allow state APCDs to direct insured payers to provide some limited state-specific data elements to the national APCD, which would then be part of the data the federal government provided back to the state.

75 See, e.g., U.S. Department of Health & Human Services, "Trump Administration Announces Historic Price Transparency Requirements to Increase Competition and Lower Healthcare Costs for All Americans," November 5, 2019,

<sup>76</sup> See, e.g., Glenn Melnick and Katya Fonkych, "An Empirical Analysis of Hospital ED Pricing Power," 26 AMERICAN JOURNAL OF MANAGED CARE 105 (December 19, 2019), <u>https://www.ajmc.com/journals/issue/2020/2020-vol26-n3/an-</u> <u>empirical-analysis-of-hospital-ed-pricing-power</u>; Mark Shepard, "Hospital Network Competition and Adverse Selection: Evidence from the Massachusetts Health Insurance Exchange," *Harvard Kennedy School of Government*, August 1, 2016, <u>https://scholar.harvard.edu/files/mshepard/files/mshepard\_hospitalnetworksselection\_Aug2016.pdf</u>.

<sup>&</sup>lt;sup>74</sup> "Qualified Entity Program," U.S. Centers for Medicare & Medicaid Services, October 15, 2019, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/QEMedicareData</u>.

https://www.hhs.gov/about/news/2019/11/15/trump-administration-announces-historic-price-transparency-and-lowerhealthcare-costs-for-all-americans.html.

<sup>&</sup>lt;sup>77</sup> This approach, as well as the possible approach to Medicaid collection described in the next paragraph, parallels the approach envisioned for self-insured data under the Senate HELP Committee's Lower Health Care Costs Act.

<sup>&</sup>lt;sup>78</sup> Medicaid data is a possible exception, as noted above. If T-MSIS data were determined to be inadequate, state APCDs could continue to obtain Medicaid data from their state Medicaid agencies and provide those data to the national APCD in exchange for the data collected by the national APCD (paralleling the structure envisioned in the recent Senate HELP bill).

Over the long run, centralizing data collection would reduce states' data collection costs, allowing them to focus their resources on data analysis and policy support. In the near term, however, the creation of a national APCD would impose some transition costs. Receiving data from the national APCD (rather than receiving it directly from each payer) would require state APCDs to develop processes for accepting and integrating that information into their data systems. It may also require changes in state law to align privacy or other standards.<sup>79</sup> Note that, in contrast to the HELP Committee's bill, we envision a process where the national APCD would collect all data, not just data for self-insured plans. In addition to better facilitating use of the data by federal policymakers and multi-state analyses, we believe this approach ultimately reduces burden for state APCDs because the HELP process would require states to build the ability to accept national data without relieving them of the need to maintain their own data collection systems.

States would lose some control in the shift to national data collection. While they would retain the ability to collect limited state specific elements and could likely adapt to the standardized data format, they would not be able to direct data submission from small entities or mandate certain formatting. Nor would they be able to oversee submission, conduct their own quality control processes, or leverage their in-state relationships to promote timely and accurate compliance with reporting standards. That said, we expect a national APCD could achieve the same – or better – levels of overall data quality through a national quality control process and clearly articulated federal penalties for noncompliance.

#### Privacy and Security Safeguards

A national APCD would be powerful because it contains detailed information about health care delivery, including who received which health care services, who delivered those services, and who paid for them. But those data are obviously sensitive and, as noted earlier, some observers have expressed concern that holding claims-level information in a federal database poses risks to privacy. An important question, therefore, is how to ensure the privacy and security of data held in a national APCD.

To start, we note that while a national APCD is a new undertaking, it would not present fundamentally novel privacy or security concerns. As noted above, the federal government already possesses large amounts of claims data through operation of the Medicare and Medicaid programs, and, while there have been isolated security incidents, we are unaware of any significant data breach resulting from the use of claims data for program operations, public reporting, or research, a notable contrast with some private payers.<sup>80</sup> Consistent with this, the privacy and security of data in a national APCD can be ensured by adapting the procedures that the federal government already uses to safeguard claims data.

The starting point should be to ensure that the APCD is subject to the Privacy Act, which protects the privacy and security of personal information held by the government, as well as the privacy and security requirements that apply to covered entities under the Health Insurance Portability and Accountability Act (HIPAA), which protect health information generally. The former would likely be automatic, while making an APCD subject to HIPAA rules could require explicit action by policymakers.<sup>81</sup>

Tying an APCD's privacy and security safeguards to these existing federal laws would be superior to creating a new legal framework to govern privacy and security for the APCD. These existing frameworks have generally been successful in protecting health information held by the federal government. Indeed, the Privacy Act and HIPAA are the principal laws that govern CMS' handling of

<sup>&</sup>lt;sup>79</sup> See APCD Council, on behalf of State APCDs, Letter to the U.S. Senate Committee on Health, Education, Labor and Pensions regarding the Lower Health Care Costs Act of 2019, June 5, 2019,

https://www.apcdcouncil.org/sites/default/files/media/lowerhealthcarecostsact\_comments\_06052019\_final.pdf. <sup>80</sup> See, e.g., Nate Lord, "Top 10 Biggest Healthcare Data Breaches of All Time," *Data Insider*, June 25, 2018, <u>https://digitalguardian.com/blog/top-10-biggest-healthcare-data-breaches-all-time</u>.

<sup>&</sup>lt;sup>81</sup> In particular, it is unclear whether an APCD would be a "covered entity" within the meaning of HIPAA and, thus, whether HIPAA's privacy and security rules would automatically apply to an APCD.

Medicaid and Medicare claims data, and, as noted above, we are unaware of any significant data breaches affecting these claims databases. Linking protections for APCD data to these existing statutes also takes advantage of the fact that these statutes, as well as their accompanying guidance and regulations, are periodically updated in response to changing technology and other developments.

We envision that—pursuant to these laws—an APCD would adopt procedures to prevent inappropriate disclosure similar to those CMS uses to control access to Medicare and Medicaid claims data. For example, all researchers seeking identifiable data from CMS (that is, data from which an individual's identity could potentially be discerned) must sign a data use agreement in which they agree to abide by specified security requirements and agree not to release results pertaining to groups of people smaller than 11.<sup>82</sup> Researchers seeking datasets that contain the largest array of identifiable data elements must additionally submit a detailed application describing why their research project requires identifiable data, and the study must pass human subjects review by an Institutional Review Board operating under the Common Rule as well as review by the CMS Privacy Board.<sup>83</sup> Many studies using CMS data now access and analyze those data via CMS' Virtual Research Data Center, a secure computing environment maintained by CMS, rather than by receiving the data files directly, which allows CMS to retain control over the data even when used by researchers; a similar approach could be used in the context of a national APCD. Similar processes apply to other non-CMS users, including state governments and other federal agencies.<sup>84</sup>

We believe these procedural safeguards aimed at preventing inappropriate disclosure are the most important part of efforts to protect the privacy and security of information held by an APCD. However, as a further step to address privacy and security concerns, policymakers could consider limiting the APCD's ability to collect or retain identifiable data. In considering options like these, it is useful to distinguish between two types of identifiable data elements:

• **Direct identifiers.** Health care claims data contain some fields that directly identify patients, such as a patient's name or social security number.<sup>85</sup> Completely barring the APCD from interacting with direct identifiers would make it impossible to use the APCD for longitudinal analyses that follows patients over time as they are served by different providers and covered by different insurers, which would substantially limit the questions an APCD could answer. For example, being unable to follow patients would make it impossible to use an APCD to study the care patients receive over the course of a pregnancy or in connection with a chronic disease.

However, it is possible to facilitate longitudinal analyses without retaining direct identifiers within the APCD. In particular, it is possible to use direct identifiers in the original data to create an "encrypted" unique identifier that links together different records corresponding to the same person but does not itself reveal any identifying information. Indeed, with rare exceptions, CMS only provides encrypted unique identifiers when making Medicare and Medicaid data available for analytic use, and many other entities that hold identifiable data follow similar practices.<sup>86</sup> An APCD would almost surely follow similar practices when making

<sup>&</sup>lt;sup>82</sup> "Limited Data Set (LDS) Files," U.S. Centers for Medicare & Medicaid Services, June 30, 2020, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/Data-Disclosures-Data-Agreements/DUA</u> -

NewLDS.

<sup>&</sup>lt;sup>83</sup> Research Data Assistance Center, "Research Identifiable File (RIF) Requests," <u>https://www.resdac.org/research-identifiable-files-rif-requests</u> (last visited September 18, 2020).

<sup>&</sup>lt;sup>84</sup> Research Data Assistance Center, "Research Identifiable File (RIF) Requests," <u>https://www.resdac.org/research-identifiable-files-rif-requests</u> (last visited September 18, 2020); "Identifiable Data Files," *U.S. Centers for Medicare & Medicaid Services*, March 20, 2020, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/Data-Disclosures-Data-Agreements/Researchers</u>.

 <sup>&</sup>lt;sup>85</sup> HIPAA regulations define a longer list of fields considered to be direct identifiers. See 45 CFR § 164.514(e).
 <sup>86</sup> See United States Census Bureau, "Data Ingest and Linkage," September 7, 2016,

<sup>&</sup>lt;u>https://www.census.gov/about/adrm/linkage/technical-documentation/processing-de-identification.html</u> and the cited technical paper for a discussion of how the Census Bureau creates this type of encrypted identifier to enable research using the various identifiable databases it holds.

data available for analytic purposes, but policymakers could go one step farther and bar the APCD from even *holding* anything other than an encrypted identifier on an ongoing basis.

This type of approach could allay some stakeholder concerns and would have the advantage of making the APCD a less attractive target for identity theft or other large-scale fraudulent activities. However, even this restriction would have some downsides. In particular, direct identifiers in real-world claims data often contain minor errors and imperfections, like transposed digits, which can complicate creation of a unique identifier. Completely forbidding an APCD from holding unencrypted direct identifiers would limit the APCD's ability to investigate approaches to creating encrypted identifiers that are more robust to data errors or to take advantage of improvements in methods for creating encrypted identifiers.

• **Indirect identifiers.** Many fields on health care claims databases that do not directly identify patients, such as dates of service, patient age, and patient zip codes, can nevertheless be used to identify individual patients when used in combination with each other and with other fields present on a health care claim.<sup>87</sup> For example, claims data reflecting trauma care in a specific city on a specific date could be linked to news reports. However, preventing an APCD from collecting and retaining these types of indirect identifiers would severely limit the types of research an APCD could support. To take just one timely example, barring the APCD from holding indirect identifiers would likely prevent an APCD from simultaneously holding fine-grained data on both patient age and patient zip code. That, in turn, would reduce the usefulness of an APCD for studying COVID-19 due to the large differences in the pandemic's impact by age and geography.

The claims database that would have been created by the recent Senate HELP proposal would have permitted the non-profit operating the database to collect identifiable information but would have required the non-profit to subsequently de-identify those records.<sup>88</sup> Consistent with the discussion above, this process would allow creation of an encrypted unique identifier and, thus, facilitate use of the database for longitudinal analysis. However, it could require the removal of many data elements that may be indirect identifiers (like zip code or age), seriously limiting the database's capabilities.

#### **Funding Requirements**

We have not produced a detailed estimate of what a national APCD might cost, but similar federal undertakings can provide some guidance on this question. Notably, the Agency for Healthcare Research and Quality (AHRQ) operates the Healthcare Cost and Utilization Project (HCUP), which collects data from state-operated inpatient and outpatient hospital encounter databases and then makes harmonized versions of those databases available to researchers for a fee.<sup>89</sup> It also produces periodic reports based on its data and provides a web-accessible tool that can be used to produce aggregate tabulations without purchasing the underlying discharge databases. Budget documents show that funding for HCUP was between \$9 and \$14 million in fiscal year 2020.<sup>90</sup>

<sup>88</sup> Lower Health Care Costs Act, S. 1895, 116th Congress § 303 (2019), <u>https://www.congress.gov/bill/116th-congress/senate-bill/1895</u>.

us.ahrq.gov/news/exhibit booth/HCUPFactSheet.pdf (last visited September 17, 2020).

<sup>90</sup> See "National Institute for Research on Safety and Quality (NIRSQ)," Department Of Health And Human Services National Institutes Of Health,

<sup>&</sup>lt;sup>87</sup> See, e.g., Gregory Simon, Susan Shortreed, Yates Coley, Robert Penfold, Rebecca Rossom, Beth Waitzfelder, Katherine Sanchez, and Frances Lynch, "Assessing and Minimizing Re-identification Risk in Research Data Derived from Health Care Records," 7 THE JOURNAL FOR ELECTRONIC HEALTH DATA AND METHODS 6 (March 29, 2019),

<sup>&</sup>lt;u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6450246/;</u> Khaled El Emam, Elizabeth Jonker, Luk Arbuckle, and Bradley Malin, "A Systematic Review of Re-Identification Attacks on Health Data," 10 PLOS ONE 4 (December 2, 2011), <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3229505/</u>.

<sup>&</sup>lt;sup>89</sup> "HCUP Fact Sheet," Healthcare Cost and Utilization Project, <u>https://www.hcup-</u>

https://www.ahrq.gov/sites/default/files/wysiwyg/cpi/about/mission/budget/2021/FY\_2021\_CJ\_NIRSO.pdf (last visited September 18, 2020). The budget request indicates that AHRQ funding for HCUP and several other activities totaled \$14.3 million in fiscal year 2020, which places an upper bound on the amount spent on HCUP. The request also indicates that the

The analogy between a national APCD and HCUP is imperfect. A national APCD would receive data from a greater number of entities than HCUP and would receive and manage a greater variety of types of data. A national APCD would also need to do all of its own data quality checks, whereas HCUP is able to rely to some degree on data quality checks performed by its state partners. On the other hand, a national APCD would collect data through a uniform process and format, whereas each of HCUP's state partners submits data in slightly different form, which could reduce the effort a national APCD would need to invest in harmonizing different data sources.

On balance, we expect that operating a national APCD would be a more complex undertaking than operating HCUP, though not overwhelmingly so. Correspondingly, a reasonable guess might be that a national APCD would cost around twice what it costs to operate HCUP or around \$20 million per year. Costs are likely to be higher initially as the APCD creates its basic data systems, so policymakers would likely need to provide additional start-up funding, perhaps on the order of \$40 million. These estimates are consistent with the evidence described above that reveal state APCD operating budgets (operating on a smaller scale with fewer payers) of \$1.6 to \$4.4 million. Similarly, the Office of Personnel Management spent approximately \$10 million to develop a claims database for the FEHB program.<sup>91</sup> Further analysis to refine these cost estimates would be worthwhile.<sup>92</sup>

#### An Alternative Governance Structure: Housing a National APCD Within a Non-Profit

Some stakeholders have expressed concern about creating a federal database that holds detailed claims information. While some of those concerns reflect questions about how policymakers would maintain the security of APCD data, which we discussed above, some stakeholders may also harbor a general uneasiness about the government, particularly the federal government, possessing such a large quantity of health information, separate from fears regarding a potential breach.

As noted above, it is not fundamentally novel for a government entity to hold these types of data; the federal government holds claims data for the Medicare and Medicaid programs, and state APCDs will continue to exist and possess similar data in the absence of federal legislation. Nevertheless, given stakeholder concerns, policymakers have considered an alternative where Congress would direct that the national APCD data be collected and maintained by a non-profit organization under contract with the federal government.<sup>93</sup>

Under this type of approach, a non-profit entity (likely an existing organization that has experience with health care claims data) would receive a time-limited contract with the federal government. As a contractor, they would receive claims data from payers, make those data available to a variety of authorized users, and conduct their own research. A board of experts and stakeholders would provide oversight and advice on the maintenance and handling of the data. While contractors would almost certainly be involved in supporting any APCD that was housed within a federal agency, this type of approach differs by providing more autonomy and direct responsibility to the contractor.

Administration's fiscal year 2021 proposal to provide \$8.8 million for HCUP alone would only partially fund HCUP, which provides a lower bound on the amount spent on HCUP.

<sup>&</sup>lt;sup>91</sup> Arthur Allen, "Insurers' Doubts Idle OPM Data Warehouse," *Politico*, December 13, 2017,

https://www.politico.com/story/2017/12/13/insurers-doubts-idle-opm-data-warehouse-294976.

<sup>&</sup>lt;sup>92</sup> CMS also collects claims data and other similar data from health insurers to operate risk adjustment programs and for other similar purposes, including from insurers in the Medicare Part D program, the Medicare Advantage program, and the individual and small group markets. These data collection functions performed by these systems are, in most important respects, closely analogous to the functions that would need to be performed by a national APCD. Unfortunately, public estimates of spending on those systems is not readily available because budget documents combine spending on these data systems with other agency activities. However, the cost of those data systems would provide a useful datapoint for estimating the cost of a national APCD.

<sup>&</sup>lt;sup>93</sup> See Lower Health Care Costs Act, S. 1895, 116th Congress § 303 (2019), <u>https://www.congress.gov/bill/116th-congress/senate-bill/1895</u>.

The framework poses important governance challenges, though steps can be taken to mitigate these difficulties to some degree. Specifically, three strategies can help ensure that the entity remains accountable to federal policymakers and the public interest:

- **Flexibility to change contractors.** Authorizing legislation and agency contracts should ensure that the federal government retains the ability in practice, and not just in theory to change contractors in the face of poor performance. The federal government should retain ownership of software products and require transition assistance in its contracts, and legislation should be drafted broadly to ensure multiple entities could be viable contractors.
- **Policymaker access to data.** Authorizing legislation and agency contracts should ensure that executive and legislative agency staff have flexible access to the data and are able to pursue agency objectives without interference from the contractor.
- **Clear federal control**. While a stakeholder board can provide some additional oversight of contractor performance, it is important that the federal government itself retain the authority to supervise the contractor and hold it accountable in the event of poor performance. Stakeholders should not gain the ability to direct research away from areas that affect their commercial interests.

In addition to potentially offering a more politically appealing path, a contractor-led approach may offer additional flexibility and agility in research. Contractors operating with significant autonomy could be effective in quickly developing usable data products that reflect emerging interests. On the other hand, even with governance safeguards, the inherent difficulties in holding an outside entity accountable raises the risk of poor performance.

## Harmonize State APCDs and Create a Federal Clearinghouse for APCD data

If building a national APCD is judged infeasible or undesirable, a less ambitious approach would be to attempt to "stitch together" the current patchwork of state APCDs in ways that can overcome some—though not all—of the shortcomings of relying on a network of state APCDs. In many respects, this approach would mirror the approach the federal government has taken to stitch together state hospital encounter databases via the Healthcare Cost and Utilization Project (HCUP) operated by the Agency for Healthcare Research and Quality (AHRQ). Like creating a national APCD, it would likely be feasible to pursue this approach through agency action, but this type of project would be most likely to succeed if Congress mandates and funds the effort.

This approach would involve four main steps:

- **Facilitate state collection of data from self-insured plans.** To ensure that the state APCDs are able to provide a comprehensive picture of their commercial insurance markets, the federal government would grant state APCDs the authority to collect data from self-insured plans if they provided data to the federal clearinghouse described below. This could occur via either the legislative or administrative pathways described earlier.
- **Provide performance-contingent grants to state APCDs.** The federal government would provide grant funding to state governments to support the creation and maintenance of APCDs, with two objectives. First, the grant funding would encourage states that do not currently operate APCDs to set them up.<sup>94</sup> Second, the funding would allow the federal

<sup>&</sup>lt;sup>94</sup> The federal government has had some success in using grant funding to encourage states to invest in data collection efforts. See, e.g., U.S. Centers for Medicare & Medicaid Services, "Rate Review Cycle III Funding Opportunity: Frequently Asked Questions," September 18, 2020, <u>https://www.cms.gov/CCIIO/Resources/Fact-Sheets-and-FAQs/rr-foa-faq-6-6-2013</u>.

government to place certain requirements on how state APCDs collect and share data, as described below.

While it might be possible to use existing funding to support this type of grant program, ideally this grant program would be created and funded legislatively. To allow states to make long-term plans and investments, legislation should ideally provide a permanent mandatory appropriation. In light of the data on typical state APCD budgets discussed earlier, a reasonable estimate is that grant funding on the order of \$2 million per state per year would be adequate to encourage state APCDs to comply with federal requirements. Inducing new states to set up APCDs might require larger amounts, as discussed below.

• **Create a federal clearinghouse for APCD data.** State APCDs that accept federal grant funds or wish to collect data from self-insured plans would be required to report the data they collect (including data reported by fully-insured plans) to the federal government, which would then integrate the various states' data with federal Medicare and Medicaid data in a single harmonized database.<sup>95</sup> As noted earlier, HCUP successfully performs a similar function with respect to state hospital encounter databases. Indeed, policymakers could consider making the federal clearinghouse part of the broader suite of HCUP databases.

As with a national APCD, we anticipate that the federal government would use the harmonized database to produce public reports and make the database available to researchers and policymakers. Similarly, we anticipate that the database would abide by privacy and security safeguards similar to those we envision for a national APCD.

The federal government would need to commit meaningful resources to support this type of clearinghouse. While we have not developed a formal cost estimate, the \$9-14 million per year that the federal government currently spends on HCUP provides a reasonable point of comparison. Relative to HCUP, the clearinghouse would need to manage a greater variety of types of data but would have somewhat greater control over how that data is collected and submitted. On balance, we suspect that operating the clearinghouse would be modestly more complex than operating HCUP. Correspondingly, while a reasonable guess is that operating the clearinghouse might cost around \$15 million per year on an ongoing basis, spending needs would likely be higher initially, and further analysis would be worthwhile. Some resources might be available in existing funding streams, but ideally Congress would pass new legislation directing the federal government to pursue this project and appropriating the needed funds.

• Set common data collection standards. To maximize the utility of the federal clearinghouse, the federal government would need to require state APCDs to abide by certain minimum data collection standards (for both insured and self-insured plans). Those standards would need to specify the minimum set of data elements states are required to collect, the schedule on which states would be required to collect and submit data, and a set of data quality standards that states would be expected to meet. Indeed, one limitation on the HCUP databases has been that some states' discharge databases do not collect certain data elements or do not collect those data elements in comparable ways, which can complicate multi-state research projects.<sup>96</sup> Federal policymakers could simultaneously seek to standardize how state APCDs collect data from payers, including by setting standards for the submission format and process akin to those discussed in the context of legislative and agency de-preemption. Compliance with all of these data collection standards could be made a condition of the grant

<sup>&</sup>lt;sup>95</sup> As under a national APCD, if data quality concerns with the T-MSIS data held by CMS persisted, the clearinghouse could consider instead collecting those data via the state APCD.

<sup>&</sup>lt;sup>96</sup> See Healthcare Cost and Utilization Project, "Availability of Data Elements by Year," August 2, 2019, <u>https://www.hcup-us.ahrq.gov/db/state/siddist/siddist\_ddeavailbyyear.jsp</u>.

funds described above or of granting states the authority to collect data from self-insured plans.

This approach would be a substantial improvement over the status quo. Notably, it would restore the comprehensiveness of state APCDs, make it much easier to combine data from multiple states to support public reporting, research, and policymaking, as well as ensure that federal policymakers have ready access to APCD data.

However, relative to creating a national APCD, this approach would have some important limitations. First, while the grant funding we envision under this approach might encourage some additional states to create APCDs, it is unlikely to motivate all states to overcome the political opposition that APCDs can engender. Second, even with the common data collection standards envisioned above, it is unlikely that data would be perfectly comparable across states with so many different entities responsible for data collection. Third, harmonizing data submission process in the ways envisioned above would likely only modestly reduce administrative burdens for payers required to submit to multiple states, and it would do essentially nothing to reduce duplication of state APCD infrastructure.

Policymakers could, in principle, address the first of these problems (incomplete coverage) by allowing the federal government to operate a federal APCD in states that decline to set up an APCD or that wish to cede these functions to the federal government, essentially creating a hybrid of the clearinghouse approach envisioned in this section and the national APCD approach discussed earlier. This approach could ensure truly national coverage and create a platform that could encourage migration toward a truly national APCD over the long run, albeit at higher cost at least in the short run.

The recent Senate HELP Committee proposal (see Box 2) offered a different form of hybrid approach, with some advantages and disadvantages relative to the hybrid approach discussed in the last paragraph. On the positive side of the ledger, the HELP bill envisioned the federal government handling all data collection related to self-insured plans, which would likely both improve data quality and reduce administrative burden. However, the HELP bill had no mechanism to collect insured data in states without APCDs, and it is unclear whether the HELP bill would have provided the authority required to regulate state APCDs' data collection practices as we envision above.

## A Note on "Federated" Alternatives to APCDs

As an alternative to the policy approaches considered in this section, particularly creating a national APCD, some health plans have suggested creating a "federated" or "distributed" claims data system. <sup>97</sup> Under this approach, each plan would retain possession of its own data, but data users could query those plan-specific databases under certain circumstances. We are unaware of any fully fleshed-out proposal to create a federated system as an alternative to an APCD. However, advocates of this approach seem to have two broad architectures in mind, each of which we discuss in turn.

Under the first architecture, payers would transmit only aggregate summary statistics in response to queries from data users.<sup>98</sup> This structure mirrors the External Data Gathering Environment (EDGE)

<sup>&</sup>lt;sup>97</sup> See, e.g., "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018, <u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf;</u> Sheryl Turney, "Claims-based Databases for Policy Development and Evaluation: Testimony before the National Committee on Vital and Health Statistics," June 17, 2016, <u>https://www.ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-3-Sheryl-Turney-Anthem-2016June17.pdf;</u> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://www.ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-3-Sheryl-Turney-Anthem-2016June17.pdf;</u> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://www.ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-3-Sheryl-</u>

https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-withoutpassword.pdf; Blue Cross Blue Shield Association. "Ensuring the Privacy and Security of Patient Data Distributed Secure Access Data Model," (on file with authors).

<sup>&</sup>lt;sup>98</sup> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-without-password.pdf</u>.

servers used to collect data from payers for the individual and small group market risk adjustment programs.

This type of system would be dramatically less useful to data users than a traditional APCD. Most importantly, because end users would receive only summary statistics from each contributing payer's data, end users would need to write specialized code to compute market-wide aggregates, rather than calculating such amounts using standard statistical packages. For anything more complicated than calculating market-wide means (e.g., fitting a regression model), this would be a formidable task. And some analyses would be effectively impossible under this structure because many statistics—including statistics as simple as the market-wide median payment for a particular service—cannot be calculated based solely on summary statistics from each payer's data. It is also often hard to assess data quality and modify analyses to mitigate data quality problems without access to claims-level information, which could threaten the reliability of analyses performed using this type of system.

Advocates of this approach argue that it would better protect the security of claims data. Indeed, data users would no longer be able to access to claims-level information, which would remove one potential source of a breach; however, as discussed earlier, those risk can be mitigated in other ways. And beyond limiting data users' access, the security advantages of this approach are unclear. Each payer would now need to set up an internet-connected server that contains its claims data and responds to queries from data users, rather than submitting data once to the APCD and having the APCD handle interactions with end users. Thus, the number of potential sources of a data breach would be much higher under this type of arrangement, although the number of records exposed in any given breach would be smaller.

Under the second architecture, data users could obtain claims-level information from each payer and assemble a temporary local dataset for analysis.<sup>99</sup> This approach would avoid many of usability pitfalls of the EDGE-like approach described above, but it would still have important weaknesses relative to a traditional APCD; notably, data users could not benefit from the APCD's data curatorial efforts, particularly efforts to identify and resolve data quality problems and ensure comparability of data elements across data submitters. Moreover, this structure would have no meaningful security advantages relative to a traditional APCD and would arguably be worse in light of the fact that, as under the EDGE-like model, each payer would need to host its claims data on its own internet-connected server.

A final important note is that, regardless of the precise architecture, many supporters of federated approaches appear to envision that each individual payer would approve or disapprove use of its data on a case-by-case basis.<sup>100</sup> Indeed, this may be the key feature of a federated approach from the perspective of its proponents. However, given the large number of payers involved, requiring payer approval would likely make using these data prohibitively burdensome in most applications. It would also inappropriately constrain research that payers viewed as opposed to their parochial interests.

# Conclusion

APCDs are important tools for understanding and improving our health care system, but existing APCDs have major limitations. State APCDs' inability to collect data from self-insured plans prevents them from providing a complete picture of health care enrollment and payment within a state. Moreover, the 23 states that have APCDs today encompass only half the population, and our existing

<sup>&</sup>lt;sup>99</sup> Blue Cross Blue Shield Association. "Ensuring the Privacy and Security of Patient Data Distributed Secure Access Data Model," (on file with authors).

<sup>&</sup>lt;sup>100</sup> "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018, <u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf;</u> <u>https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-without-password.pdf;</u> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-without-password.pdf</u>.

patchwork system makes it difficult to conduct analyses with multiple states' data, limits the availability of these data for federal policymaking, and fails to exploit potential economies of scale.

Federal policymakers have a variety of options to redress these problems. They could: (1) act surgically to undo the effects of the 2016 Supreme Court decision that blocks states from collecting APCD data; (2) build a truly national APCD covering all states and all payers; or (3) work to harmonize existing state APCDs and encourage states that currently lack APCDs to create them.

We believe that creating a national APCD is the best of these approaches. With a small investment of resources relative to national health care spending, policymakers could create a tool that offers a comprehensive picture of the health care system that no existing data source can come close to providing, thereby accelerating efforts by a wide range of public and private actors to better understand and ultimately improve American health care. Efforts to expand state APCD coverage and harmonize existing APCDs could also improve on the status quo (as well as the pre-*Gobeille* status quo) and might encounter somewhat less stakeholder opposition. That said, such a project would achieve less than creating a truly national APCD, and we view it as a decidedly second-best alternative.

Finally, we underscore that if the political will cannot be summoned to pursue these larger projects, either Congress or federal agencies should act swiftly to at least restore states' ability to collect self-insured data. While not costless, this is a fairly simple undertaking that will make existing APCDs far more useful and comprehensive. It would also allow state APCDs to maximize their own potential, hopefully building a constituency for creating a better national infrastructure over the longer-term.



Leonard D. Schaeffer Center for Health Policy & Economics The USC-Brookings Schaeffer Initiative for Health Policy is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics and aims to inform the national health care debate with rigorous, evidencebased analysis leading to practical recommendations using the collaborative strengths of USC and Brookings.

Questions about the research? Email communications@brookings.edu. Be sure to include the title of this paper in your inquiry.

© 2018 The Brookings Institution | 1775 Massachusetts Ave., NW, Washington, DC 20036 | 202.797.6000
October 2020

# Federal Policy Options to Realize the Potential of APCDs

Matthew Fiedler and Christen Linke Young

USC-Brookings Schaeffer Initiative for Health Policy

This report is available online at: https://www.brookings.edu/research/federal-policy-options-to-realize-the-potential-of-apcds/



Leonard D. Schaeffer Center for Health Policy & Economics



Economic Studies at BROOKINGS

### **EDITOR'S NOTE**

This white paper is part of the USC-Brookings Schaeffer Initiative for Health Policy, which is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics. The Initiative aims to inform the national health care debate with rigorous, evidence-based analysis leading to practical recommendations using the collaborative strengths of USC and Brookings. The Commonwealth Fund provided a grant to the Brookings Institution to support the writing of this report.

#### **ACKNOWLEDGEMENTS**

The authors thank Kathleen Hannick and Spoorthi Kamepalli for excellent research assistance and Brieanna Nicker for excellent editorial assistance.

# **Executive Summary**

An all-payer claims database (APCD) is a system that collects health care claims and related data from all (or nearly all) entities that pay for health care services in a geographic area, including private and public health plans. Today, 23 states have APCDs, and they are valuable tools that virtually anyone with a stake in the health care system—including consumers, employers, health care providers, health insurers, researchers, and policymakers—can use to better understand the system and find ways to improve it. Indeed, in the states that have them, APCDs can provide a comprehensive picture of health care spending, health care delivery, and health insurance enrollment, and they offer insights that no other data can replicate, particularly with respect to private health insurance markets.

Unfortunately, today's APCDs have important limitations. Most prominently, a 2016 Supreme Court decision, *Gobeille v. Liberty Mutual Insurance Co.*, held that states may not require data collection from non-governmental self-insured group health plans. Because self-insured plans represent 61% of enrollment in employer coverage—and about one-third of all covered people—this decision left a large gap in state APCDs.

Current APCDs also have limitations that predate the *Gobeille* decision and arise from the fact that they are state entities that operate independently of one another. Because each state has its own data submission protocols and data access procedures, combining data from multiple states is challenging, which can frustrate efforts to compare experiences in different states. Further, because APCDs are state-controlled, federal policymakers have no automatic access to APCD data. Relying on a patchwork of state APCDs also forfeits potential economies of scale, which increases administrative costs for both payers and APCDs themselves and may prevent APCDs from making valuable investments in public reporting or data quality. Further, half the U.S. population lives in a state without an APCD.

Federal policymakers have multiple options to address the limitations of current APCDs:

- Enable state collection of self-insured data: Federal policymakers can directly restore state APCDs' ability to collect data from self-insured plans. Congress could enact simple legislation that would achieve this objective. Alternatively, the Supreme Court's decision in *Gobeille* described a legal pathway by which the federal government could authorize states to collect these data on its behalf without new legislation. In either case, policymakers could choose to limit the ability to collect data from self-insured plans to state APCDs that meet certain conditions, like collecting data in a uniform format to reduce administrative burden on payers or providing adequate researcher access to the data.
- **Create a national APCD:** The federal government could also build a national APCD that would collect data from all payers in all states. The federal government and outside researchers could then access this rich national dataset, subject to appropriate privacy safeguards. Data from a national APCD could also be shared with state APCDs, which might need to adapt their systems to accept it, but would then be freed from the burden of collecting data themselves and could focus their limited resources on high-value efforts to support broader use of the data.

In designing such a system, policymakers would need to pay careful attention to privacy and data security concerns. A national APCD could adopt security procedures like those that govern existing federal health care databases. It could also implement data access procedures similar to those that govern Medicare claims data today; in particular, it could bar users from disclosing anything other than aggregated results, require them to abide by rigorous data security practices, limit their access to only those data elements required for their planned analyses, and require them to access and analyze data in a secure computing environment controlled by the federal government. Policymakers could also bar an APCD from holding direct individual identifiers, although such restrictions would need to be crafted carefully to avoid reducing the APCD's capabilities.

The federal government already has the authority to collect these data and could do so without new legislation, although such an initiative is more likely to be pursued and completed if Congress directs and funds the work. Policymakers could also consider housing this initiative within a non-profit, rather than a federal agency, as proposed in legislation recently considered in the Senate Health, Education, Labor, and Pensions Committee, although such an approach poses some governance concerns and would likely require new legislation.

• Expand state APCD coverage and harmonize state APCDs: Policymakers could also pursue a hybrid approach that would expand, improve, and harmonize the existing network of state APCDs. In this model, policymakers would take three steps: (1) authorize state APCDs to collect self-insured data; (2) provide grants to states to encourage creation of new APCDs; and (3) require state APCDs to collect data through a standardized process and share their data with a federal "clearinghouse," similar to the federal clearinghouse that currently exists for state hospital encounter data. The clearinghouse could support research projects that require data from multiple states and facilitate use of these data by federal policymakers, while the grants might encourage more states to create APCDs. However, some states would likely continue to lack APCDs under this approach, and each state APCD would still need to invest in its own infrastructure for collecting and maintaining claims data. The federal government likely already has the authority to pursue this approach, but as with creating a national APCD, such an initiative is more likely to be undertaken with Congressional support.

We believe that creating a national APCD is the best of these approaches. With a small investment of resources relative to total US health care spending, policymakers could create a tool that offers a comprehensive picture of the health care system that no existing data source can come close to matching, thereby accelerating efforts by a wide range of public and private actors to better understand and ultimately improve American health care. While efforts to expand the number of state APCDs and harmonize existing APCDs could also improve on the status quo (and the pre-*Gobeille* status quo) and might encounter somewhat less stakeholder opposition, such a project would achieve less than creating a truly national APCD, and we view it as a decidedly second-best alternative.

If the political will cannot be summoned to pursue these larger projects, either Congress or federal agencies should act swiftly to at least restore states' ability to collect self-insured data. While not cost free, this is a fairly simple undertaking that will make existing APCDs more useful and comprehensive. It would allow state APCDs to maximize their own potential, hopefully building a constituency for creating a better national infrastructure over the longer-term.

Stakeholders might raise objections to the policy approaches we recommend here, but policymakers should not be deterred from moving forward. Payers might raise concerns about the burden of reporting data to APCDs, but since payers already provide similar data to many entities, including state APCDs, under the status quo, the incremental burden associated with these proposals would likely be modest. There is also an ongoing debate about whether disclosure of payers' negotiated prices, including through an APCD, could put upward pressure on prices. While the evidence on this question is mixed, policymakers could prevent disclosure of negotiated prices if they wished, albeit not without reducing the utility of APCD data in important respects. Privacy and security concerns are also sometimes raised in response to options that involve the federal government holding claims data. However, APCDs do not appear to present any novel privacy or security issues relative to other government undertakings, and these concerns can be addressed using privacy and security standards similar to those that have proven successful in protecting other sensitive data, like Medicare claims data. We also note that some stakeholders sell data products that would become less valuable if APCD data became more robust and widely available, which may lead them to oppose APCD expansion, but this concern likely should not factor into policymakers' decisions.

# Contents

A Primer on APCDs1
What is an APCD?1
Uses of APCD Data 3
Stakeholder Objections to APCDs5
Administrative Burden
Upward Pressure on Negotiated Prices6
Privacy and Security
Data Uses
Unstated Stakeholder Objections
Limitations of Existing APCDs
The <i>Gobeille</i> Decision and its Consequences8
The Court's Decision in <i>Gobeille v. Liberty Mutual</i> 8
Consequences of the <i>Gobeille</i> Decision9
Limitations of Relying on a Patchwork of State APCDs10
Challenges in Combining Data from Multiple States 10
Incomplete Geographic Coverage11
Inaccessibility to Federal Policymakers11
Inability to Exploit Economies of Scale12
Federal Policy Options12
Enable State Collection of Self-Insured Data15
Legislative De-Preemption15
Agency De-Preemption16
Create a National APCD 18
Architecture of a National APCD19
Uses of APCD Data 20
Role of Existing State APCDs21
Privacy and Security Safeguards 22
Funding Requirements24
An Alternative Governance Structure: Housing a National APCD Within a Non-Profit
Harmonize State APCDs and Create a Federal Clearinghouse for APCD data
A Note on "Federated" Alternatives to APCDs 28
Conclusion 29

# A Primer on APCDs

We begin this report by providing a brief overview of what an all-payer claims database (APCD) is, what APCDs can be used for, and the main objections raised against APCDs. Readers interested in more background on state APCDs may wish to refer to more comprehensive introductions elsewhere.<sup>1</sup>

#### What is an APCD?

An APCD is a system that seeks to collect health care claims and related data from all (or nearly all) entities that pay for health care services in a geographic area, including private health insurance plans, Medicare, and Medicaid. All existing APCDs operate at the state level, and 23 states accounting for half the U.S. population currently have an APCD in operation or active implementation, as illustrated in Figure 1.<sup>2</sup> Several more states have APCD-like entities for which data submission is voluntary but which still reach a meaningful fraction of the state's insurance market.<sup>3</sup>



# Figure 1. States with APCDs, 2020

Note: California, Georgia, Hawaii, Indiana, and New Mexico APCDs are in implementation. Source: Adapted from APCD Council

<sup>&</sup>lt;sup>1</sup> Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payer-claims-databases-primer-states</u>; Jo Porter, Denise Love, Amy Costello, Ashley Peters, Barbara Rudolph, "All-Payer Claims Database Development Manual: Establishing a Foundation for Health Care Transparency and Informed Decision Making," *All-Payer Claims Database Council*, February 2015, <u>https://www.apcdcouncil.org/manual</u>.

<sup>&</sup>lt;sup>2</sup> For additional details on the data underlying Figure 1, see All-Payer Claims Database Council, "Interactive State Report Map," <u>https://www.apcdcouncil.org/state/map</u> (last visited October 19, 2020). The APCD Council reports that West Virginia began development of an APCD for which implementation has since stalled.

<sup>&</sup>lt;sup>3</sup> The states are Texas, Wisconsin, Michigan, Oklahoma, and South Carolina. All-Payer Claims Database Council, "Interactive State Report Map," <u>https://www.apcdcouncil.org/state/map</u> (last visited October 19, 2020).

#### Box I: Glossary

- Group health plan. A health benefit plan offered by an employer to its employee.
- Insured group health plan. A product sold to an employer under which an insurance company assumes responsibility for paying enrollees' health care claims.
- Self-insured group health plan. A group health plan in which the employer is directly responsible for paying its employees' health care claims. Self-insured group health plans can (and generally do) hire an outside contractor, typically an insurance company, to handle the major administrative functions of the plan, including constructing provider networks and processing claims.
- Administrator. The entity who administers the benefits of a self-insured group health plan. Administrators are usually, but not always, a third-party under contract with the group health plan. Also called a third-party administrator when administration is conducted under a separate contract.

Most APCDs are directly operated by a state agency, but a few states delegate operation of their APCDs to a non-governmental entity.<sup>4</sup> Even where an APCD is operated by a state agency, the work of collecting, cleaning, and maintaining data from payers is frequently contracted out to a vendor.<sup>5</sup>

In all states with APCDs, state law compels health insurers and the state's Medicaid program to submit data to the APCD. Most state APCDs also obtain Medicare data via agreements with the federal government. Importantly, as we discuss in much greater detail below, federal law has prevented states from placing similar requirements on most self-insured group health plans since 2016, and it appears that states are unable to collect data for most self-insured enrollees. Because self-insured plans represent about 61% of enrollment in employer coverage and about one-third of all people with coverage, the "all payer" label is something of a misnomer as applied to existing state APCDs.<sup>6</sup> Further, state APCDs do not collect data from certain other payers, like the Federal Employee Health Benefits Program, TRICARE, or the Veterans Administration.

The core of an APCD is health care claims data. A health care claim is generated for each service an insurer pays for and contains a variety of useful information, including the type of service, the patient that received the service, the provider that delivered the service, the date of delivery, the diagnosis that precipitated the service, and—crucially—what the insurer paid for the service as well as what the enrollee paid in cost-sharing. Prescription drug claims contain similar information. APCDs generally also collect various related information held by payers that is useful for analytic purposes, which may include enrollee demographic characteristics like age and zip code, as well as characteristics of enrollees' coverage such as network characteristics and plan premiums.

<sup>&</sup>lt;sup>4</sup> For additional detail on each state APCD's governance structure, see All-Payer Claims Database Council, "Interactive State Report Map," <u>https://www.apcdcouncil.org/state/map</u> (last visited October 19, 2020).

<sup>&</sup>lt;sup>5</sup> Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payerclaims-databases-primer-states</u>; Jo Porter, Denise Love, Amy Costello, Ashley Peters, Barbara Rudolph, "All-Payer Claims Database Development Manual: Establishing a Foundation for Health Care Transparency and Informed Decision Making," *All-Payer Claims Database Council*, February 2015, <u>https://www.apcdcouncil.org/manual</u>.

<sup>&</sup>lt;sup>6</sup> For estimates of the share of employer market enrollment in self-insured plan see "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-section/ehbs-2019-section-10-plan-funding/</u>. The share of total enrollment in self-insured plans was calculated using the estimates of total employer market enrollment available at Kaiser Family Foundation, "Health Insurance Coverage of the Total Population," *Kaiser Family Foundation*, <u>https://www.kff.org/other/state-indicator/total-population/</u> (last visited September 15, 2020). In practice, states also generally exempt insurers with very limited enrollment from reporting to the APCDs. See Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payer-claims-databases-primer-states</u>.

APCDs fund themselves through a combination of mechanisms, including direct state funding, federal grant funding, and fees on data users.<sup>7</sup> We are unaware of a data source that provides comprehensive information on APCDs' budgets, but three APCDs for which recent budget information is readily available have annual budgets ranging from \$1.6 million to \$4.4 million.<sup>8</sup> Extrapolating these estimates nationwide implies that existing APCDs incur combined operating costs of less than \$100 million. For context, \$100 million amounts to less than 0.003% of national health expenditures in 2018 – or about \$1 per \$37,000 in health care spending.<sup>9</sup> While APCD budgets do not include the costs that payers incur to report to APCDs, this figure suggests that if the uses of APCD data described in the next section facilitate even tiny reductions in health care spending or equivalent improvements in other aspects of health care system performance, then state investments in APCDs generate benefits that greatly exceed their costs.

## Uses of APCD Data

Health care claims provide comprehensive information on what health care items and services (insured) people receive and how much is paid for those items and services. Consequently, claims can support many different types of analyses that have the potential to improve the health care system:<sup>10</sup>

• **Public reporting:** Many state APCDs use the data they hold to produce public reports on their states' health care systems. Some examine levels of and trends in health care utilization, spending, and quality in the state, which may be helpful to a variety of stakeholders, including individuals, the press, employers, providers, and insurers in understanding the current state of the health care system and making decisions related to it.<sup>11</sup> Others examine specific issues of current interest, such as opioid prescribing patterns, the effects of COVID-19 on the health care system, and the utilization of low-value services.<sup>12</sup> Some also use APCD data to create consumer-facing price transparency tools that allow patients to compare the prices charged by competing providers.<sup>13</sup>

<sup>&</sup>lt;sup>7</sup> Jo Porter, Denise Love, Ashley Peters, Jane Sachs, and Amy Costello, "The Basics of All-Payer Claims Databases: A Primer for States," *All-Payer Claims Database Council*, January 2014, <u>https://www.apcdcouncil.org/publication/basics-all-payer-claims-databases-primer-states</u>.

<sup>&</sup>lt;sup>8</sup> "2019 Colorado All Payer Claims Database Annual Report", *Center for Improving Value in Health Care*, February 2020, <u>https://www.civhc.org/wp-content/uploads/2020/02/CO-APCD-Annual-Report-FY19.pdf</u>; "Washington All-Payer Claims Database 2019 Accomplishments," *Washington All-Payer Claims Database*, January 2020,

https://www.ofm.wa.gov/sites/default/files/public/dataresearch/healthcare/pdf/2019 WA APCD accomplishments.pdf; "Collaborations in the Commonwealth, 2019 Annual Report & Strategic Plan Update," *Virginia Health Information*, http://www.vhi.org/About/annual report.pdf (last visited September 17, 2020).

 <sup>&</sup>lt;sup>9</sup> "National Health Expenditure Data," *Centers for Medicare & Medicaid Services*, December 17, 2019, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData.</u>
 <sup>10</sup> For a review of a large number of applications of APCD data, see All Payer Claims Database, "APCD Showcase: States Leading by Example," <u>https://www.apcdshowcase.org/</u> (last visited September 17,2020).

<sup>&</sup>lt;sup>11</sup> "Annual Cost Trends Report," *Massachusetts Health Policy Commission*, <u>https://www.mass.gov/service-details/annual-cost-trends-report</u> (last visited September 17, 2020); Washington Office of Financial Management, "Washington State HEDIS Quality Measures (claims based) - Data Dashboard," <u>https://www.ofm.wa.gov/washington-data-research/health-care/health-care-access-utilization-and-quality/washington-state-hedis-quality-measures-claims-based-data-dashboard</u> (last visited September 17, 2020); "2018 Vermont Health Care Expenditure Analysis," *Green Mountain Care Board*, July 8, 2020,

https://gmcboard.vermont.gov/sites/gmcb/files/Misc/2018 VT Health Care Expenditure Analysis Final %20July %2 08 %202020.pdf.

<sup>&</sup>lt;sup>12</sup> "2016 Virginia Low Value Services Report," Virginia Health Information, February 2017,

https://www.vhi.org/apcd/Virginia%20Low%20Value%20Services%20Report.pdf; Utah Department of Health, "Preliminary COVID-19 Healthcare Trends: A Snapshot from Utah's All Payer Claims Database," August 25, 2020, http://stats.health.utah.gov/latest-news/preliminary-covid-19-healthcare-trends/; "Prescribing Opioids in Colorado," Center for Improving Value in Health Care, March 2019, https://www.civhc.org/wp-content/uploads/2019/02/Opioid-Spot-Analysis-March-2019.pdf.

<sup>&</sup>lt;sup>13</sup> Florida Health Price Finder, "Learn More About Getting The Most Out Of Your Health Care Dollars,"

<sup>&</sup>lt;u>https://pricing.floridahealthfinder.gov/</u> (last visited September 17, 2020); New Hampshire Health Cost, "Compare Health Costs & Quality of Care," <u>https://nhhealthcost.nh.gov/</u> (last visited September 17, 2020).

- **Research:** APCDs can—and typically do—make the data they collect available to outside researchers, generally for a fee, with restrictions to protect patient privacy.<sup>14</sup> State APCDs have supported research on a wide variety of topics, such as the effect of tiered networks on hospital choice and health care spending, the effect of Medicaid expansion on continuity of coverage, and the utilization of telehealth services.<sup>15</sup>
- **Direct policy applications:** APCD data can also directly support policy design and implementation. At the policy design stage, APCD data can give policymakers a better picture of their states' health care systems and help inform estimates of the potential consequences of policy changes. For example, New Hampshire used APCD data to better understand how the prices paid by commercial payers compared to the prices paid by its Medicaid program as part of an effort to redesign its Medicaid fee schedules, while Washington State used APCD data to inform the provider payment rate requirements under its new "public option."<sup>16</sup>

APCD data also has applications in policy implementation. For example, APCD data has been used to determine out-of-network payment standards under state laws that address surprise billing.<sup>17</sup> APCD data can also be used by state attorneys general to monitor for anti-competitive conduct in health care markets or evaluate proposed provider or insurer mergers.

APCDs have at least two important advantages over other claims data sources (or, at least, they would if they included data from all self-insured group health plans). First, APCDs can offer a more complete picture of the commercially insured population than other commercial claims databases, such as the databases maintained by IBM Marketscan, Optum (a subsidiary of United Healthcare), Blue Health Intelligence (a Blue Cross Blue Shield affiliate), and the non-profit Health Care Cost Institute (which, in its current incarnation, contains claims data contributed by Aetna, Humana, and United Healthcare, but will soon encompass data from Aetna, Humana, and Blue Health Intelligence). All of these databases capture a non-random subset of the commercial insurance market, and the subset of the market each database captures often changes over time; this introduces potential for bias in estimating marketwide averages and trends. This incomplete coverage, as well as limitations that contributing payers place on the use of their data, also limits the value of these databases for understanding how and why performance varies across different commercial payers and the factors that shape employers' and individuals' choices among competing insurance options.

Second, the fact that APCDs aspire to encompass all payers allows them to support analyses that would not be possible with databases that include only a subset of a state's insurance market. For example, APCDs can be used to study trends in insurance enrollment in the state's insurance market as a whole,

https://www.apcdcouncil.org/publication/releasing-apcd-data-how-states-balance-privacy-and-utility.

<sup>14 &</sup>quot;Releasing APCD Data: How States Balance Privacy and Utility," All-Payer Claims Database, March 2017,

<sup>15</sup> Elena Prager, "Health Care Demand Under Simple Prices: Evidence From Tiered Hospital Networks," Northwestern University, 2017, https://faculty.kellogg.northwestern.edu/models/faculty/m download document.php?id=523 https://link.springer.com/article/10.1007/s11606-019-05101-8;

Jiani Yu, Pamela J. Mink, Peter J. Huckfeldt, Stefan Gildemeister, and Jean M. Abraham, "Population-Level Estimates Of Telemedicine Service Provision Using An All-Payer Claims Database," 37 HEALTH AFFAIRS 1931, December 2018, https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2018.05116.

<sup>&</sup>lt;sup>16</sup> Denise Love, William Custer, and Patrick Miller, "All-Payer Claims Databases: State Initiatives to Improve Health Care Transparency," The Commonwealth Fund, September 2010,

https://www.commonwealthfund.org/sites/default/files/documents/ media files publications issue brief 2010 sep 1439 love allpayer claims databases ib v2.pdf; Christina Cousart, "How Washington State Is Reducing Costs and Improving Coverage Value – A Q&A with its Health Benefit Exchange CEO," National Academy for State Health Policy, August 5, 2019, https://www.nashp.org/how-washington-state-is-reducing-costs-and-improving-coverage-value-a-ga-withits-health-benefit-exchange-ceo/.

<sup>&</sup>lt;sup>17</sup> Colorado Department of Regulatory Agencies, "Out-of-Network Health Care Provider Reimbursement," https://www.colorado.gov/pacific/dora/out-network-health-care-provider-reimbursement (last visited September 17, 2020): Washington State Office of the Insurance Commissioner. "Arbitration and using the Balance Billing Protection Act Data Set," https://www.insurance.wa.gov/arbitration-and-using-balance-billing-protection-act-data-set (last visited September 17, 2020).

potentially with far greater precision and granularity than survey data sources.<sup>18</sup> They can also be used to study how often people transition among different types of coverage and what the consequences of those transitions may be for the cost and quality of patient care.<sup>19</sup>

APCDs are also a useful complement to state hospital encounter databases, which collect encounter records directly from hospitals.<sup>20</sup> Hospital encounter databases generally do not collect information on non-facility-based outpatient care or prescription drug utilization, nor do they collect information on the prices paid for health care services. Thus, they paint an incomplete picture of care patterns and are not suitable for analyzing health care spending. (On the other hand, encounter databases do capture utilization by uninsured people, which APCDs do not since APCDs collect data from insurers.)

## Stakeholder Objections to APCDs

While APCDs have significant potential to inform the public, facilitate research, and directly support policymaking, they do have detractors. We discuss several common objections to APCDs, including that they create administrative burdens for payers, could place upward pressure on prices by disclosing confidential negotiated prices, could threaten privacy, or may be applied in an overly broad array of circumstances. We also briefly discuss concerns that often go unstated but may be important motivators of stakeholder opposition.

#### Administrative Burden

Payers frequently express concern that submitting data to APCDs is burdensome.<sup>21</sup> Concerns about burden are raised particularly frequently by groups representing self-insured group health plans, who argue that being required to submit to state APCDs, as opposed to a single national APCD, burdens self-insured plans that have enrollees in multiple states.<sup>22</sup> They often also note, likely correctly, that any associated administrative costs will ultimately be passed along to consumers as higher premiums or, in the case of self-insured plans, higher plan administration fees. (For self-insured plans, the plan administrator, rather than the employer itself, generally handles APCD submission).

Our conversations with stakeholders indicated that submitting to an APCD involves three main steps. First, the insurer or plan administrator must extract the required information from its data systems and put that information in the format required by the APCD. Historically, each state's APCD has set its own data submission format, although in recent years the APCD Council has worked with state APCDs to develop a Common Data Layout that may be used in more states in years to come.<sup>23</sup> Second, the submitting entity must actually transmit those data to the APCD, a process that generally uses standard technical protocols. Finally, the submitting entity must respond to any post-submission quality control inquiries. Our stakeholder conversations indicated that it is common for a payer to be required to submit data multiple times, either because the payer's data fails automated data quality checks at the time of submission or because the APCD's post-submission quality control checks identify issues that require resubmission.

<u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf</u>. <sup>22</sup> The ERISA Industry Committee, "Comments on the "Lower Health Care Costs Act of 2019," June 5, 2019,

<sup>&</sup>lt;sup>18</sup> Center For Health Information And Analysis, "Enrollment in Health Insurance," <u>https://www.chiamass.gov/enrollment-in-health-insurance/</u> (last visited September 17, 2020).

<sup>&</sup>lt;sup>19</sup> Sarah H. Gordon, Benjamin D. Sommers, Ira Wilson, Omar Galarraga, and Amal N. Trivedi, "The Impact of Medicaid Expansion on Continuous Enrollment: a Two-State Analysis," 34 JOURNAL OF GENERAL INTERNAL MEDICINE 1919 (June 21, 2019), <u>https://link.springer.com/article/10.1007/s11606-019-05101-8</u>.

<sup>&</sup>lt;sup>20</sup> Almost all states maintain these databases for inpatient stays, and most states also have such databases for emergency department visits and hospital-based outpatient surgeries. See, "HCUP Fact Sheet," *Healthcare Cost and Utilization Project*, <u>https://www.hcup-us.ahrq.gov/news/exhibit\_booth/HCUPFactSheet.pdf</u> (last visited September 17, 2020). <sup>21</sup> "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018,

https://www.eric.org/uploads/doc/resources/06-05-19%20ERIC%20Comments%200n%20HELP%20Draft%20Final.pdf. 23 All-Payer Claims Database, "Common Data Layout," <u>https://www.apcdcouncil.org/common-data-layout</u> (last visited September 17, 2020).

We are unaware of any estimates of the cost of submitting data to an APCD. We note, however, that the activities involved in APCD submission are relatively routine for insurers and plan administrators. Data like these are shared with various vendors associated with day-to-day operation of health plans. Notably, many insurers and plan administrators also submit essentially identical data to commercial or non-profit databases (e.g, IBM Marketscan, Blue Health Intelligence or the Health Care Cost Institute). The incremental cost in submitting to an APCD may, therefore, be modest. In any case, we discuss steps federal policymakers could take to minimize these costs below.

#### Upward Pressure on Negotiated Prices

Another commonly expressed concern is that APCDs may result in public disclosure of the prices negotiated between health care providers and health insurers and that this disclosure may put upward pressure on negotiated prices.<sup>24</sup> That upward pressure could arise in two ways.<sup>25</sup> First, price disclosure may facilitate tacit collusion by providers by making it harder for a provider that lowers its price to hide that fact from its competitors. Second, in some cases, price disclosure could change the landscape of provider-insurer negotiations in ways that increase prices; for example, providers could become more reluctant to accept low prices from any given insurer for fear that other insurers will see that they are willing to accept low prices and demand low prices too, or a low-priced provider could learn that an insurer is willing to pay other providers higher prices and demand similarly high prices.

On the other hand, there are also ways that making price information more broadly available could reduce negotiated prices. First, as noted above, some states use APCD data to drive consumer-facing tools designed to enable patients to seek out lower-priced providers. If consumers did shift to lower-priced providers, this could lower prices directly and could put pressure on providers to reduce prices. Second, in some cases, price disclosure could change the landscape of provider-insurer negotiations in ways that reduce prices, rather than increase them as discussed in the last paragraph; for example, insurers could become less willing to pay any given provider high prices for fear that other providers will see that they are willing to pay high prices and demand high prices too, or an insurer that currently pays a provider a high price could learn that the provider accepts lower prices from other insurers and demand a similarly low price.

Some recent empirical research has suggested that greater price transparency may, on net, cause small reductions in prices, but the effects of price disclosure may be context-dependent, and this question is far from settled.<sup>26</sup> In any case, if federal policymakers are concerned that price disclosure may have downsides, they could take steps to limit APCDs' ability to disclose provider-level price information, although this would inhibit some uses of APCD data.

<sup>&</sup>lt;sup>24</sup> "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018, <u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf</u>; Chamber of Commerce of the United States of America, Letter to Senators Alexander and Murray regarding the Lower Health Care Costs Act, June 17, 2019,

https://www.uschamber.com/sites/default/files/190617\_lowerhealthcarecostsact\_senatehelpcommittee.pdf. <sup>25</sup> For an overview of the economic logic and evidence behind these arguments, see "Amendments to the Minnesota Government Data Practices Act Regarding Health Care Contract Data," *Office of Policy Planning, Bureau of Competition, Bureau of Economics*, June 29, 2015, <u>https://www.ftc.gov/system/files/documents/advocacy\_documents/ftc-staffcomment-regarding-amendments-minnesota-government-data-practices-act-regarding-healthcare/150702minnhealthcare.pdf.</u>

<sup>&</sup>lt;sup>26</sup> Christopher M. Whaley, "Provider Responses to Online Price Transparency," 66 JOURNAL OF HEALTH ECONOMICS 241 (July 2019), <u>https://www.sciencedirect.com/science/article/abs/pii/S0167629618310476</u>; Zach Y. Brown, "Equilibrium Effects of Health Care Price Information," 101 REVIEW OF ECONOMICS AND STATISTICS 699 (October 2019), <u>https://www.mitpressjournals.org/doi/full/10.1162/rest\_a\_00765?casa\_token=OIb1ZgME8\_gAAAAA%3AWwnoEMMIsD\_7YhOPSIJ5otMLz31TUuQNvUiHhq69VWIet8GqIF5Q7YYNmXFjxxlzdR22\_xrOEbsq.</u>

#### Privacy and Security

Stakeholders also frequently raise concerns about the privacy of claims information submitted to an APCD,<sup>27</sup> fearing disclosure of individual-level information, such as through a computer systems breach or as a result of researcher misconduct.<sup>28</sup> While this is indeed a theoretical possibility, these concerns can be addressed through appropriate data privacy security safeguards. Indeed, we are unaware of any significant claims data breaches in the Medicare and Medicaid programs, both of which hold similarly sensitive claims records and use them for similar purposes. We discuss how federal policymakers might approach privacy and security protection in the context of a national APCD later in this paper.

#### Data Uses

Stakeholders also sometimes raise concerns about the fact that APCDs generally make data broadly available for public reporting, research, and policymaking, rather than restricting use of the data to a narrow set of pre-specified "use cases." This open-ended mandate makes some stakeholders – particularly those whose activities are subject to more careful scrutiny through an APCD – uncomfortable. However, much of the value of an APCD arises from its ability to offer a flexible tool to support a broad array of efforts to better understand and ultimately improve the health care system. Because the health care system is complex and because circumstances change over time, any attempt to pre-specify the full set of potential applications of APCDs would likely leave out many high-value applications of APCD data.

A related concern, while not always made explicit, is that a government entity ought not have access to this type of health care data, particularly in the context of the broad mandate envisioned for APCDs. There is little that policymakers can do to mitigate this concern while still realizing the potential of APCDs. We do note, however, that even before the advent of state APCDs, state governments held claims data for their Medicaid programs and the federal government held claims data for the Medicare program, so it is routine for government entities to collect and hold claims data, albeit generally for the purposes of direct program administration.

#### Unstated Stakeholder Objections

While the preceding objections to APCDs are the ones most often raised publicly, some stakeholders' views of APCDs may also reflect more parochial concerns. First, some health care providers may worry that broader availability of data on the prices of health care services may engender support for policies to reduce those prices. Second, as noted above, many insurers currently sell their claims information or data products derived from that claims information to third parties. For example, Blue Cross Blue Shield plans do so through their Blue Health Intelligence affiliate, while United Healthcare does the same through its Optum subsidiary, and many plans also sell data to data warehouses like IBM Marketscan that then resell those data to other entities. Plans may worry that broader availability of data through APCDs would reduce the prices they can demand. Third, some dominant insurers may worry that if information on prices and utilization in their markets become more widely available, other insurers could use that information to enter those markets or otherwise compete more effectively. In general, there is not a strong policy rationale for changing APCD policy to address parochial concerns like these, but policymakers should be aware that stakeholders may harbor them.

https://www.uschamber.com/sites/default/files/190617\_lowerhealthcarecostsact\_senatehelpcommittee.pdf.

<sup>&</sup>lt;sup>27</sup> Federation of American Hospitals, Letter to Senators Alexander and Murray Regarding the Lower Health Care Costs Act, June 5, 2019, <u>https://www.fah.org/fah-ee2-uploads/website/documents/FAH\_Respone\_-</u>

<sup>&</sup>lt;u>HELP Health Care Cost Reduction Discussion Draft %28FINAL%29.pdf</u>; "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018,

https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf; Chamber of Commerce of the United States of America, Letter to Senators Alexander and Murray regarding the Lower Health Care Costs Act, June 17, 2019,

<sup>&</sup>lt;sup>28</sup> Peter Swire, "Possible Privacy, Cybersecurity, and Data Breach Issues in the Proposed National Medical Claims Database Under Section 303 of S. 1895," September 27, 2019, <u>https://peterswire.net/wp-content/uploads/Swire-white-paper.S-1895-privacy-security.2019.pdf</u>.

# Limitations of Existing APCDs

Existing APCDs generate real benefits but also have limitations that reduce their utility for public reporting, research, and policymaking. One limitation—which has received increasing attention from federal policymakers—stems from the Supreme Court's 2016 decision in *Gobeille v. Liberty Mutual Insurance Co.*, which held that states could not require data collection from non-governmental self-insured group health plans.

But existing APCDs also have other limitations that predate the *Gobeille* decision and arise from the fact that current APCDs are state entities that operate almost entirely independently of one another. These limitations, particularly the fact that it is challenging to combine data from multiple APCDs, reduce APCDs' utility in many applications, especially at the federal level, while also increasing administrative costs. This section discusses each set of limitations in turn.

#### The Gobeille Decision and its Consequences

*Gobeille* was a 6-2 decision, with Justices Roberts, Kennedy, Thomas, Breyer, Alito, and Kagan in the majority. This section considers the Court's holding and the decision's impact on APCDs.

#### The Court's Decision in Gobeille v. Liberty Mutual

The federal Employee Retirement Income Security Act of 1974 (ERISA) regulates benefits offered by employers, including employer health plans (also called group health plans). ERISA includes a famously broad preemption clause that bars states from implementing any laws that "relate to" employee benefits.<sup>29</sup> However, ERISA also specifies that state laws that "regulate[] insurance" are not preempted by federal law,<sup>30</sup> leading to an uneasy arrangement where states have jurisdiction over the sale of insured health benefits to employers, but not over the employer's group health plan itself. As a result, states can generally use their authority to regulate insurance to control *insured* employer health benefits, but state law cannot reach self-insured group health plans. And self-insurance is common: 61% of people with health coverage from an employer were in a self-insured plan in 2019.<sup>31</sup>

While ERISA does place limits on how states interact with self-insured group health plans, the scope of ERISA preemption was unclear. For a number of years, states took the position that APCD data collection did not violate ERISA. As a practical matter, state laws generally placed the reporting obligation on the entity that administered benefits and paid claims, which for almost all self-insured group health plans is a third-party (generally an insurance company), not on the plan itself. Thus, states could maintain that the data collection laws were not "related to" a group health plan as the Supreme Court has defined that concept in jurisprudence dating back to the 1990s.<sup>32</sup>

However, in 2011, a self-insured plan directed its administrator not to submit data to Vermont, the administrator was subpoenaed by the state, and the self-insured plan then sued, claiming that the requirement to submit to the state's APCD was preempted by ERISA. The Second Circuit agreed.<sup>33</sup> The case reached the Supreme Court, and in March 2016 the Supreme Court held that ERISA preempted state laws that required data submission associated with a self-insured plan.<sup>34</sup>

<sup>&</sup>lt;sup>29</sup> 29 U.S.C. § 1144(a).

<sup>&</sup>lt;sup>30</sup> 29 U.S.C. § 1144(b)(2).

<sup>&</sup>lt;sup>31</sup> "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-section/ehbs-2019-section-10-plan-funding/</u>.

<sup>&</sup>lt;sup>32</sup> Given the Court's prior decisions, this argument was more plausible than it may initially seem. The Court has criticized "uncritical literalism" in applying the phrase "relate to," and demanded a more contextual inquiry into whether a state law duplicates ERISA requirements in assessing preemption. See, e.g., Brief for Petitioner, *Gobeille v. Liberty Mutual Insurance Co.*, <u>https://www.scotusblog.com/wp-content/uploads/2015/09/14-181ts.pdf</u>.

<sup>&</sup>lt;sup>33</sup> Liberty Mutual Insurance Co. v. Donegan, 746 F.3d 497 (2d Cir. 2014).

<sup>&</sup>lt;sup>34</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. \_\_\_\_ (2016)

The Court's majority opinion concluded that state laws requiring administrators to submit data about self-insured plans were "related to" a group health plan within the meaning of ERISA. Under the Court's prior ERISA jurisprudence, one important question was the extent to which the state law overlapped with "the objectives of the ERISA statute." The Court emphasized that ERISA included record-keeping and reporting requirements and that while current ERISA regulations did not directly compel self-insured plans to submit claims data to federal regulators, the statute provided authority for the federal government to require submission of additional data.<sup>35</sup> Given this overlap between the "objectives" of ERISA and these state laws, the states' reporting requirements were preempted.

The scope of federal data collection authority was also addressed in a separate concurrence by Justice Breyer. Breyer noted that federal law allowed the government to collect information related to health care claims that was very similar to the data state APCDs were collecting, and he wrote to emphasize that this federal authority provided a pathway for states to access the data they sought. He noted that the federal government could collect claims data and conduct analysis on behalf of the states, share data with the states, or "delegate" authority to collect data to "a particular state."<sup>36</sup>

## Consequences of the Gobeille Decision

Today, state APCDs are continuing to collect and analyze data from insured group health plans, which represent about 39% of the employer market nationally.<sup>37</sup> State APCDs can also require data collection from self-insured non-federal governmental health plans (i.e., state and local government employee health plans), which are not regulated under ERISA or affected by ERISA preemption These plans account for a significant fraction of total enrollment in most states since state government and public universities are major employers almost everywhere in the country. Finally, states generally allow voluntary submission from self-insured plans (other than governmental plans).

We are unaware of any comprehensive data on how many self-insured plans still submit to APCDs, but fragmentary evidence suggests that states are receiving a limited amount of data. For example, Maryland reports that it collects data for 25-30% of self-insured enrollees, primarily from governmental plans, and Massachusetts estimates that it collects data for about 25% of self-insured enrollees.<sup>38</sup> Our conversations with stakeholders suggest that some large employers, particularly those that have an institutional connection to the APCD mission like health systems or universities, do opt in to data-sharing with state APCDs and that some states have also worked with Chambers of Commerce or other local stakeholders to encourage employers to opt in. However, stakeholders suggest that these efforts have borne limited fruit, and data collection from non-governmental self-insured plans is fairly limited and non-representative.

Nor are there obvious steps states could take to substantially increase submission by self-insured plans. States could try to require third-party administrators to submit self-insured plan data unless the employer affirmatively opts out of submission, but given that many plan administrators may prefer not to submit data for the various reasons discussed above, opt outs would likely be common. Alternatively, states could require that any insurance company that wished to sell *insured* health benefits in the state must incorporate submission to the state APCD into its contracts with employers for which it administers self-insured plans. But this strategy would not reach all self-insured plans, and courts might conclude that this type of regulatory bank shot was also preempted under ERISA.

<sup>37</sup> "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-section/ehbs-2019-section-10-plan-funding/</u>.

<sup>&</sup>lt;sup>35</sup> Id. ("The State's law and regulation govern plan reporting, disclosure, and—by necessary implication—recordkeeping. These matters are fundamental components of ERISA's regulation of plan administration.")

<sup>&</sup>lt;sup>36</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. \_\_\_\_ (2016) (Breyer, J., concurring). <sup>37</sup> "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-</u>

<sup>&</sup>lt;sup>38</sup> The Maryland Health Care Commission, "MCDB Data Release," January 14, 2020,

https://mhcc.maryland.gov/mhcc/pages/apcd/apcd\_data\_release/apcd\_data\_release\_mcdb.aspx; "Massachusetts All-Payer Claims Database, 2014-2018 Documentation Guide," *Center for Health Information and Analysis*, February 2020, https://www.chiamass.gov/assets/docs/p/apcd/apcd-8.0/APCD-Release-8-Documentation-Guide.pdf.

The loss of self-insured data makes state APCDs less useful than they were prior to *Gobeille* in at least four important respects:

- **Loss of comprehensiveness:** APCDs that lack complete self-insured data are not true allpayer databases since, as noted earlier, about one-third of all covered people are enrolled in self-insured group health plans. That large gap makes it difficult or impossible to use the APCD to track aggregate insurance enrollment or to study transitions among different coverage types, eliminating one of the major advantages of APCDs relative to other data sources.
- **Loss of representativeness:** The enrollees omitted when APCDs lose access to self-insured data are a non-random subset of people with employer coverage. Notably, large employers are far more likely to be self-insured; in 2019, just 17% of health insurance enrollment was in self-insured plans among firms with fewer than 200 workers, compared to 80% for firms with 200 or more workers.<sup>39</sup> The share of workers in self-insured plans also varies widely by industry and region, presumably in part reflecting variation in the firm size distribution across those categories. Consequently, state APCDs that lack self-insured data may offer a skewed picture of the market as a whole and will generally be unsuitable for studying how claims spending varies across firms of different types, particularly larger and smaller firms.
- **Smaller sample sizes:** Due to the large number of covered lives in self-insured plans, exclusion of self-insured data from state APCDs also substantially reduces the size of those databases. Smaller samples sizes can create problems for many analyses but are particularly problematic for efforts to measure the efficiency or quality of care at the provider level since the total number of patients seen by many providers (across all plan types) is often modest.
- **Inability to study differences between insured and self-insured plans**: APCDs that lack data from self-insured plans cannot be used to compare insured and self-insured plans. Because of ERISA preemption, insured health plans are subject to many state regulations that self-insured plans are not, so comparing outcomes under the two types of plans can provide useful insights about the effects of those regulations.<sup>40</sup> Some research has also found that health insurance companies behave differently when acting as third-party administrators for self-insured plans than when they sell insured coverage, a pattern that merits greater study.<sup>41</sup>

#### Limitations of Relying on a Patchwork of State APCDs

The *Gobeille* decision was a significant blow to state APCDs, but even the APCDs that existed before the decision fell short of realizing APCDs' full potential. Because existing APCDs are run by the states, they operate independently of one another and do not exist everywhere. In several ways, this state of affairs has made existing APCDs less effective than they could be in supporting public reporting, research, and policymaking, while increasing administrative costs for both payers and governments.

#### Challenges in Combining Data from Multiple States

Many potential applications of APCD data require combining data for multiple states. Most prominently, research aimed at learning about the effects of state policies commonly involves comparing outcomes in states that have implemented a particular policy to states that have not and thus requires data for multiple states. In other cases, data from multiple states may be necessary to achieve adequate statistical power, particularly when studying phenomena that operate at the provider

<sup>&</sup>lt;sup>39</sup> "2019 Employer Health Benefits Survey," *Kaiser Family Foundation*, September 25, 2019, <u>https://www.kff.org/report-section/ehbs-2019-section-10-plan-funding/</u>.

 <sup>&</sup>lt;sup>40</sup> See, e.g., Colleen L. Barry, Andrew J. Epstein, Steven C. Marcus, Alene Kennedy-Hendricks, Molly K. Candon, Ming Xie, and David S. Mandell, "Effects Of State Insurance Mandates On Health Care Use And Spending For Autism Spectrum Disorder," 36 HEALTH AFFAIRS 1754 (October 2017), <u>https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2017.0515</u>.
 <sup>41</sup> Stuart V. Craig, Keith Marzilli Ericson, and Amanda Starc, "How Important Is Price Variation Between Health Insurers?," *The National Bureau of Economic Research*, October 2018, <u>https://www.nber.org/papers/w25190</u>.

or geographic market level (since, in these cases, the relevant metric of sample size is the number of providers or markets represented in the data set). Similarly, communities interested in understanding in broad terms how their health care systems compare to others will often benefit greatly from being able to compare to communities in other states. Even studies with a purely local focus will sometimes require data from multiple state APCDs if a metropolitan area of interest crosses state boundaries.

Unfortunately, despite the benefits of combining data from multiple state APCDs, we are aware of few studies that have done so (and even those studies that do combine data from multiple state APCDs generally only use data from a small number of APCDs).<sup>42</sup> The dearth of such studies likely reflects two main barriers. First, and likely most important, while most state APCDs allow researchers to access their data if certain conditions are met, as noted earlier, each state has its own application process, its own restrictions on how data can be used, and its own fees for data access. Consequently, accessing multiple states' databases may require a substantial investment of both time and funds. Second, each state APCD collects and stores data in slightly different ways. Thus, adding an additional state to a research project generally requires substantial additional researcher effort to account for the idiosyncratic features of that particular state's data. For both these reasons, research projects that use more than one state database are likely to be prohibitively difficult in most cases.

#### Incomplete Geographic Coverage

Currently, 27 states lack APCDs, and half the country's population lives in a state without an APCD. The most direct consequence of the fact that some states lack APCDs is that these states cannot use APCD data to support research and policy efforts aimed at improving their own health care systems.

But the fact that many states lack APCDs also impedes national efforts to improve the health care system. For example, researchers have used APCD data to evaluate state-level policies, which can offer lessons that are useful to other states and to federal policymakers.<sup>43</sup> APCD data cannot support such studies in states that lack them. And even where barriers to combining data from multiple states can be overcome, the lack of truly national data constrains the sample sizes available to researchers.

Incomplete APCD coverage also limits the utility of APCDs for federal policymaking, even if the data access concerns considered below can be overcome. For example, as noted earlier, some states have used their APCDs to set out-of-network payment standards in legislation addressing surprise billing. But because APCDs do not exist everywhere, that option is not available to federal policymakers. Instead, they have ended up pursuing other approaches to setting payment standards, such as having each insurer compute a standard based on its own data, which have important downsides.<sup>44</sup>

#### Inaccessibility to Federal Policymakers

APCD data may be of use to federal policymakers in areas well beyond surprise billing. The comprehensive picture they provide of the commercial health insurance market can help inform policy analysis and policy development work by both the executive branch and legislative agencies like the

<sup>&</sup>lt;sup>42</sup> For a couple of notable exceptions, see Sarah Gordon, Benjamin Sommers, Ira Wilson, Omar Galarraga, and Amal N. Trivedi, "The Impact of Medicaid Expansion on Continuous Enrollment: a Two-State Analysis," 34 JOURNAL OF GENERAL INTERNAL MEDICINE 1919 (June 21, 2019), <u>https://link.springer.com/article/10.1007/s11606-019-05101-8</u>; Maria de Jesus Diaz-Perez, Rita Hanover, Emilie Sites, Doug Rupp, Jim Courtemanche, and Emily Levi, "Producing Comparable Cost and Quality Results From All-Payer Claims Databases," 25 AMERICAN JOURNAL OF MANAGED CARE 138 (May 2, 2019), <u>https://www.ajmc.com/journals/issue/2019/2019-vol25-n5/producing-comparable-cost-and-quality-results-from-allpayerclaims-databases</u>.

<sup>&</sup>lt;sup>43</sup> See, e.g., Keith Marzilli Ericson, Amanda Starc, "How Product Standardization Affects Choice: Evidence From The Massachusetts Health Insurance Exchange," 50 JOURNAL OF HEALTH ECONOMICS 71, December 2016, https://www.sciencedirect.com/science/article/abs/pii/S0167629616302156.

<sup>&</sup>lt;sup>44</sup> Loren Adler, Matthew Fiedler, Paul B. Ginsburg, and Christen Linke Young, "Comments on the Lower Health Care Costs Act of 2019," *Brookings Institution*, June 6, 2019, <u>https://www.brookings.edu/opinions/comments-on-the-lower-healthcare-costs-act-of-2019/;</u> Loren Adler, Matthew Fiedler, Paul B. Ginsburg, and Christen Linke Young, "Comments on the No Surprises Act," *Brookings Institution*, May 29, 2019, <u>https://www.brookings.edu/opinions/comments-on-the-no-surpriseact/</u>.

Congressional Budget Office. APCD data may also be useful for various "operational" purposes, including anti-trust enforcement by the Department of Justice and Federal Trade Commission.

Unfortunately, because existing APCDs are controlled by the states, they are not routinely available to federal policymakers. To our knowledge, no state provides a specific process by which a federal government agency can gain access to APCD data, although a federal agency might be able to access data through the process available to researchers. Even where processes do exist, federal agencies will face the same challenges researchers face in trying to combine data from multiple states, although their greater resources may increase their ability to overcome them.

#### Inability to Exploit Economies of Scale

The existence of multiple state APCDs also necessitates some administrative duplication. Each state must develop its own data submission policies and protocols, build and maintain its own data systems, manage and clean its own data, as well as produce its own publications and statistical reports based on the data collected.<sup>45</sup> For their part, payers that operate in multiple states incur higher costs to conform to each state's data submission requirements and respond separately to post-submission inquiries regarding data quality issues. The development of the APCD Council's Common Data Layout (CDL), which was described above, may reduce duplicative effort in some areas, but will not in others, and it remains to be seen how widely the CDL will ultimately be adopted.<sup>46</sup>

Because APCD budgets are relatively modest and there is reason to believe that payers' submission costs are modest too, the aggregate cost of this duplication may be small, at least relative to the potential benefits of APCDs and health care spending. Rather, the more important way that state APCDs' limited scale negatively affects their work may be by preventing them from making certain types of investments. For example, as noted earlier, APCD data can be used to produce reports on aggregate trends in health care spending, prices, utilization, and quality across different service types or geographic areas, which can be valuable to a broad array of users, ranging from researchers and policymakers to employers and health insurers. Investing in the staff to produce these types of reports may sometimes be challenging for states, particularly small states. But because producing these types of reports for many geographic areas is only modestly more resource intensive than producing them for a single geographic area, these types of investments would likely be more feasible for an APCD with broader geographic scope.<sup>47</sup> For similar reasons, APCDs with broader geographic scope may be able to justify investing more in efforts to improve data quality since those efforts could be leveraged across a larger database. States' limited financing capacity may also lead APCDs to rely too heavily on fees from data users, which may reduce the data's accessibility for research purposes.

# Federal Policy Options

Recent years have seen bipartisan federal interest in improving APCDs (see Box 2), which suggests that changes in federal policy toward APCDs are indeed possible. In this section, we consider steps federal policymakers could take to make progress in this area. We consider three broad approaches.

The first approach would, through either legislative or administrative action, restore state APCDs' ability to require submission of data for self-insured plans, allowing state APCDs to once again provide a comprehensive picture of how health care services are received and paid for in their states. However, this approach would not address the various other limitations of the existing APCDs discussed above or would address these other limitations in an incomplete or cumbersome way.

<sup>&</sup>lt;sup>45</sup> In practice, some vendors serve multiple state APCDs, which may reduce duplication to some degree.

<sup>&</sup>lt;sup>46</sup> All-Payer Claims Database, "Common Data Layout," <u>https://www.apcdcouncil.org/common-data-layout</u> (last visited September 17, 2020).

<sup>&</sup>lt;sup>47</sup> Notably, the Health Care Cost Institute has produced reports with a national scope.

#### Box 2: Recent Federal Proposals Related to APCDs

Federal policymakers of both parties have shown interest in making APCDs more effective. Most of those proposals have been primarily focused on addressing the problems created by the *Gobeille* decision, but some would also have helped address other problems with current APCDs.

In July 2016, just three months after the *Gobeille* decision, the Obama Administration promulgated a proposed regulation updating its data collection standards for all employee benefits. It did not propose specific language related to the collection of APCD-like information but did seek public comments on what changes it should make to health plan reporting "in light of the Supreme Court's recent decision in *Gobeille v. Liberty Mutual Insurance Co.*" <sup>48</sup> Commenters, including those representing both self-insured plans and APCDs, took this as an indication that the Department of Labor was considering policy along the lines indicated in Justice Breyer's concurrence that would allow state APCDs to regain access to self-insured plan data.<sup>49</sup> The federal government subsequently delayed the update process and withdrew this rule in the fall of 2019,<sup>50</sup> seemingly due to general concerns about regulatory burden not specific to APCDs.

A more concrete proposal was introduced in the summer of 2019 by Senators Lamar Alexander (R-TN) and Patty Murry (D-WA), leaders of the Senate Health, Education, Labor, and Pensions (HELP) committee.<sup>1</sup> In their Lower Health Care Costs Act, they proposed creation of what would essentially be a national APCD, containing data from all states and housed in a non-profit entity. Under their proposal, self-insured plans would be required to submit data to this system. These data would be available to state APCDs on the condition that they provide state-level data on Medicaid and insured plans. States could also require insured plans and other payers to submit data directly. The proposal established a process for research use and provided \$15 million per year in funding.<sup>51</sup>

In addition, in early 2020, Representative Dan Lipinski (D-IL) proposed legislation that focused narrowly on removing the barriers to APCDs created by the *Gobeille* decision. His bill would have simply modified ERISA to allow state APCDs to resume collecting data from self-insured plans.<sup>52</sup> This legislation also included federal grants to support new and existing state APCDs.

Two additional approaches aim to address both the problems created by the *Gobeille* decision and the limitations of relying on an uncoordinated patchwork of state APCDs that pre-dated *Gobeille*. Policymakers could build a national APCD, which could fully address all of the limitations of existing APCDs discussed above. Alternatively, policymakers could seek to harmonize existing state APCDs and make state APCD data available through a federal clearinghouse, which would address some, but not all, of these limitations.

Table 1 summarizes these three potential changes to federal policy toward APCDs, as well as two other prominent proposals. The remainder of this section discusses these proposals in much greater detail.

https://www.reginfo.gov/public/do/eAgendaViewRule?publd=201910&RIN=1210-AB63.

<sup>&</sup>lt;sup>48</sup> Employee Benefits Security Administration, Internal Revenue Service, Pension Benefit Guaranty Corporation, "Proposed Revision of Annual Information Return/Reports," 81 Fed. Reg. 47533 (July 21, 2016),

https://www.federalregister.gov/documents/2016/07/21/2016-14893/proposed-revision-of-annualinformationreturnreports.

 <sup>&</sup>lt;sup>49</sup> See, e.g., APCD Council, Comment Letter Regarding Employee Benefits Security Administration, Annual Reporting and Disclosure Proposed Rule, October 12, 2016, <u>https://www.regulations.gov/document?D=EBSA-2016-0010-0046</u>; BlueCross BlueShield Association, Comment Letter Regarding Employee Benefits Security Administration, Annual Reporting and Disclosure Proposed Rule, December 12, 2016, <u>https://www.regulations.gov/document?D=EBSA-2016-0010-0130</u>.
 <sup>50</sup> 29 C.F.R. § 2520, Fall 2019 Unified Agenda, "Revision of the Form 5500 Series and Implementing Related Regulations Under the Employee Retirement Income Security Act of 1974,"

<sup>&</sup>lt;sup>51</sup> The bill also authorized grants to states to establish and maintain APCDs but did not appropriate funds for this purpose.

	Administrative or legislative?	Allows state APCDs to collect self- insured data?	Pre-Gobeille Limitations of APCDs			
			Facilitates combining data from many states?	Expands APCD coverage?	Ensures federal gov't can access APCD data?	Benefits from economies of scale?
Policy Approaches Considered i	n This Paper					
Enable state collection of self- insured data	Either	Yes, directly	No (or limited)	No	No (or limited)	No (or limited)
Build a national APCD in a federal agency or non-profit	Either, but legislative path more likely	Yes, from national APCD	Yes	Yes, fully national	Yes	Yes
Harmonize state APCDs and create a federal clearinghouse	Either, but legislative path more likely	Yes, directly	Yes, with some limitations	Possibly, via grant funding	Yes	No (or limited)
Other Approaches			.	1	1	
Collect self-insured data nationally and share with state APCDs (Senate HELP proposal)	Either, but legislative path more likely and needed for grants	Yes, from national APCD	Yes, for self- insured data, other data with limitations	Yes, for self- insured data, but not for other data	Yes	Partially
"Federated" approach with payers holding their own data and	Legislative	Only through research queries	No	No	No	No

# Table I: Comparison of Potential Federal Policy Changes to Improve APCDs

executing research queries

## Enable State Collection of Self-Insured Data

Policymakers that wish to restore something like the pre-*Gobeille* status quo could pursue one of two broad paths. The simplest approach would be for Congress to amend ERISA to restore states' ability to obtain data for self-insured plans, but agencies could achieve a similar outcome through rulemaking.

#### Legislative De-Preemption

The Supreme Court's decision in *Gobeille* was a statutory decision (that is, it was based on the Court's interpretation of the text of ERISA), so Congress could restore states' ability to require data submission from self-insured plans by simply amending ERISA. Specifically, the law's preemption clause could be modified to specify that state laws requiring data submission to an APCD are not preempted; Representative Lipinski (D-IL) introduced legislation doing exactly that in early 2020.<sup>52</sup>

Congress has changed the scope of ERISA preemption in a similar past instance: in 1981, the Supreme Court held that Hawaii's employer mandate as preempted by ERISA,<sup>53</sup> and in 1983, Congress modified ERISA's preemption clause to declare that the state law was exempt from preemption.<sup>54</sup> Further, such an approach would not represent a radical departure from how ERSIA's preemption clause has functioned historically. Since the 1990s, ERISA's preemptive scope has been fairly limited in health policy because it is an area of traditional state regulation,<sup>55</sup> so lawmakers need not worry that modifying the preemption clause in this way would disrupt the uniformity of the statutory scheme.

Congress could allow state APCDs to resume data collection with no restrictions. Alternatively, Congress could define the scope of de-preemption more narrowly, allowing states to avoid preemption only when state law meets certain criteria. In principle, this approach could help to address some of the limitations of state APCDs that predated *Gobeille* or ameliorate some stakeholder concerns. This would be a more significant departure from how ERISA's preemption clause has historically been drafted, but it is feasible.<sup>56</sup>

Congress may wish to consider this type of approach in two main areas:

• Data format and submission processes: To address concerns about the burden of data collection, Congress could condition de-preemption on states collecting data in a fairly standardized format. It would be unwise to legislate use of any specific format, such as the APCD Council's Common Data Layout, since that would preclude changes as technology improved. Rather, states could be required to collect data in a format established by federal agencies (likely the Department of Labor, in consultation with the Department of Health and Human Services) through regulation. This standardized format might naturally be the CDL initially but could evolve over time. The standardized format could also, in principle, make some allowance for states to collect state-specific data elements (as the CDL does).

<sup>&</sup>lt;sup>52</sup> Transparency and Accountability in Health Care Costs and Prices Act of 2020, H.R. 6004, 116th Congress (2020), <u>https://www.congress.gov/bill/116th-congress/house-bill/6004</u>.

<sup>&</sup>lt;sup>53</sup> Agsalud v. Standard Oil Co., 454 U.S. 801 (1981).

<sup>&</sup>lt;sup>54</sup> 29 U.S.C. § 1144(b)(5).

<sup>55</sup> See, e.g., Travelers.

<sup>&</sup>lt;sup>56</sup> Note that Justice Thomas has articulated Commerce Clause concerns about ERISA's preemption clause as a whole. For example, in his concurrence in *Gobeille*, he wonders about the extent to which "Congress can exempt ERISA plans from state regulations that have nothing to do with interstate commerce," and he has called upon the Court to reconsider its ERISA jurisprudence as a whole. *Gobeille v. Liberty Mut. Insurance Co.*, 577 U.S. \_\_\_\_ (2016) (Thomas, J., concurring). Legislation that conditions de-preemption on a variety of technical considerations may further exacerbate these concerns, though Justice Thomas's views do not appear to command a majority.

Similarly, Congress could also consider measures to standardize the process by which states submit data to APCDs. This could include standardizing the schedule on which payers are required to submit data or how payers transmit data, although the benefits of standardizing the latter may be small.<sup>57</sup> As with data submission formats, it would be unwise to legislate a particular schedule or transmission process, but Congress could direct the agencies to monitor specific aspects of the data submission process and provide authority for them to standardize elements of that process if opportunities to streamline it became apparent.

Congress could also consider limiting de-preemption to data collection from administrators that are either responsible for a minimum number of self-insured lives in the state or have any insured business in the state. For other administrators, the benefits of collecting the additional data may be small relative to the additional administrative burden created. However, it would be important that any exclusion threshold be set at a reasonably low level in order to ensure that APCDs remain representative of the state market.

Facilitating data use: Congress could also condition de-preemption on APCDs having a suitable process for making data available to federal policymakers, researchers, and potentially other data users to access data. For example, states could be required to provide access to federal policymakers, adopt a harmonized application process for researchers that makes it easier for researchers to obtain data from multiple states, or produce a minimum set of public reports with aggregate data on health care spending. As above, it would likely be unwise to specify the details of these requirements in legislation, so Congress may wish to grant general authority to federal agencies to establish requirements like these in regulation.

Implementing these types of standards would likely reduce the burden on submitting entities and might make it somewhat easier for policymakers and researchers to access data, although they would likely accomplish much less in either area than proposals that would create a national APCD infrastructure. On the other hand, conditions of this kind, particularly conditions that would mandate that states offer broader data access, may require changes in some state laws since not all states provide research use on the same terms. That could meaningfully delay or even block access to self-insured data by some state APCDs. Changes to data collection formats and processes would also involve some transition costs for states and for payers. Efforts by the agencies to define and oversee these standards would also carry some opportunity costs and distract agency staff from other priorities. All of these costs should be weighed against the benefits of greater standardization going forward.

#### Agency De-Preemption

In the absence of new federal legislation, federal agencies have authority to facilitate state collection of data from self-insured plans through regulation. The Supreme Court's majority opinion in Gobeille and Justice Breyer's concurrence both highlighted the federal government's authority under ERISA to establish reporting requirements for all employee benefits. The majority opinion noted that ERISA allows the Department of Labor to compel reporting of "such data or information [that] is necessary to carry out the purposes of" ERISA<sup>58</sup> and to use these data "for statistical and research purposes, and [to] compile and publish such studies, analyses, reports, and surveys."59 The Court also noted that the Affordable Care Act included new reporting requirements for group health plans that could encompass data related to health care claims.<sup>60</sup> This is perhaps a more expansive view of the ERISA data collection authorities than the Department of Labor has previously adopted, but the majority opinion reflects the Court's view that ERISA grants the agency authority to collect granular information from group health plans.

<sup>57</sup> States generally use routine technical transactions for submission and whatever burden exists arises from the mechanics of establishing a connection to the APCD, which should generally be relatively easy.

<sup>&</sup>lt;sup>58</sup> 29 U.S.C. § 1024(a)(2)(B). <sup>59</sup> 29 U.S.C. § 1026(a).

<sup>60 29</sup> U. S. C. § 1185d; 42 U. S. C. § 300gg-15a

Justice Brever's concurrence addresses these issues even more directly. He explicitly says that the authorities cited by the majority allow the Department of Labor to require self-insured plans to report data that mirrors the data collected by state APCDs. Further, he crafts what he views as a plausible path for state APCDs to continue to access self-insured data, mediated by the Department of Labor. This is consistent with a theme that Breyer has articulated in a series of concurrences beginning in the mid-1990s: that federal agencies can play an important role in helping courts to understand the preemptive scope of statutes under their jurisdiction.<sup>61</sup>

Specifically, Brever's concurrence envisions that federal government could collect APCD-like information and share the data with states, as appropriate, or the federal government could craft a path for states to access the data directly by "delegating" authority to the states:

I see no reason why the Secretary of Labor could not develop reporting requirements that satisfy the States' needs, including some State-specific requirements, as appropriate. Nor do I see why the Department could not delegate to a particular State the authority to obtain data related to that State, while also providing the data to the Federal Secretary for use by other States or at the federal level. Although the need for federal approval or authorization limits to some degree the States' power to obtain information, requiring that approval has considerable advantages. The federal agencies are more likely to be informed about, and to understand, ERISA-related consequences and health care needs from a national perspective. Their involvement may consequently secure for the States necessary information without unnecessarily creating costly conflicts.62

Federal agencies collecting data from self-insured plans and distributing it to the states is technically feasible, but it is a complex endeavor (discussed further below). However, many stakeholders and scholars believe that Justice Breyer's suggestion that the Department of Labor could "delegate" the authority to collect data to states is a promising alternative for agency action.<sup>63</sup>

Brever's opinion suggests two limits on the way such agency-based de-preemption must be structured, at least in his view. First, Breyer calls upon the agency to reflect an understanding of "ERISA-related consequences" of the action it is taking, which likely requires the Department of Labor to place at least some conditions on states' ability to collect data from group health plans. That is, blanket depreemption of any state data collection efforts related to group health plans may not reflect an appropriately nuanced assessment of what is an appropriate requirement for group health plans under ERSIA's preemption clause. Second, Breyer's concurrence envisions these data being available for use at the federal level. That is, if the information is being collected under the Department of Labor's

<sup>&</sup>lt;sup>61</sup> In a line of cases in which the Court has assessed whether the FDA's approval of and labeling requirements for a product preempts a state tort claim arising from injuries associated with that product, Breyer has emphasized the role that agency judgement can play in helping to understand the scope of preemption, and implicitly called upon agencies to provide that guidance. Medtronic v. Lohr, 518 U. S. 470 (1996) (Breyer, J., concurring in part and concurring in judgment), Wyeth v. Levine 555 U.S. 555 (2009) (Breyer, J., concurring). Cf. Bates v. Dow Agrosciences LLC, 544 U.S. 431 (2005) (Breyer, J., concurring) (addressing similar issues under the EPA's jurisdiction). But see [Sharkey].

 <sup>&</sup>lt;sup>62</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. (2016) (Breyer, J., concurring).
 <sup>63</sup> Sean Bland, Jeffrey Crowley, Lawrence Gostin, "Strategies for Health System Innovation After Gobeille v Liberty Mutual Insurance Company," 316 JOUNRAL OF THE AMERICAN MEDICAL ASSOCIATION 581 (August 9, 2016),

https://jamanetwork.com/journals/jama/article-abstract/2532230; Nicholas Bagley, "A modest proposal for fixing Gobeille," The Incidental Economist, April 20, 2016, https://theincidentaleconomist.com/wordpress/a-modest-proposalfor-fixing-gobeille/; Maura Calsyn, "Policy Options to Encourage All-Payer Claims Databases," Center For American Progress, April 20, 2018, https://www.americanprogress.org/issues/healthcare/reports/2018/04/20/449602/policyoptions-encourage-payer-claims-databases/; John Freedman, Linda Green, and Bruce Landon, "All-Payer Claims Databases - Uses and Expanded Prospects after Gobeille," APCD Council, December 2016,

https://www.apcdcouncil.org/publication/all-paver-claims-databases-%E2%80%94-uses-and-expanded-prospects-aftergobeille; APCD Council, Comment Letter Regarding Employee Benefits Security Administration, Annual Reporting and Disclosure Proposed Rule, October 12, 2016, , https://www.regulations.gov/document?D=EBSA-2016-0010-0046.

authority to determine what is necessary or appropriate under ERISA and the ACA, then the federal government must have some ability to access it.

Breyer's opinion thus suggests that the federal government could, for example, promulgate a regulation delegating to state APCDs the authority to collect claims data from group health plans, provided that the data is collected in the Common Data Layout using a routine electronic format for submission. As with legislative de-preemption, the Department of Labor could also consider limiting this delegation to data collection from plan administrators that are either responsible for at least a minimum number of self-insured lives in the state or have any insured business in the state. Similarly, the federal government could require APCDs that collect data to make the information available for research use, though that may require legislative changes in some states. Regardless of how other researchers access these data, federal agencies must reserve the ability to access the information themselves for enforcement or analysis purposes.

If the agencies pursued this approach, the authority underlying this regulation should follow the outline provided by the Court in *Gobeille*, invoking general ERISA authorities as well as the ACA. Specifically, as described above, ERISA requires plans to file an annual report,<sup>64</sup> and the Court majority explained that this language "permits the Secretary of Labor to 'requir[e] any information or data from any [plan] where he finds such data or information is necessary to carry out the purposes of" ERISA.<sup>65</sup> In addition, ACA section 1311(e)(3) describes a series of data elements related to plan enrollment and health care claims that plans offered through the Health Insurance Exchange must provide to their regulators, along with "other information as determined appropriate."<sup>66</sup> Language codified into other federal statutes requires group health plans as well as other types of insured health benefits to provide the 1311(e)(3) data elements to their regulators, including the Department of Labor for group health plans.<sup>67</sup> But because the 1311(e)(3) data elements are required of many types of health plans – not just group health plans – the 1311(e)(3) authority may not, on its own, confer authority to delegate collection under ERISA to the states. The ERISA authority cited by the Court majority in *Gobeille* more clearly plays that role.

## Create a National APCD

The preceding section considered policies that would restore something resembling the pre-*Gobeille* environment, with self-insured plans (and other payers) submitting data to independent state APCDs. These approaches could be implemented relatively quickly and would enable states to continue their ongoing work with complete data. In implementing this type of approach, Congress and federal agencies could take some steps to reduce administrative costs associated with submitting data to APCDs and perhaps modestly broaden access to these data. However, this approach will fall well short of addressing the other limitations of the existing patchwork of state APCDs, particularly the challenges in combining data from multiple states and the fact that many states lack APCDs. We turn now to approaches that would build a truly national APCD, with data collected from all payers and in all states.

A national APCD could, in principle, be implemented either legislatively or through agency action. As described above, the Supreme Court has suggested that existing statutes convey *authority* to the federal government to collect APCD-like data from insured and self-insured commercial health plans, and the federal government could directly furnish the national APCD with Medicare and Medicaid data. That said, collecting and maintaining these data would be a significant undertaking that would require an investment of funding and human capital. The required sums would likely not be large in the context of the federal health care budget, but building a national APCD would nonetheless be a major commitment requiring interagency effort from the Departments of Labor, Health and Human

<sup>64 29</sup> U.S.C. 1024

<sup>65</sup> Gobeille v. Liberty Mutual Insurance Co., 577 U.S. \_\_\_\_ (2016), quoting 29 U.S.C. § 1024(a)(2)(B).

<sup>&</sup>lt;sup>66</sup> 42 U.S.C. § 13031(e)(3).

<sup>&</sup>lt;sup>67</sup> 42 U. S. C. §§ 300gg–15a.

Services, and Treasury that would take resources away from other departmental priorities. Therefore, expansive federal data collection is most likely to occur if legislation mandates and funds such an effort. However, a motivated administration could likely undertake this initiative in the absence of Congressional action.

Below we describe the architecture of a national APCD, as we envision it. We describe the rules that would govern use of APCD data, privacy and security safeguards, funding requirements, as well as how the role of state APCDs would change following creation of a national APCD. We also address whether it would be preferable to house a national APCD in a non-governmental entity.

#### Architecture of a National APCD

The federal government would require all commercial payers to submit claims level data to a national APCD operated by a federal agency. Given the expertise of the Department of Health and Human Services (HHS) in maintaining Medicare claims and other health care data, it would be the best entity to actually possess and maintain this database. However, it would be appropriate for HHS to operate the project in consultation with the Department of Labor and the Department of Treasury, with which it shares jurisdiction over the requirements applied to health care payers.

Under this approach, all commercial payers – health insurance issuers, insured and self-insured group health plans, and non-federal governmental plans – that meet certain relatively low enrollment thresholds would be required to submit claims data. (Note that this differs from the scope of data collection contemplated by the Senate HELP committee, which required federal data collection only from self-insured payers.<sup>68</sup>) Information would be submitted in a standard format specified by the agencies. Quarterly data submission may best balance policymakers' and stakeholders' desire for current and actionable information with minimizing the burden such data collection places on payers. Federal agency staff or contractors would be responsible for accepting data and performing the same types of quality checks that are conducted by state APCDs today and would have authority to enforce data submission requirements.

The federal government would furnish claims data for major public coverage programs to the APCD. The Centers for Medicare and Medicaid Services (CMS) directly holds claims data for traditional Medicare and collects similar data from Medicare Part D plans and Medicare Advantage plans.<sup>69</sup> CMS also collects claims-level data for state Medicaid programs and Children's Health Insurance Programs via its Transformed Medicaid Statistical Information System (T-MSIS), although there are currently some questions about the quality of the T-MSIS data.<sup>70</sup> If those concerns persist, federal policymakers could consider instead obtaining Medicaid data via agreements with state APCDs, as we discuss below.

The Office of Personnel Management also likely has authority to facilitate collection of data from the Federal Employees Health Benefit Program. Since 2011, the agency has been investing in efforts to establish its own claims database; some carriers have opposed these efforts, but the agency insists it has legal authority to collect these data for its own purposes and for independent research.<sup>71</sup> Using the

<sup>&</sup>lt;sup>68</sup> See Lower Health Care Costs Act, S. 1895, 116th Congress § 303 (2019), <u>https://www.congress.gov/bill/116th-congress/senate-bill/1895</u>.

<sup>&</sup>lt;sup>69</sup> The encounter data collected from Medicare Advantage plans is currently believed to have some data quality problems. See "Report to the Congress: Medicare and the Health Care Delivery System," *MedPac*, June 2019,

<sup>&</sup>lt;u>http://www.medpac.gov/docs/default-source/reports/jun19\_ch7\_medpac\_reporttocongress\_sec.pdf?sfvrsn=0</u>. Ensuring that the national APCD had complete and accurate data would be another reason to continue efforts to improve the quality of these data.

<sup>&</sup>lt;sup>70</sup> "Update on Transformed Medicaid Statistical Information System (T-MSIS)," *Medicaid and CHIP Payment and Access Commission*, October 2019, <u>https://www.macpac.gov/publication/update-on-transformed-medicaid-statistical-information-system-t-msis/</u>.

<sup>&</sup>lt;sup>71</sup> See, "Privacy Impact Assessment for the Health Claims Data Warehouse (HCDW)," *Office of Personnel Management Office of Healthcare and Insurance*, May 8, 2018, <u>https://www.opm.gov/information-management/privacy-policy/privacy-policy/hcdw.pdf;</u> "Congressional Budget Justification and Annual Performance Plan," U.S. Office of Personnel Management,

same authority, policymakers would fold the current effort into the national APCD, which would likely reduce burdens on insurers since carriers submitting to the OPM database would likely be submitting data to the APCD for their other products. The Veterans Health Administration could likely provide its data to the national APCD as well. The Department of Defense maintains similar data for its workforce in the TRICARE Encounter Data system and provides some limited access to civilian researchers.<sup>72</sup> While similar to the information contained in an APCD, these data could have national security implications that limit the degree to which they can be shared; these issues are beyond the scope of this paper, but we believe the Department of Defense could likely share some limited data with a national APCD.

For all payers, we anticipate that the APCD would collect information similar to the information held by existing state APCDs, including the standard fields included on health care claims, patient demographic information, and certain plan characteristics.

#### Uses of APCD Data

We envision that the data held by a national APCD would be used for public reporting, research, and policymaking, like data held by state APCDs. In particular, agencies could produce routine reports on health care utilization, prices, and spending, as well as dimensions of health care quality that can be measured in claims data, both nationwide and disaggregated by geography. These reports would offer data users a sharper and more detailed picture of national trends, and the large sample sizes would particularly improve the ability to compare geographic areas. Agencies would also be able to conduct narrower analyses linked to current national priorities, just as state APCDs have produced analyses related to topics of current public and policy interest, such as the opioid epidemic.

Data in a national APCD would also be used to directly support policy design and implementation. Legislative agencies like the Congressional Budget Office, Government Accountability Office, Medicare Payment Advisory Commission, and Medicaid and CHIP Payment and Access Commission would access these data to conduct policy analysis and oversight through mechanisms similar to those they use to access Medicare and Medicaid data today. Executive branch policymakers could also use the data to conduct analyses to inform policy deliberations and, where relevant, for policy implementation. Use of APCD data for law enforcement or immigration enforcement purposes would be prohibited to avoid any risk of discouraging individuals from seeking appropriate health care (particularly care for substance use disorders), with narrow exceptions for anti-trust enforcement and investigations of health care fraud.

The national APCD would also make its data available to researchers. We expect that researchers could access APCD data in a manner similar to the way they access Medicare and Medicaid claims data today. Basic public use files that strip out all potentially identifying information could be made available through a simple process, and researchers could apply for access to more detailed data sets, subject to stringent privacy protections as described below. The existing Research Data Access Center (ResDAC)<sup>73</sup> that helps researchers apply for and use Medicare and Medicaid data could be expanded to support researchers seeking data from the national APCD.

<sup>72</sup> Office of the Assistant Secretary of Defense for Health Affairs (OSAD(HA),

TRICARE Management Activity (TMA), Human Research Protection Program (HRPP), "Guide for DoD Researchers on Using MHS Data," October 10, 2012, <u>https://health.mil/Reference-Center/Publications/2012/10/10/Guide-for-DoD-Researchers-on-Using-MHS-Data</u>.

February 2018, <u>https://www.opm.gov/about-us/budget-performance/budgets/congressional-budget-justification-fy2019.pdf;</u> Arthur Allen, "Insurers' Doubts Idle OPM Data Warehouse," *Politico*, December 13, 2017, <u>https://www.politico.com/story/2017/12/13/insurers-doubts-idle-opm-data-warehouse-294976</u>.

<sup>&</sup>lt;sup>73</sup> Research Data Assistance Center, "Find, Request and Use CMS Data," <u>https://www.resdac.org/</u> (last visited September 18, 2020).

A national APCD would need to develop rules about data access for organizations that may sell data products derived from APCD data. Medicare currently allows certain "Qualified Entities" (QE) to obtain Medicare data and sell products based on that data, provided that they also combine Medicare data with commercial claims data to produce certain public reports.<sup>74</sup> We believe that there is no reason to bar commercial entities from accessing data and packaging it in ways that may be valuable for downstream users and that a national APCD would ideally create a counterpart to the QE program that enables access to national APCD data, subject to appropriate requirements.

Across all of these uses, policymakers would need to decide whether users of APCD data would be permitted to publicly disclose provider- or payer-level estimates, particularly estimates of negotiated prices. Many state APCDs permit public disclosure of provider-or payer-level data, and the Trump Administration has recently proposed several policies intended to make health care prices more transparent, including requiring providers to make their negotiated prices public.<sup>75</sup>

The main potential advantage of allowing these types of disclosures is that it could support research on natural experiments that involve specific providers and insurers, which can provide insights about health care market dynamics that would otherwise be unavailable.<sup>76</sup> However, provider and payer stakeholders are likely to oppose such disclosures through an APCD. Further, as discussed earlier, some believe that disclosure of negotiated prices could put upward pressure on prices, which would be both substantively undesirable and, as a procedural matter, could lead the Congressional Budget Office to estimate that legislation creating a national APCD that allowed such disclosures would increase federal spending. That said, as also discussed above, other evidence suggests that greater price transparency may not meaningfully increase prices or may even put modest downward pressure on prices. On balance, we lean toward permitting APCD users to report provider- and payer-specific estimates but acknowledge that there are arguments against a permissive approach.

#### Role of Existing State APCDs

If the federal government created a national APCD, the role of state APCDs might change. In particular, we envision the federal government would share with a state APCD all data collected from that state shortly after federal receipt, including data for self-insured plans that state APCDs cannot collect today.<sup>77</sup> While states could continue collecting data from payers themselves, we anticipate that few state APCDs would choose to do so, provided that the federal government adopted appropriate quality control processes and prioritized delivering data to states in a timely fashion.<sup>78</sup> To make ceasing data collection more attractive for states, the federal government could allow state APCDs to direct insured payers to provide some limited state-specific data elements to the national APCD, which would then be part of the data the federal government provided back to the state.

75 See, e.g., U.S. Department of Health & Human Services, "Trump Administration Announces Historic Price Transparency Requirements to Increase Competition and Lower Healthcare Costs for All Americans," November 5, 2019,

<sup>76</sup> See, e.g., Glenn Melnick and Katya Fonkych, "An Empirical Analysis of Hospital ED Pricing Power," 26 AMERICAN JOURNAL OF MANAGED CARE 105 (December 19, 2019), <u>https://www.ajmc.com/journals/issue/2020/2020-vol26-n3/an-</u> <u>empirical-analysis-of-hospital-ed-pricing-power</u>; Mark Shepard, "Hospital Network Competition and Adverse Selection: Evidence from the Massachusetts Health Insurance Exchange," *Harvard Kennedy School of Government*, August 1, 2016, <u>https://scholar.harvard.edu/files/mshepard/files/mshepard\_hospitalnetworksselection\_Aug2016.pdf</u>.

<sup>&</sup>lt;sup>74</sup> "Qualified Entity Program," U.S. Centers for Medicare & Medicaid Services, October 15, 2019, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/QEMedicareData</u>.

https://www.hhs.gov/about/news/2019/11/15/trump-administration-announces-historic-price-transparency-and-lowerhealthcare-costs-for-all-americans.html.

<sup>&</sup>lt;sup>77</sup> This approach, as well as the possible approach to Medicaid collection described in the next paragraph, parallels the approach envisioned for self-insured data under the Senate HELP Committee's Lower Health Care Costs Act.

<sup>&</sup>lt;sup>78</sup> Medicaid data is a possible exception, as noted above. If T-MSIS data were determined to be inadequate, state APCDs could continue to obtain Medicaid data from their state Medicaid agencies and provide those data to the national APCD in exchange for the data collected by the national APCD (paralleling the structure envisioned in the recent Senate HELP bill).

Over the long run, centralizing data collection would reduce states' data collection costs, allowing them to focus their resources on data analysis and policy support. In the near term, however, the creation of a national APCD would impose some transition costs. Receiving data from the national APCD (rather than receiving it directly from each payer) would require state APCDs to develop processes for accepting and integrating that information into their data systems. It may also require changes in state law to align privacy or other standards.<sup>79</sup> Note that, in contrast to the HELP Committee's bill, we envision a process where the national APCD would collect all data, not just data for self-insured plans. In addition to better facilitating use of the data by federal policymakers and multi-state analyses, we believe this approach ultimately reduces burden for state APCDs because the HELP process would require states to build the ability to accept national data without relieving them of the need to maintain their own data collection systems.

States would lose some control in the shift to national data collection. While they would retain the ability to collect limited state specific elements and could likely adapt to the standardized data format, they would not be able to direct data submission from small entities or mandate certain formatting. Nor would they be able to oversee submission, conduct their own quality control processes, or leverage their in-state relationships to promote timely and accurate compliance with reporting standards. That said, we expect a national APCD could achieve the same – or better – levels of overall data quality through a national quality control process and clearly articulated federal penalties for noncompliance.

#### Privacy and Security Safeguards

A national APCD would be powerful because it contains detailed information about health care delivery, including who received which health care services, who delivered those services, and who paid for them. But those data are obviously sensitive and, as noted earlier, some observers have expressed concern that holding claims-level information in a federal database poses risks to privacy. An important question, therefore, is how to ensure the privacy and security of data held in a national APCD.

To start, we note that while a national APCD is a new undertaking, it would not present fundamentally novel privacy or security concerns. As noted above, the federal government already possesses large amounts of claims data through operation of the Medicare and Medicaid programs, and, while there have been isolated security incidents, we are unaware of any significant data breach resulting from the use of claims data for program operations, public reporting, or research, a notable contrast with some private payers.<sup>80</sup> Consistent with this, the privacy and security of data in a national APCD can be ensured by adapting the procedures that the federal government already uses to safeguard claims data.

The starting point should be to ensure that the APCD is subject to the Privacy Act, which protects the privacy and security of personal information held by the government, as well as the privacy and security requirements that apply to covered entities under the Health Insurance Portability and Accountability Act (HIPAA), which protect health information generally. The former would likely be automatic, while making an APCD subject to HIPAA rules could require explicit action by policymakers.<sup>81</sup>

Tying an APCD's privacy and security safeguards to these existing federal laws would be superior to creating a new legal framework to govern privacy and security for the APCD. These existing frameworks have generally been successful in protecting health information held by the federal government. Indeed, the Privacy Act and HIPAA are the principal laws that govern CMS' handling of

<sup>&</sup>lt;sup>79</sup> See APCD Council, on behalf of State APCDs, Letter to the U.S. Senate Committee on Health, Education, Labor and Pensions regarding the Lower Health Care Costs Act of 2019, June 5, 2019,

https://www.apcdcouncil.org/sites/default/files/media/lowerhealthcarecostsact\_comments\_06052019\_final.pdf. <sup>80</sup> See, e.g., Nate Lord, "Top 10 Biggest Healthcare Data Breaches of All Time," *Data Insider*, June 25, 2018, <u>https://digitalguardian.com/blog/top-10-biggest-healthcare-data-breaches-all-time</u>.

<sup>&</sup>lt;sup>81</sup> In particular, it is unclear whether an APCD would be a "covered entity" within the meaning of HIPAA and, thus, whether HIPAA's privacy and security rules would automatically apply to an APCD.

Medicaid and Medicare claims data, and, as noted above, we are unaware of any significant data breaches affecting these claims databases. Linking protections for APCD data to these existing statutes also takes advantage of the fact that these statutes, as well as their accompanying guidance and regulations, are periodically updated in response to changing technology and other developments.

We envision that—pursuant to these laws—an APCD would adopt procedures to prevent inappropriate disclosure similar to those CMS uses to control access to Medicare and Medicaid claims data. For example, all researchers seeking identifiable data from CMS (that is, data from which an individual's identity could potentially be discerned) must sign a data use agreement in which they agree to abide by specified security requirements and agree not to release results pertaining to groups of people smaller than 11.<sup>82</sup> Researchers seeking datasets that contain the largest array of identifiable data elements must additionally submit a detailed application describing why their research project requires identifiable data, and the study must pass human subjects review by an Institutional Review Board operating under the Common Rule as well as review by the CMS Privacy Board.<sup>83</sup> Many studies using CMS data now access and analyze those data via CMS' Virtual Research Data Center, a secure computing environment maintained by CMS, rather than by receiving the data files directly, which allows CMS to retain control over the data even when used by researchers; a similar approach could be used in the context of a national APCD. Similar processes apply to other non-CMS users, including state governments and other federal agencies.<sup>84</sup>

We believe these procedural safeguards aimed at preventing inappropriate disclosure are the most important part of efforts to protect the privacy and security of information held by an APCD. However, as a further step to address privacy and security concerns, policymakers could consider limiting the APCD's ability to collect or retain identifiable data. In considering options like these, it is useful to distinguish between two types of identifiable data elements:

• **Direct identifiers.** Health care claims data contain some fields that directly identify patients, such as a patient's name or social security number.<sup>85</sup> Completely barring the APCD from interacting with direct identifiers would make it impossible to use the APCD for longitudinal analyses that follows patients over time as they are served by different providers and covered by different insurers, which would substantially limit the questions an APCD could answer. For example, being unable to follow patients would make it impossible to use an APCD to study the care patients receive over the course of a pregnancy or in connection with a chronic disease.

However, it is possible to facilitate longitudinal analyses without retaining direct identifiers within the APCD. In particular, it is possible to use direct identifiers in the original data to create an "encrypted" unique identifier that links together different records corresponding to the same person but does not itself reveal any identifying information. Indeed, with rare exceptions, CMS only provides encrypted unique identifiers when making Medicare and Medicaid data available for analytic use, and many other entities that hold identifiable data follow similar practices.<sup>86</sup> An APCD would almost surely follow similar practices when making

<sup>&</sup>lt;sup>82</sup> "Limited Data Set (LDS) Files," U.S. Centers for Medicare & Medicaid Services, June 30, 2020, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/Data-Disclosures-Data-Agreements/DUA</u> -

\_NewLDS.

<sup>&</sup>lt;sup>83</sup> Research Data Assistance Center, "Research Identifiable File (RIF) Requests," <u>https://www.resdac.org/research-identifiable-files-rif-requests</u> (last visited September 18, 2020).

<sup>&</sup>lt;sup>84</sup> Research Data Assistance Center, "Research Identifiable File (RIF) Requests," <u>https://www.resdac.org/research-identifiable-files-rif-requests</u> (last visited September 18, 2020); "Identifiable Data Files," *U.S. Centers for Medicare & Medicaid Services*, March 20, 2020, <u>https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/Data-Disclosures-Data-Agreements/Researchers</u>.

 <sup>&</sup>lt;sup>85</sup> HIPAA regulations define a longer list of fields considered to be direct identifiers. See 45 CFR § 164.514(e).
 <sup>86</sup> See United States Census Bureau, "Data Ingest and Linkage," September 7, 2016,

<sup>&</sup>lt;u>https://www.census.gov/about/adrm/linkage/technical-documentation/processing-de-identification.html</u> and the cited technical paper for a discussion of how the Census Bureau creates this type of encrypted identifier to enable research using the various identifiable databases it holds.

data available for analytic purposes, but policymakers could go one step farther and bar the APCD from even *holding* anything other than an encrypted identifier on an ongoing basis.

This type of approach could allay some stakeholder concerns and would have the advantage of making the APCD a less attractive target for identity theft or other large-scale fraudulent activities. However, even this restriction would have some downsides. In particular, direct identifiers in real-world claims data often contain minor errors and imperfections, like transposed digits, which can complicate creation of a unique identifier. Completely forbidding an APCD from holding unencrypted direct identifiers would limit the APCD's ability to investigate approaches to creating encrypted identifiers that are more robust to data errors or to take advantage of improvements in methods for creating encrypted identifiers.

• **Indirect identifiers.** Many fields on health care claims databases that do not directly identify patients, such as dates of service, patient age, and patient zip codes, can nevertheless be used to identify individual patients when used in combination with each other and with other fields present on a health care claim.<sup>87</sup> For example, claims data reflecting trauma care in a specific city on a specific date could be linked to news reports. However, preventing an APCD from collecting and retaining these types of indirect identifiers would severely limit the types of research an APCD could support. To take just one timely example, barring the APCD from holding indirect identifiers would likely prevent an APCD from simultaneously holding fine-grained data on both patient age and patient zip code. That, in turn, would reduce the usefulness of an APCD for studying COVID-19 due to the large differences in the pandemic's impact by age and geography.

The claims database that would have been created by the recent Senate HELP proposal would have permitted the non-profit operating the database to collect identifiable information but would have required the non-profit to subsequently de-identify those records.<sup>88</sup> Consistent with the discussion above, this process would allow creation of an encrypted unique identifier and, thus, facilitate use of the database for longitudinal analysis. However, it could require the removal of many data elements that may be indirect identifiers (like zip code or age), seriously limiting the database's capabilities.

#### **Funding Requirements**

We have not produced a detailed estimate of what a national APCD might cost, but similar federal undertakings can provide some guidance on this question. Notably, the Agency for Healthcare Research and Quality (AHRQ) operates the Healthcare Cost and Utilization Project (HCUP), which collects data from state-operated inpatient and outpatient hospital encounter databases and then makes harmonized versions of those databases available to researchers for a fee.<sup>89</sup> It also produces periodic reports based on its data and provides a web-accessible tool that can be used to produce aggregate tabulations without purchasing the underlying discharge databases. Budget documents show that funding for HCUP was between \$9 and \$14 million in fiscal year 2020.<sup>90</sup>

<sup>88</sup> Lower Health Care Costs Act, S. 1895, 116th Congress § 303 (2019), <u>https://www.congress.gov/bill/116th-congress/senate-bill/1895</u>.

us.ahrq.gov/news/exhibit booth/HCUPFactSheet.pdf (last visited September 17, 2020).

<sup>90</sup> See "National Institute for Research on Safety and Quality (NIRSQ)," Department Of Health And Human Services National Institutes Of Health,

<sup>&</sup>lt;sup>87</sup> See, e.g., Gregory Simon, Susan Shortreed, Yates Coley, Robert Penfold, Rebecca Rossom, Beth Waitzfelder, Katherine Sanchez, and Frances Lynch, "Assessing and Minimizing Re-identification Risk in Research Data Derived from Health Care Records," 7 THE JOURNAL FOR ELECTRONIC HEALTH DATA AND METHODS 6 (March 29, 2019),

<sup>&</sup>lt;u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6450246/;</u> Khaled El Emam, Elizabeth Jonker, Luk Arbuckle, and Bradley Malin, "A Systematic Review of Re-Identification Attacks on Health Data," 10 PLOS ONE 4 (December 2, 2011), <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3229505/</u>.

<sup>&</sup>lt;sup>89</sup> "HCUP Fact Sheet," Healthcare Cost and Utilization Project, <u>https://www.hcup-</u>

https://www.ahrq.gov/sites/default/files/wysiwyg/cpi/about/mission/budget/2021/FY\_2021\_CJ\_NIRSO.pdf (last visited September 18, 2020). The budget request indicates that AHRQ funding for HCUP and several other activities totaled \$14.3 million in fiscal year 2020, which places an upper bound on the amount spent on HCUP. The request also indicates that the

The analogy between a national APCD and HCUP is imperfect. A national APCD would receive data from a greater number of entities than HCUP and would receive and manage a greater variety of types of data. A national APCD would also need to do all of its own data quality checks, whereas HCUP is able to rely to some degree on data quality checks performed by its state partners. On the other hand, a national APCD would collect data through a uniform process and format, whereas each of HCUP's state partners submits data in slightly different form, which could reduce the effort a national APCD would need to invest in harmonizing different data sources.

On balance, we expect that operating a national APCD would be a more complex undertaking than operating HCUP, though not overwhelmingly so. Correspondingly, a reasonable guess might be that a national APCD would cost around twice what it costs to operate HCUP or around \$20 million per year. Costs are likely to be higher initially as the APCD creates its basic data systems, so policymakers would likely need to provide additional start-up funding, perhaps on the order of \$40 million. These estimates are consistent with the evidence described above that reveal state APCD operating budgets (operating on a smaller scale with fewer payers) of \$1.6 to \$4.4 million. Similarly, the Office of Personnel Management spent approximately \$10 million to develop a claims database for the FEHB program.<sup>91</sup> Further analysis to refine these cost estimates would be worthwhile.<sup>92</sup>

#### An Alternative Governance Structure: Housing a National APCD Within a Non-Profit

Some stakeholders have expressed concern about creating a federal database that holds detailed claims information. While some of those concerns reflect questions about how policymakers would maintain the security of APCD data, which we discussed above, some stakeholders may also harbor a general uneasiness about the government, particularly the federal government, possessing such a large quantity of health information, separate from fears regarding a potential breach.

As noted above, it is not fundamentally novel for a government entity to hold these types of data; the federal government holds claims data for the Medicare and Medicaid programs, and state APCDs will continue to exist and possess similar data in the absence of federal legislation. Nevertheless, given stakeholder concerns, policymakers have considered an alternative where Congress would direct that the national APCD data be collected and maintained by a non-profit organization under contract with the federal government.<sup>93</sup>

Under this type of approach, a non-profit entity (likely an existing organization that has experience with health care claims data) would receive a time-limited contract with the federal government. As a contractor, they would receive claims data from payers, make those data available to a variety of authorized users, and conduct their own research. A board of experts and stakeholders would provide oversight and advice on the maintenance and handling of the data. While contractors would almost certainly be involved in supporting any APCD that was housed within a federal agency, this type of approach differs by providing more autonomy and direct responsibility to the contractor.

Administration's fiscal year 2021 proposal to provide \$8.8 million for HCUP alone would only partially fund HCUP, which provides a lower bound on the amount spent on HCUP.

<sup>&</sup>lt;sup>91</sup> Arthur Allen, "Insurers' Doubts Idle OPM Data Warehouse," *Politico*, December 13, 2017,

https://www.politico.com/story/2017/12/13/insurers-doubts-idle-opm-data-warehouse-294976.

<sup>&</sup>lt;sup>92</sup> CMS also collects claims data and other similar data from health insurers to operate risk adjustment programs and for other similar purposes, including from insurers in the Medicare Part D program, the Medicare Advantage program, and the individual and small group markets. These data collection functions performed by these systems are, in most important respects, closely analogous to the functions that would need to be performed by a national APCD. Unfortunately, public estimates of spending on those systems is not readily available because budget documents combine spending on these data systems with other agency activities. However, the cost of those data systems would provide a useful datapoint for estimating the cost of a national APCD.

<sup>&</sup>lt;sup>93</sup> See Lower Health Care Costs Act, S. 1895, 116th Congress § 303 (2019), <u>https://www.congress.gov/bill/116th-congress/senate-bill/1895</u>.

The framework poses important governance challenges, though steps can be taken to mitigate these difficulties to some degree. Specifically, three strategies can help ensure that the entity remains accountable to federal policymakers and the public interest:

- **Flexibility to change contractors.** Authorizing legislation and agency contracts should ensure that the federal government retains the ability in practice, and not just in theory to change contractors in the face of poor performance. The federal government should retain ownership of software products and require transition assistance in its contracts, and legislation should be drafted broadly to ensure multiple entities could be viable contractors.
- **Policymaker access to data.** Authorizing legislation and agency contracts should ensure that executive and legislative agency staff have flexible access to the data and are able to pursue agency objectives without interference from the contractor.
- **Clear federal control**. While a stakeholder board can provide some additional oversight of contractor performance, it is important that the federal government itself retain the authority to supervise the contractor and hold it accountable in the event of poor performance. Stakeholders should not gain the ability to direct research away from areas that affect their commercial interests.

In addition to potentially offering a more politically appealing path, a contractor-led approach may offer additional flexibility and agility in research. Contractors operating with significant autonomy could be effective in quickly developing usable data products that reflect emerging interests. On the other hand, even with governance safeguards, the inherent difficulties in holding an outside entity accountable raises the risk of poor performance.

## Harmonize State APCDs and Create a Federal Clearinghouse for APCD data

If building a national APCD is judged infeasible or undesirable, a less ambitious approach would be to attempt to "stitch together" the current patchwork of state APCDs in ways that can overcome some—though not all—of the shortcomings of relying on a network of state APCDs. In many respects, this approach would mirror the approach the federal government has taken to stitch together state hospital encounter databases via the Healthcare Cost and Utilization Project (HCUP) operated by the Agency for Healthcare Research and Quality (AHRQ). Like creating a national APCD, it would likely be feasible to pursue this approach through agency action, but this type of project would be most likely to succeed if Congress mandates and funds the effort.

This approach would involve four main steps:

- **Facilitate state collection of data from self-insured plans.** To ensure that the state APCDs are able to provide a comprehensive picture of their commercial insurance markets, the federal government would grant state APCDs the authority to collect data from self-insured plans if they provided data to the federal clearinghouse described below. This could occur via either the legislative or administrative pathways described earlier.
- **Provide performance-contingent grants to state APCDs.** The federal government would provide grant funding to state governments to support the creation and maintenance of APCDs, with two objectives. First, the grant funding would encourage states that do not currently operate APCDs to set them up.<sup>94</sup> Second, the funding would allow the federal

<sup>&</sup>lt;sup>94</sup> The federal government has had some success in using grant funding to encourage states to invest in data collection efforts. See, e.g., U.S. Centers for Medicare & Medicaid Services, "Rate Review Cycle III Funding Opportunity: Frequently Asked Questions," September 18, 2020, <u>https://www.cms.gov/CCIIO/Resources/Fact-Sheets-and-FAQs/rr-foa-faq-6-6-2013</u>.

government to place certain requirements on how state APCDs collect and share data, as described below.

While it might be possible to use existing funding to support this type of grant program, ideally this grant program would be created and funded legislatively. To allow states to make long-term plans and investments, legislation should ideally provide a permanent mandatory appropriation. In light of the data on typical state APCD budgets discussed earlier, a reasonable estimate is that grant funding on the order of \$2 million per state per year would be adequate to encourage state APCDs to comply with federal requirements. Inducing new states to set up APCDs might require larger amounts, as discussed below.

• **Create a federal clearinghouse for APCD data.** State APCDs that accept federal grant funds or wish to collect data from self-insured plans would be required to report the data they collect (including data reported by fully-insured plans) to the federal government, which would then integrate the various states' data with federal Medicare and Medicaid data in a single harmonized database.<sup>95</sup> As noted earlier, HCUP successfully performs a similar function with respect to state hospital encounter databases. Indeed, policymakers could consider making the federal clearinghouse part of the broader suite of HCUP databases.

As with a national APCD, we anticipate that the federal government would use the harmonized database to produce public reports and make the database available to researchers and policymakers. Similarly, we anticipate that the database would abide by privacy and security safeguards similar to those we envision for a national APCD.

The federal government would need to commit meaningful resources to support this type of clearinghouse. While we have not developed a formal cost estimate, the \$9-14 million per year that the federal government currently spends on HCUP provides a reasonable point of comparison. Relative to HCUP, the clearinghouse would need to manage a greater variety of types of data but would have somewhat greater control over how that data is collected and submitted. On balance, we suspect that operating the clearinghouse would be modestly more complex than operating HCUP. Correspondingly, while a reasonable guess is that operating the clearinghouse might cost around \$15 million per year on an ongoing basis, spending needs would likely be higher initially, and further analysis would be worthwhile. Some resources might be available in existing funding streams, but ideally Congress would pass new legislation directing the federal government to pursue this project and appropriating the needed funds.

• Set common data collection standards. To maximize the utility of the federal clearinghouse, the federal government would need to require state APCDs to abide by certain minimum data collection standards (for both insured and self-insured plans). Those standards would need to specify the minimum set of data elements states are required to collect, the schedule on which states would be required to collect and submit data, and a set of data quality standards that states would be expected to meet. Indeed, one limitation on the HCUP databases has been that some states' discharge databases do not collect certain data elements or do not collect those data elements in comparable ways, which can complicate multi-state research projects.<sup>96</sup> Federal policymakers could simultaneously seek to standardize how state APCDs collect data from payers, including by setting standards for the submission format and process akin to those discussed in the context of legislative and agency de-preemption. Compliance with all of these data collection standards could be made a condition of the grant

<sup>&</sup>lt;sup>95</sup> As under a national APCD, if data quality concerns with the T-MSIS data held by CMS persisted, the clearinghouse could consider instead collecting those data via the state APCD.

<sup>&</sup>lt;sup>96</sup> See Healthcare Cost and Utilization Project, "Availability of Data Elements by Year," August 2, 2019, <u>https://www.hcup-us.ahrq.gov/db/state/siddist/siddist\_ddeavailbyyear.jsp</u>.

funds described above or of granting states the authority to collect data from self-insured plans.

This approach would be a substantial improvement over the status quo. Notably, it would restore the comprehensiveness of state APCDs, make it much easier to combine data from multiple states to support public reporting, research, and policymaking, as well as ensure that federal policymakers have ready access to APCD data.

However, relative to creating a national APCD, this approach would have some important limitations. First, while the grant funding we envision under this approach might encourage some additional states to create APCDs, it is unlikely to motivate all states to overcome the political opposition that APCDs can engender. Second, even with the common data collection standards envisioned above, it is unlikely that data would be perfectly comparable across states with so many different entities responsible for data collection. Third, harmonizing data submission process in the ways envisioned above would likely only modestly reduce administrative burdens for payers required to submit to multiple states, and it would do essentially nothing to reduce duplication of state APCD infrastructure.

Policymakers could, in principle, address the first of these problems (incomplete coverage) by allowing the federal government to operate a federal APCD in states that decline to set up an APCD or that wish to cede these functions to the federal government, essentially creating a hybrid of the clearinghouse approach envisioned in this section and the national APCD approach discussed earlier. This approach could ensure truly national coverage and create a platform that could encourage migration toward a truly national APCD over the long run, albeit at higher cost at least in the short run.

The recent Senate HELP Committee proposal (see Box 2) offered a different form of hybrid approach, with some advantages and disadvantages relative to the hybrid approach discussed in the last paragraph. On the positive side of the ledger, the HELP bill envisioned the federal government handling all data collection related to self-insured plans, which would likely both improve data quality and reduce administrative burden. However, the HELP bill had no mechanism to collect insured data in states without APCDs, and it is unclear whether the HELP bill would have provided the authority required to regulate state APCDs' data collection practices as we envision above.

## A Note on "Federated" Alternatives to APCDs

As an alternative to the policy approaches considered in this section, particularly creating a national APCD, some health plans have suggested creating a "federated" or "distributed" claims data system. <sup>97</sup> Under this approach, each plan would retain possession of its own data, but data users could query those plan-specific databases under certain circumstances. We are unaware of any fully fleshed-out proposal to create a federated system as an alternative to an APCD. However, advocates of this approach seem to have two broad architectures in mind, each of which we discuss in turn.

Under the first architecture, payers would transmit only aggregate summary statistics in response to queries from data users.<sup>98</sup> This structure mirrors the External Data Gathering Environment (EDGE)

<sup>&</sup>lt;sup>97</sup> See, e.g., "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018, <u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf;</u> Sheryl Turney, "Claims-based Databases for Policy Development and Evaluation: Testimony before the National Committee on Vital and Health Statistics," June 17, 2016, <u>https://www.ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-3-Sheryl-Turney-Anthem-2016June17.pdf;</u> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://www.ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-3-Sheryl-Turney-Anthem-2016June17.pdf;</u> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://www.ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-3-Sheryl-</u>

<sup>&</sup>lt;u>https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-without-password.pdf;</u> Blue Cross Blue Shield Association. "Ensuring the Privacy and Security of Patient Data Distributed Secure Access Data Model," (on file with authors).

<sup>&</sup>lt;sup>98</sup> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-without-password.pdf</u>.

servers used to collect data from payers for the individual and small group market risk adjustment programs.

This type of system would be dramatically less useful to data users than a traditional APCD. Most importantly, because end users would receive only summary statistics from each contributing payer's data, end users would need to write specialized code to compute market-wide aggregates, rather than calculating such amounts using standard statistical packages. For anything more complicated than calculating market-wide means (e.g., fitting a regression model), this would be a formidable task. And some analyses would be effectively impossible under this structure because many statistics—including statistics as simple as the market-wide median payment for a particular service—cannot be calculated based solely on summary statistics from each payer's data. It is also often hard to assess data quality and modify analyses to mitigate data quality problems without access to claims-level information, which could threaten the reliability of analyses performed using this type of system.

Advocates of this approach argue that it would better protect the security of claims data. Indeed, data users would no longer be able to access to claims-level information, which would remove one potential source of a breach; however, as discussed earlier, those risk can be mitigated in other ways. And beyond limiting data users' access, the security advantages of this approach are unclear. Each payer would now need to set up an internet-connected server that contains its claims data and responds to queries from data users, rather than submitting data once to the APCD and having the APCD handle interactions with end users. Thus, the number of potential sources of a data breach would be much higher under this type of arrangement, although the number of records exposed in any given breach would be smaller.

Under the second architecture, data users could obtain claims-level information from each payer and assemble a temporary local dataset for analysis.<sup>99</sup> This approach would avoid many of usability pitfalls of the EDGE-like approach described above, but it would still have important weaknesses relative to a traditional APCD; notably, data users could not benefit from the APCD's data curatorial efforts, particularly efforts to identify and resolve data quality problems and ensure comparability of data elements across data submitters. Moreover, this structure would have no meaningful security advantages relative to a traditional APCD and would arguably be worse in light of the fact that, as under the EDGE-like model, each payer would need to host its claims data on its own internet-connected server.

A final important note is that, regardless of the precise architecture, many supporters of federated approaches appear to envision that each individual payer would approve or disapprove use of its data on a case-by-case basis.<sup>100</sup> Indeed, this may be the key feature of a federated approach from the perspective of its proponents. However, given the large number of payers involved, requiring payer approval would likely make using these data prohibitively burdensome in most applications. It would also inappropriately constrain research that payers viewed as opposed to their parochial interests.

# Conclusion

APCDs are important tools for understanding and improving our health care system, but existing APCDs have major limitations. State APCDs' inability to collect data from self-insured plans prevents them from providing a complete picture of health care enrollment and payment within a state. Moreover, the 23 states that have APCDs today encompass only half the population, and our existing

<sup>&</sup>lt;sup>99</sup> Blue Cross Blue Shield Association. "Ensuring the Privacy and Security of Patient Data Distributed Secure Access Data Model," (on file with authors).

<sup>&</sup>lt;sup>100</sup> "Achieving States' Goals for All-Payer Claims Databases," *Anthem Public Policy Institute*, June 2018, <u>https://www.antheminc.com/cs/groups/wellpoint/documents/wlp\_assets/d19n/mzq1/~edisp/pw\_g345393.pdf;</u> <u>https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-without-password.pdf;</u> Joel Slackman, "Hearing On Claims-Based Databases For Policy Development and Evaluation: Testimony before The National Committee On Vital And Health Statistics," June 17, 2016, <u>https://ncvhs.hhs.gov/wp-content/uploads/2016/05/Panel-1a-Joel-Slackman-BCBSA-Written-2016June17-without-password.pdf</u>.

patchwork system makes it difficult to conduct analyses with multiple states' data, limits the availability of these data for federal policymaking, and fails to exploit potential economies of scale.

Federal policymakers have a variety of options to redress these problems. They could: (1) act surgically to undo the effects of the 2016 Supreme Court decision that blocks states from collecting APCD data; (2) build a truly national APCD covering all states and all payers; or (3) work to harmonize existing state APCDs and encourage states that currently lack APCDs to create them.

We believe that creating a national APCD is the best of these approaches. With a small investment of resources relative to national health care spending, policymakers could create a tool that offers a comprehensive picture of the health care system that no existing data source can come close to providing, thereby accelerating efforts by a wide range of public and private actors to better understand and ultimately improve American health care. Efforts to expand state APCD coverage and harmonize existing APCDs could also improve on the status quo (as well as the pre-*Gobeille* status quo) and might encounter somewhat less stakeholder opposition. That said, such a project would achieve less than creating a truly national APCD, and we view it as a decidedly second-best alternative.

Finally, we underscore that if the political will cannot be summoned to pursue these larger projects, either Congress or federal agencies should act swiftly to at least restore states' ability to collect self-insured data. While not costless, this is a fairly simple undertaking that will make existing APCDs far more useful and comprehensive. It would also allow state APCDs to maximize their own potential, hopefully building a constituency for creating a better national infrastructure over the longer-term.



Leonard D. Schaeffer Center for Health Policy & Economics The USC-Brookings Schaeffer Initiative for Health Policy is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics and aims to inform the national health care debate with rigorous, evidencebased analysis leading to practical recommendations using the collaborative strengths of USC and Brookings.

Questions about the research? Email communications@brookings.edu. Be sure to include the title of this paper in your inquiry.

© 2018 The Brookings Institution | 1775 Massachusetts Ave., NW, Washington, DC 20036 | 202.797.6000
# Insurer Participation on the ACA Marketplaces, 2014-2021

#### Daniel McDermott (https://www.kff.org/person/daniel-mcdermott/) and

Cynthia Cox (https://www.kff.org/person/cynthia-cox/) (https://twitter.com/cynthiaccox)

Published: Nov 23, 2020



Since the Affordable Care Act marketplaces opened in 2014, the number of insurers participating on the exchanges has been in constant flux as companies have entered or exited the market, and expanded or reduced their footprint in states.

For the third straight year, several insurers are entering the market or expanding their service area in 2021. This year, we find that 30 insurers are entering the individual market across 20 states (Table 1) and an additional 61 insurers are expanding their service area within states they already operated. There will be an average of 5.0 insurers per state in 2021, up from a low of 3.5 in 2018 but still below the peak of 6.0 in 2015. The number of insurers per state ranges from one company operating in Delaware to thirteen operating in Wisconsin.

The map and chart below show how insurer participation has changed from 2014 through 2021 in every county in the U.S.

#### Figure 1



The number of consumers with multiple insurer options has steadily grown in recent years (Figure 2). In 2021, 78% of enrollees (living in 46% of counties) will have a choice of three or more insurers, up from 67% of enrollees in 2020 and 58% of enrollees in 2019.<sup>1</sup>

More than 200 counties will have 5 or more insurers participating in 2021, including eight insurers offering plans in certain areas of Washington, Ohio and Florida. Only 10% of counties have only a single insurer offering in 2021, down from 52% of counties in 2018 (Figure 2).

Figure 2										
Insurer Participation on ACA Marketplaces, 2018-2021										
One insurer	Two ins	urers	Three or more in	surers						
Counties (2018)	52%				30%			18%		
Counties (2019)	37%			40%			23%			
Counties (2020)	25%		46%			29%				
Counties (2021)	10%	44%			46%					
Enrollees (2018)	26%		27%		48%					
Enrollees (2019)	17%		25%	58%						
Enrollees (2020)	10%	22%		68%						
Enrollees (2021)	19%		78%							
NOTE: Enrollment in 2021 is based on 2020 plan selections. Percentages may not sum to 100 due to rounding. SOURCE: KFF analysis of data from Healthcare.gov and a review of state rate filings.										

Table 1:	States	with	New	Entrants	for	2020
----------	--------	------	-----	----------	-----	------

State	Insurers (Parent Companies) Entering Marketplaces
Arizona	UnitedHealth
Florida	AvMed, Guidewell
lowa	Oscar
Idaho	Cambia Health Solutions
Illinois	Bright Health, Mercy Health, SSM Health
Indiana	Anthem
Kansas	BCBS of Kansas City
Maryland	UnitedHealth
Minnesota	Quartz, PreferredOne
Missouri	BCBS of Kansas City
North Carolina	Oscar, UnitedHealth
New Mexico	Friday Health Plans
Nevada	Friday Health Plans, Selecthealth
Oklahoma	CommunityCare, Oscar, UnitedHealth
Tennessee	UnitedHealth
Texas	Friday Health Plans, Scott and White
Virginia	UnitedHealth
Washington	Community Health Plan of WA, UnitedHealth
Wisconsin	Anthem
Wyoming	Mountain Health

SOURCE: KFF analysis of data from Healthcare.gov and a review of state rate filings.

Although there are an average of 5.0 insurance companies participating per state in 2021, insurers typically do not participate statewide. Insurer participation varies greatly within states, and rural areas tend to have fewer insurers. On average, metro-area counties have 3.1 insurers participating in 2021 (up from 2.6 in 2020), compared to 2.5 insurers in non-metro counties (up from 2.0 in 2020). In 2020, 87% of enrollees lived in metro counties.

Going into 2021, 1,207 counties (38%) are gaining at least one insurer, while only 12 counties nationwide will lose an insurer (net of any entrances). The map below shows net insurer entrances and exits for 2021 by county.

#### Figure 3

## EDPRAFTYGE NAME IN STATION HEAD REPORT OF A CONTRACT OF A



As noted above, there remain several counties with just one exchange insurer, though the number is decreasing. In 2021, 10% of counties (accounting for 3% of enrollees) will have access to just one insurer on the marketplace (a considerable decrease from 25% of counties and 10% of enrollees in 2020).

Figure 4





Often, when there is only one insurer participating on the exchange, that company is a Blue Cross Blue Shield or Anthem plan (Figure 4). <u>Before the ACA (http://kff.org/privateinsurance/state-indicator/market-share-and-enrollment-of-largest-three-insurers-individual-market/?</u> <u>currentTimeframe=2&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D)</u>, state individual markets were often dominated by a single Blue Cross Blue Shield plan.

## **Insurer Participation in Previous Years**

Insurer participation levels have steadily climbed back to levels seen in the early years of ACA implementation. In 2014, there were an average of 5.0 insurers participating in each state's ACA marketplace, ranging from one company in New Hampshire and West Virginia to 16 companies in New York (see Table 2 in the appendix). 2015 saw a net increase in insurer participation and marked the highest levels of insurer participation on the Marketplaces to date, with an average of 6.0 insurers per state. In 2016, insurer

participation dipped slightly to 5.6 companies per state due to due to a combination of some new insurer exits and the failure of a number of CO-OP plans. In 2017, <u>insurance company losses (http://kff.org/health-reform/issue-brief/insurer-financial-performance-in-the-early-years-of-the-affordable-care-act/</u>) led to a number of high profile exits from the market and the average number of companies per state decreased to 4.3.



Although <u>insurance company financial performance improved (https://www.kff.org/health-reform/issue-brief/individual-insurance-market-performance-in-mid-2017/)</u> during 2017, a number of insurers exited the market or reduced their service area going in to 2018 and insurer participation bottomed-out at 3.5 per state, likely driven in part by legislative and regulatory uncertainty surrounding ACA repeal and replace and cost-sharing subsidy payments. In 2018, eight states (Alaska, Delaware, Iowa, Mississippi, Nebraska, Oklahoma, South Carolina, and Wyoming) had just one participating insurer but, despite <u>concerns earlier in the year (https://www.kff.org/interactive/counties-at-risk-of-having-no-insurer-on-the-marketplace-exchange-in-2018/</u>), all counties across the country had at least one insurer in 2018. In 2018, insurers in this market were quite profitable and arguably over-priced.

Despite the zeroing out of the individual mandate penalty, insurance company <u>margins</u> <u>continued to be high (https://www.kff.org/health-reform/issue-brief/individual-insurance-market-performance-in-mid-2018/)</u> in 2019, and a number of insurers entered the market or expanded their service area. The average number of marketplace insurance companies per state in 2019 was 4.0, ranging from one company in five states (Alaska, Delaware, Mississippi, Nebraska, and Wyoming) to more than 10 companies in three states

(California, New York and Wisconsin). In 2020, marketplace insurer participation rose to an average of 4.5 insurers per state, ranging from one company each in Delaware and Wyoming to more than ten companies in California, New York, and Wisconsin. Even during the coronavirus pandemic, the individual market <u>remained stable</u> (<u>https://www.kff.org/private-insurance/issue-brief/individual-insurance-market-performance-in-early-2020/)</u> and participating insurers continued to perform well financially. The new entrants and expansions since 2019, along with steady premiums and profits, serve as evidence that the zeroing out of the individual mandate penalty and expansion of short-term insurance plans did not disrupt the individual market as much as expected.

## Discussion

Despite uncertainties surrounding the ongoing pandemic and its impact on individual market enrollment and insurer viability, insurer participation on the ACA marketplaces is increasing for the third straight year in 2021 and will equal average participation levels at the outset of the marketplaces in 2014. The share of marketplace enrollees with only one insurer option (3%) has continued to decrease and will be the lowest rate since 2016 (when 2% of enrollees had only one insurer option). As has been the case in the previous two years, there are a number companies entering the market or expanding their footprints within states in 2021, exceeding the number of insurers exiting or cutting down on their service area. Nonetheless, the market overall continues to have lower insurer participation than its peak in 2016.

Thus far, insurer financial performance (https://www.kff.org/private-insurance/issuebrief/individual-insurance-market-performance-in-early-2020/) data in 2020 suggests that insurers remained profitable before and during the pandemic. Decreases in health care utilization and claims costs have contributed to relatively the high gross margins (https://www.kff.org/private-insurance/issue-brief/health-insurer-financial-performance-amid-the-<u>coronavirus-pandemic/</u>) among individual market insurers this year. Even though insurers must cover the cost of testing and many have voluntarily waived cost-sharing (https://www.healthsystemtracker.org/brief/cost-sharing-waivers-and-premium-relief-by-private-plansin-response-to-covid-19/) for COVID-19 treatment, insurers are on track yet again to owe substantial rebates to consumers based on low medical loss ratios in 2021 (based on their 2018-2020 experience). Marketplace premiums are falling 1-4% (https://www.kff.org/private-insurance/issue-brief/how-aca-marketplace-premiums-are-changing-by-<u>county-in-2021/</u>) on average in 2021 despite questions about what the pandemic will look like next year and the potential that the Supreme Court will invalidate the Affordable Care Act in their ruling in *California v. Texas*. Combined with these moderate premium decreases, the steady increase in insurer participation on the marketplaces for 2021 highlights the continued stability and attractiveness of the individual market for insurers across the country.

Table 2: Tota	l Number	of Insurers	by S	state 2	2014 - 2021
---------------	----------	-------------	------	---------	-------------

State	2014	2015	2016	2017	2018	2019	2020	2021
Alabama	2	3	3	1	2	2	2	2
Alaska	2	2	2	1	1	1	2	2
Arizona	8	11	8	2	2	5	5	6
Arkansas	3	3	4	3	3	3	3	3
California	11	10	12	11	11	11	11	11
Colorado	10	10	8	7	7	7	8	8
Connecticut	3	4	4	2	2	2	2	2
Delaware	2	2	2	2	1	1	1	1
DC	3	3	2	2	2	2	2	2
Florida	8	10	7	5	4	5	7	9
Georgia	5	9	8	5	4	4	6	6
Hawaii	2	2	2	2	2	2	2	2
Idaho	4	5	5	5	4	4	4	5
Illinois	5	8	7	5	4	5	5	8
Indiana	4	8	7	4	2	2	2	3
lowa	4	4	4	4	1	2	2	3
Kansas	3	3	3	3	3	3	5	6
Kentucky	3	5	7	3	2	2	2	2
Louisiana	4	5	4	3	2	2	3	3
Maine	2	3	3	3	2	3	3	3
Maryland	4	5	5	3	2	2	2	3
Massachusetts	10	10	10	9	7	8	8	8
Michigan	9	13	11	9	7	8	8	8
Minnesota	5	4	4	4	4	4	4	6
Mississippi	2	3	3	2	1	1	2	2
Missouri	3	6	6	4	3	4	7	8
Montana	3	4	3	3	3	3	3	3
Nebraska	4	4	4	2	1	1	2	2
Nevada	4	5	3	3	2	2	3	5
New Hampshire	1	5	5	4	3	3	3	3
New Jersey	3	5	5	2	3	3	3	3

New Mexico	4	5	4	4	4	4	4	5
New York	16	16	15	14	12	12	12	12
North Carolina	2	3	3	2	2	3	4	6
North Dakota	3	3	3	3	2	3	3	3
Ohio	12	15	14	10	8	9	9	9
Oklahoma	4	4	2	1	1	2	3	6
Oregon	11	10	10	6	5	5	5	5
Pennsylvania	7	8	7	5	5	6	7	7
Rhode Island	2	3	3	2	2	2	2	2
South Carolina	3	4	3	1	1	2	4	4
South Dakota	3	3	2	2	2	2	2	2
Tennessee	4	5	4	3	3	5	5	6
Texas	11	14	16	10	8	8	8	10
Utah	6	6	4	3	2	3	5	5
Vermont	2	2	2	2	2	2	2	2
Virginia	5	6	7	8	6	7	8	8
Washington	7	9	8	6	5	5	7	9
West Virginia	1	1	2	2	2	2	2	2
Wisconsin	13	15	16	15	11	12	12	13
Wyoming	2	2	1	1	1	1	1	2
US Average	5.0	6.0	5.6	4.3	3.5	4.0	4.5	5.0

NOTE: Insurers are grouped by parent company or group affiliation.

SOURCES: KFF analysis of data from Healthcare.gov and a review of state rate filings.

## Methods

Data were gathered from healthcare.gov, state-based exchange enrollment websites, and insurer rate filings to state regulators. Companies and related subsidiaries were grouped by their parent or group affiliation using Mark Farrah Associates Health Coverage Portal TM. Enrollment in states using Healthcare.gov is from HHS (with some adjustments made for counties without reported enrollment). In states running their own exchanges, we gathered county-level data enrollment data where possible and if unavailable estimated county level enrollment based on the state's enrollment total. 2021 enrollment is estimated using 2020 plan selections. For most states running their own exchange, insurer participation is measured at the rating area level.

#### Endnotes

## GET THE LATEST ON HEALTH POLICY Sign Up For Email Alerts

Enter email address...

SIGN UP >

## **FOLLOW KFF**

Twitter

Facebook

Instagram

Email Alerts

Feeds



#### © 2021 KAISER FAMILY FOUNDATION

Powered by WordPress.com VIP

CITATIONS AND REPRINTS PRIVACY POLICY

The Henry J. Kaiser Family Foundation Headquarters: 185 Berry St., Suite 2000, San Francisco, CA 94107 | Phone 650-854-9400

Washington Offices and Barbara Jordan Conference Center: 1330 G Street, NW, Washington, DC 20005 | Phone 202-347-5270

www.kff.org | Email Alerts: kff.org/email | facebook.com/KaiserFamilyFoundation | twitter.com/kff

the Kaiser Family Foundation is a nonprofit organization based in San Francisco, California.



# Memo to the Biden Administration Transition Team

From: Trish Riley, National Academy for State Health Policy Executive Director Re: State-based marketplace strategies for insurance market stabilization and improvement Nov. 20, 2020

The National Academy for State Health Policy (NASHP), in close consultation with executives from state-based health insurance marketplaces (SBMs), has developed a list of priority actions that may:

- Lower costs and bring stability to individual and small group health insurance markets;
- Improve access to health insurance coverage; and/or
- Improve consumer experience when purchasing small group or individual market coverage.

NASHP is home to the State Health Exchange Leadership Network, a consortium of state leaders and staff dedicated to operation of the SBMs. This list draws upon the experience of SBM leaders who have spent the past decade building and operating successful platforms for the procurement of health insurance coverage.

These recommendations reflect NASHP's collective discussions with SBM leaders, but do not reflect consensus across all SBMs. States value flexibility to design their programs to meet local needs and circumstances. For additional information specific to each state, please see Appendix A, which includes references to comments submitted by SBMs in response to various policy changes. We have also included the contact information for SBM executives who can provide additional information specific to their states.

NASHP is ready to provide any additional information that may be helpful as you deliberate critically important issues related to health care coverage. Thank you for your time and consideration.

Sincerely,

Trish Riley

Executive Director National Academy for State Health Policy 2 Monument Square, Suite 910, Portland ME 04101 1233 20th St NW, Suite 303, Washington, DC 20036 Phone: (207) 837-4815



# **State-Based Marketplace Recommended Areas for Priority Administrative Action in 2021**

I. Issues of Greatest Urgency	4
Internal Revenue Service Flexibility on Reconciliation Access to Coverage for Qualified Immigrant Populations Reversal of the 1557 Nondiscrimination Regulations Rescind the "Double-Billing" Requirement for Non-Hyde Abortion Services Prohibition of Arrangements Created under the Data Marketing Partnership Case Reporting of State-Mandated Benefits in Addition to Essential Health Benefits (EHBs) Additional Special Enrollment Periods (SEPs) Responsive to Loss of Employment or Income	4 5 6 7 7
II. Issues of High Priority	8
<ul> <li>Simplifying Eligibility         <ul> <li>Encourage alignment of eligibility between coverage programs including APTCs/CSRs Medicaid</li> <li>Eliminate the Family Glitch</li> <li>Amend the Annual Premium Adjustment Percentage Measure</li> <li>No Modifications that Lower the Poverty Threshold</li> </ul> </li> <li>Increasing Affordability         <ul> <li>Maintain state flexibility over response to elimination of federal cost-sharing reduction (CSR) payments</li> </ul> </li> <li>Reducing Market Segmentation         <ul> <li>Limits to Short-term, Limited Duration Plans</li> <li>Association Health Plans (AHPs)</li> </ul> </li> </ul>	8 and 8 9 9 10 10 10 10 11
Limiting Exemptions Allowed to Opt-Out of Contraceptive/Abortion Coverage	12
Consumer Protections Meaningful Difference Standards for Qualified Health Plans (QHPs)	<i>13</i> 13
Supporting State and Administrative Flexibility 1332 Waiver Guidance	<i>13</i> 13
III. Issues of Moderate Priority	14
Increasing Affordability Clarity over options related to use of health reimbursement arrangements to purchase marketplace coverage (OSEHRAs and ICHRAs)	14 14
Flexibility to Enroll in Plans across Metal Levels	15

Adjusting Actuarial Value Calculators to Allow Greater Flexibility for the Sale of	Bronze
Plans	16
Consumer Protections	16
Reinstate guaranteed issue protections for individuals who lose coverage for non-p	payment
of premiums	16
Stricter Oversight of and Requirements for Direct Enrollment Entities	17

IV. Other Notable Issues	18
<i>Reducing Market Segmentation</i> Limit other non-compliant products including health care sharing ministries and direct	18
primary care arrangements	18
Limit Wellness Program Incentives	18
Consumer Protections	19
Improve Consumer Access to 1095-B and 1095-C Forms	19
Supporting State and Administrative Flexibility	19
Preserve Historical Documentation and Data	19
Continue state flexibility over financing for marketplace operations	20
Recommended Best Practices Learned from SBMs	20
Federal Funding and Standards for Navigators	20
Maintain State Flexibility over Open Enrollment Windows	21
Appendix A: Key Contact Information for State-Based Marketplaces	22
Appendix B: State-Based Marketplace Comments on Relevant Federal Regulations	24
Appendix C: Glossary of Terms	28

### I. Issues of Greatest Urgency

The following issues invite immediate attention to mitigate significant negative effects on consumers or insurance markets in 2021; and/or reverse regulations or administrative actions that have yet to be fully implemented but are slated for effectuation in 2021.

#### Internal Revenue Service Flexibility on Reconciliation

### Summary

Advanced premium tax credits (APTCs) are delivered to enrollees based on their estimated income for the year they will be covered. Traditionally, this is based on the historic income data of the individual or household applying for coverage.

Employment, income, and other household disruptions caused by the COVID-19 pandemic will lead to extreme difficulty in enrollees' ability to predict income for the foreseeable future. This unpredictability is exacerbated by the inconsistent, and time-limited provision of federal financial assistance, including the temporary enhanced unemployment insurance provided under the CARES Act and the August 2020 presidential order providing for additional temporary benefits. Federal assistance programs further complicate accurate calculations, in part due to discrepancies in how supplemental unemployment income is counted toward different federal programs, including APTCs and Medicaid.

The difficulty predicting income means that taxpayers who receive APTCs risk substantial unexpected tax liability when reconciling income and APTCs received during the tax year.

### **Proposed action**

• Immediate action by the Treasury Department and Internal Revenue Service (IRS) to provide the maximum relief possible related to reconciliation of APTC for the 2020 and 2021 tax years. This includes a complete exemption from financial liability incurred because of income miscalculations.

#### Access to Coverage for Qualified Immigrant Populations

#### Summary

Federal rules finalized in September 2019 significantly expanded the list of non-cash public benefit programs that the Department of Homeland Security (DHS) can consider in its public charge determinations to include Medicaid for certain immigrants seeking permanent citizenship status.

Proclamations issued in 2019 imposed additional barriers on immigrants including requiring proof of insurance and reinforcing requirements that immigrant sponsor financial benefits be included as part of calculations for immigrants seeking benefits.

Implementation of these policies has had a chilling effect on legal immigrants seeking services for which they are qualified, including subsidized coverage through the health insurance marketplaces even though receipt of APTC is not considered a public benefit under public charge criteria. Immediate action is needed to prevent further uncertainty among individuals and families who qualify for coverage assistance.

Under the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), most qualified, legally residing immigrants are subject to a five-year waiting period (known as the five-year bar) before they are eligible to enroll in Medicaid.

Under the ACA, health insurance marketplaces are able to offer benefits, including APTCs as soon as an immigrant is deemed "lawfully present". In this case, the marketplace may be able to extend benefits to low-income individuals who otherwise may have qualified for Medicaid, including immigrants below 100 percent of the federal poverty level (FPL).

## **Proposed action:**

- Immediate repeal of the public charge rule.
- Immediate consideration of policies or programs to support outreach to and coverage of qualifying immigrant populations.
- Reconsider policies to enable access to coverage for immigrant populations.

## **Relevant regulations and guidance**

- Inadmissibility on Public Charge Grounds, August 2019
- Memorandum on Enforcing the Legal Responsibilities of Sponsors of Aliens, May 2019
- <u>Presidential Proclamation on the Suspension of Entry of Immigrants Who Will Financially</u> <u>Burden the United States Healthcare System, October 2019</u>
- Notice of Information Collection Under OMB Emergency Review: Immigrant Health Insurance Coverage, October 2019

## **Reversal of the 1557 Nondiscrimination Regulations**

## Summary

Section 1557 of the ACA prohibits discrimination on the bases of race, color, national origin, sex, age, and disability for any health program which receives federal financial assistance or is administered by a federal agency under the ACA.

A rule issued by the Office of Civil Rights in June 2020 significantly revised anti-discrimination protections, eliminating essential protections against discrimination on the basis of sex, including protections related to gender identity and sexual orientation, directly harming members of the LGBTQ community and women.

The rule also removed previously existing requirements aimed at bolstering language accessibility of notices, as well as compliance requirements for grievances related to 1557 violations.

The rule dramatically scaled back how non-discrimination protections apply to health insurance carriers.

Several court cases have been brought forward against the changes made under the June 2020 rule. As of September 2020, a federal district court has issued a preliminary injunction against the rule, giving opportunity to rescind the rule prior to its full implementation.

## **Proposed action**

- Immediately rescind the June 2020 regulations. Reinstate regulations governing interpretation of 1557 protections issued in May 2016.
- Issue updated guidance with further clarity on definition of sex and gender as applied to non-discrimination protections.

#### **Relevant regulations and guidance**

- Nondiscrimination in Health and Health Education Programs or Activities, Delegation of Authority, June 2020
- Nondiscrimination in Health Programs and Activities, May 2016

## Rescind the "Double-Billing" Requirement for Non-Hyde Abortion Services

### Summary

A December 2019 rule requires insurers to send a separate bill to account for premiums related to non-Hyde abortion services. The bill must be separate and distinct from the normal monthly premium bill received by a consumer.

The rule also requires that consumers pay premiums for non-Hyde coverage separately, rather than in one aggregated payment that insurers split on the backend.

Cost to implement this additional billing procedure is estimated to be hundreds of millions of dollars per year.

The provision was originally slated to be implemented in June 2020. However, regulations are currently pending litigation, which has delayed implementation of the billing requirement.

## **Proposed Action**

• Repeal regulatory language requiring double billing for non-Hyde abortion services.

#### **Relevant regulations and guidance**

• Patient Protection and Affordable Care Act; Exchange Program Integrity, December 2019

#### Prohibition of Arrangements Created under the Data Marketing Partnership Case

#### Summary

A federal district court in Texas overturned a US Department of Labor (DOL) Advisory Opinion to allow a data-mining company to establish a single employer group health plan for individuals whose only relationship with the business is an agreement to share their internet activity. This decision overturns decades of DOL standards used to determine what entities are single employer plans under the Employee Retirement Income Security Act (ERISA). This decision will allow for the proliferation of fraudulent entities acting as unlicensed insurance companies.

This decision goes even further than regulations issued in 2018 that provide flexibility to allow for greater flexibility on the formation of association health plans (AHPs). The court held that Data Marketing Partnership is a single employer plan, raising ERISA preemption concerns. If allowed to stand, this would result in the proliferation of fraudulent group health plans that can raise ERISA preemption to challenge any attempt at state regulation. This decision would also allow these entities to cherry-pick healthy risk from the individual and small group markets, which would result in rising premiums, market destabilization and possibly market exit.

## **Proposed action**

• If consistent with the Final Order, DOL will issue regulations codifying standards set forth in Advisory Opinion 2020-01A.

• If regulations are not possible in light of the Final Order, seek legislative correction.

## **Relevant regulations and guidance**

- <u>September 28, 2020 Final Judgment, Data Marketing Partnership v. U.S. Department of Labor</u>
- U.S. Department of Labor, Employee Benefits Security Administration, Advisory Opinion 2020-01A January 24, 2020
- Definition of "Employer Under Section 3(5) of ERISA—Association Health Plans, June 2019

## Reporting of State-Mandated Benefits in Addition to Essential Health Benefits (EHBs)

## Summary

Federal law requires that health insurance plans sold in the individual and small group markets cover all EHBs. States may impose benefits requirements in addition to the federal EHB requirement.

To insulate the federal government from increased expenditures on health insurance subsidies, which are calculated based on the cost of insurance premiums, states must defray the cost of any state-mandated benefits issued after Dec. 31, 2011.

Regulations issued in May 2020 sets a new requirement for states to submit an annual report on their state-mandated benefits. The first reports are supposed to be issued in July 2021.

The requirement imposes excessive reporting burden on states, especially as no evidence has been provided to assert the need for enhanced oversight of and reporting by states.

## **Proposed Action**

Rescind annual reporting requirements regarding state-mandated benefits before July 2021 deadline.

## **Relevant regulations and guidance**

• Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2021; Notice Requirement for Non-Federal Governmental Plans, May 2020

# Additional Special Enrollment Periods (SEPs) Responsive to Loss of Employment or Income

#### Summary

Under currently available SEPs, an individual may enroll in marketplace coverage if they experience loss of minimum essential coverage (MEC), including MEC offered by an employer. However, there is no SEP specific to job loss.

There is also no SEP available related to a change in income, unless the individual was already enrolled in MEC.

Considering the potential for rapid changes in employment and income exacerbated under the COVID-19 pandemic and economic crisis, more flexibility is necessary to ensure the consumers are able to access the coverage they may need.

#### **Proposed Action**

- Enact new SEPs specific to consumers who experience job-loss and/or change in income.
- Maintain flexibility so that SBMs may implement SEPs relevant to the needs of their markets and consumers.

## **II.** Issues of High Priority

The following actions may have the greatest impact on improving insurance markets, access to coverage, and/or consumer experience when shopping for coverage.

## Simplifying Eligibility

# Encourage alignment of eligibility between coverage programs including APTCs/CSRs and Medicaid

#### Summary

The health insurance marketplaces are designed to provide a seamless eligibility and enrollment experience to all consumers regardless of coverage program.

Discrepancies in how eligibility is determined between programs causes significant challenges in fostering a seamless consumer experience and spurs confusion, especially for vulnerable populations at the cusp of eligibility.

#### **Proposed action**

• Leverage maximum flexibility wherever possible related to regulatory changes to eligibility calculations or processes to promote greater alignment between programs.

#### Eliminate the Family Glitch

#### Summary

Individuals may not qualify for APTCs if their employers offer "affordable" coverage. The individual's spouse and dependents are barred from qualifying for APTCs if they are eligible to enroll in the individual's employer-sponsored insurance (ESI).

Affordability of coverage is based on an "employee's required contribution," meaning the employee's share of the cost of the employer plan cannot exceed 9.78 percent of the employee's household income.

Legislative language stipulates that the "required contribution" for the employee be based on the cost of self-only coverage, there is no consideration of how affordability may change if individuals must purchase coverage for their dependents. The addition of dependent coverage usually incurs a significant increase in monthly premium expenses, meaning the employer coverage may not actually be affordable for the household.

The affordability of employer coverage affects not only eligibility for the APTC but also a potential exemption from the individual mandate. Even though the same statutory definition of "required contribution" is referenced for both purposes, currently adopted regulations have set one interpretation of the meaning of "required contribution" for determining affordability of

employer coverage for the APTC and a different interpretation for the exemption from the individual mandate. For purposes of this individual mandate penalty exemption, the required contribution for spouses and dependents is based on family premiums.

It is possible that the regulatory interpretation of required contribution for the APTC could be revised to look to the family premium for purposes of determining the affordability of employer coverage.

## **Proposed action**

• Without a clear legislative fix to encourage revision of the employer affordability standard, the federal government could utilize regulatory interpretative authority to apply the standard of the required contribution used for the individual mandate to employer affordability.

## Amend the Annual Premium Adjustment Percentage Measure

#### Summary

The annual premium adjustment percentage is a measure of insurance premium growth used to set the annual limit on cost-sharing, penalties under the employer mandate, and required contribution percentages to qualify for eligibility exemptions.

The premium adjustment percentage had been calculated based on premiums for insurance sold in the employer-sponsored market as reported in the National Health Expenditure Account. In 2020, the Centers for Medicare & Medicaid Services (CMS) adopted a new method that factors in premiums from the individual market.

The change resulted in increases in allowable out-of-pocket spending, and higher premium contributions from consumers before being eligible for eligibility exemptions.

## **Proposed action**

Revert to methodology used prior to 2020.

#### **Relevant regulations and guidance**

• Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2020, April 2020)

#### No Modifications that Lower the Poverty Threshold

#### Summary

In May 2019, the Office of Management and Budget (OMB) solicited comments on standards used to calculate the Official Poverty Measure (OPM).

OPM is critical for determining eligibility for benefits including APTCs and Medicaid. The request included a proposal to use a lower measure of inflation when calculating OPM. Specifically, the proposal suggests changing the measure from the Consumer Price Index for All Urban Consumers (CPI-U) to either the Chained Consumer Price Index (C-CPI) or the Personal Consumption Expenditure Price Index (PCEPI). Both of the latter indexes use a more conservative estimate for inflation growth from year-to-year, calculations which may not fully reflect the disproportionate effects of inflation on lower-income households. The change to either of these methods could put hundreds of thousands of individuals at risk of losing benefits.

### **Proposed action**

• No changes to the OPM that would lower poverty thresholds and/or reduce eligibility for coverage programs.

## **Relevant regulation and guidance**

• <u>Request for Comment on the Consumer Inflation Measures Produced by Federal</u> <u>Statistical Agencies, May 2019</u>

## Increasing Affordability

# Maintain state flexibility over response to the elimination of federal cost-sharing reduction (CSR) payments

## Summary

The CSR program mandates that insurers cover cost-sharing for consumers between 100-250% FPL who purchase silver-plans through the marketplace.

In October 2017, the Administration ceased providing federal reimbursement to cover costs of CSR expenditures.

Several states directed issuers to "load" the financial losses into silver-level plans (silver loading), leading to significant increases in premiums for silver-level benchmark plans used to calculate APTC.

Resulting increases in APTC led to greater affordability for consumers who qualify for the tax credits.

## **Proposed action**

- Maintain state flexibility over insurer response to elimination of CSR funding, including ability to mandate "silver loading."
- Revisit APTC calculations if CSR funding is reinstated to ensure coverage remains affordable to those that otherwise had benefitted from APTC increases.

## **Relevant regulation and guidance**

• 2017 Memo eliminating CSR payments to insurers

## **Reducing Market Segmentation**

#### Limits to Short-term, Limited Duration Plans

#### Summary

Short-term, limited duration plans (short-term plans) are alternative, limited benefit, coverage options, largely designed to be a temporary solution for consumers who experience gaps in coverage.

Short-term plans are exempt from the federal requirements placed on health insurance coverage including pre-existing condition protections, required benefit offerings, and caps on consumer out-of-pocket spending.

Regulations codified in August 2018 enabled widespread availability of short-term plans by extending the allowable duration of these plans from 3 months to 364 days, allowing for the renewability of plans up to 36 months.

Availability of these products drive consumers out of the individual market risk pool, increasing premium costs and leaving consumers vulnerable to financial risk in the case they do need comprehensive health services.

## **Proposed action**

- Maintain maximum state flexibility to regulate and impose limits on short-term plans.
- Restore regulations limiting short-term plan duration to a period of three months and prohibit their renewability.
- Enforce transparency requirements to ensure that short-term plans clearly communicate their limitations to consumers.

## **Relevant regulation and guidance**

• Excepted Benefits; Lifetime and Annual Limits; and Short-Term, Limited Duration Insurance, October 2016

## Association Health Plans (AHPs)

## Summary

Regulations issued by the DOL in June 2018 revised requirements to promote the proliferation of AHPs. Specifically, the regulations overturn long-established prior restrictions on AHPs to allow for:

- AHPs to operate as unregulated health insurance companies, many of which do not meet ACA coverage standards;
- Formation of AHPs for the primary purpose of procuring health insurance; and
- Formation of AHPs by single employers.

AHPs are not subject to many of the ACA's requirements on health insurance, including the requirement to offer EHBs. This enables AHPs to offer less comprehensive coverage to their enrollees and to manipulate benefit design to discourage enrollment by consumers considered high risk. AHPs are not subject to the rating rules applicable in the individual and small group markets, meaning they can charge more based on gender, group size, industry, and age (without restrictions).

Availability of these products drive consumers out of the individual and small group risk pools, increasing premium costs and leaving consumers vulnerable to financial risk in the case they do need a comprehensive health plan. They also may lead to risk of market destabilization in individual and small group markets, including premium increases and health insurance carrier exits.

AHPs have a long history of fraud and insolvencies, creating unnecessary risk for consumers and state regulators alike.

These regulations are currently under injunction, but the District Court's decision is currently on appeal. An adverse decision from the appeals court could result in the rapid proliferation of unlicensed insurance carriers.

#### **Proposed action**

- Increase regulations and oversight to restrict formation of associations especially to exclude associations that may engage in discriminatory practices and or adversely impact insurance markets (e.g., associations that may target only low market risk populations.
- Remove regulations that allow for formation of associations primarily for the purpose of procuring health insurance.
- Restatement of current state authority to regulate AHPs, including requirements that AHPs be licensed, meet solvency requirements, and meet requirements for plan design.

## **Relevant regulation and guidance**

• <u>Definition of "Employer" Under Section 3(5) of ERISA—Association Health Plans, June</u> 2019

## Limiting Exemptions Allowed to Opt-Out of Contraceptive/Abortion Coverage

#### Summary

Regulations issued in 2018 expand ability for entities and individuals to be exempted from the ACA's requirements to offer contraceptive coverage as part of health insurance benefits. Entities that could be exempt include non-governmental employers, not-for-profits, non-governmental institutions of higher education, insurers, and individuals with sincerely held religious objections to all or a subset of contraceptives or related patient education.

Previous exemptions had applied only to churches and similar religious organizations.

#### **Proposed action**

• Repeal 2018 regulations.

#### **Relevant regulation and guidance**

- Moral Exemption and Accommodations for Coverage of Certain Preventive Services Under the Affordable Care Act, November 2018
- <u>Religious Exemptions and Accommodations for Coverage of Certain Preventive Services</u> <u>Under the Affordable Care Act, November 2018</u>

## **Consumer Protections**

#### Meaningful Difference Standards for Qualified Health Plans (QHPs) Summary

In order to reduce consumer confusion, and streamline choice, HHS required that health plan offerings be "meaningfully different" in order to be certified as QHPs.

For a plan to be considered meaningfully different a "reasonable" consumer must be able to identify one or more material differences between the plan and any other sold through the marketplace.

Regulations issued in May 2020 eliminated meaningfully different requirements for plans sold through the marketplaces, allowing for the proliferation of extremely similar or duplicative insurance products.

#### **Proposed action**

• Reinstate meaningfully different standards to reduce the potential for duplicative plans and increased consumer confusion.

## **Relevant regulations and guidance**

• <u>Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment</u> <u>Parameters for 2021; Notice Requirement for Non-Federal Governmental Plans, May</u> <u>2020</u>

## Supporting State and Administrative Flexibility

## 1332 Waiver Guidance

## Summary

1332 waivers allow states to waive any or all requirements related to the ACA's regulation of insurance plans, health insurance marketplaces, APTC and CSR programs, and coverage purchasing requirements.

Although 1332 waivers may directly affect other programs (including Medicaid), budget requirements do not allow for coordination of Medicaid 1115 waivers and 1332 waivers. Legislatively established guardrails mandate that waiver changes can only be made as long as the coverage provided would be as comprehensive and affordable as that available under the ACA and that a comparable number of individuals would be covered. Additionally, waivers may not lead to an increase in the federal deficit.

Changes promulgated in October 2018 change the interpretation of the guardrails to allow for adoption of options that to not meet minimum essential coverage (MEC) standards including short-term plans and health sharing ministries.

The changes also alter how states may consider trade-offs in affordability and coverage standards, meaning that options made available through the waiver may not necessarily be as comprehensive or affordable for some populations as they might have been under the ACA.

## **Proposed action**

- Rescind 2018 guidance on 1332 waivers, and reinstate prior interpretation requiring that all coverage be as accessible, affordable, and comprehensive under the waiver as required under the ACA.
- Increase flexibility over budget calculations to enable states to coordinate 1332 and 1115 waivers.
- Continue expedited processes for applications that follow a similar framework to previously approved waivers.
- Allow for budget neutrality over a period of years, rather than strictly over the specific course of the waiver, or year-by-year.
- Ease administrative processes related to requesting 1332 funding renewals and extensions.
- Issue guidance clarifying that if, at the end of a 1332 waiver, there are unspent 1332 waiver pass-through funds and the waiver is renewed/extended, the pass-through funding may be rolled forward to be used during the renewal/extension period.

## **Relevant regulations and guidance**

- State Relief and Empowerment Waivers, October 2018
- <u>Centers for Medicare or Medicaid Services, Section 1332 State Relief and</u> <u>Empowerment Waiver Concepts Discussion Paper, November 2018</u>

## III. Issues of Moderate Priority

The following policies may help support or improve health insurance markets, access to coverage, and/or consumer experience when shopping for coverage, but could be addressed over an extended timeline, including changes that could be incorporated into the next Notice of Benefit and Payment Parameters (the annual rule governing individual and small group health insurance plans).

## Increasing Affordability

# Clarity over options related to use of health reimbursement arrangements to purchase marketplace coverage (QSEHRAs and ICHRAs)

#### Summary

Under current law, most health reimbursement arrangements (HRAs) are considered group health coverage, limiting the ability of employers to offer HRAs that do not include comprehensive health insurance coverage.

The Qualified Small Employer Health Reimbursement Arrangements (QSEHRAs) enacted under the 21st Century Cures Act allows employers with fewer than 50 employees to pay into an employee health reimbursement arrangement (the QSEHRA). The QSEHRA does not qualify as group coverage, and funds from the QSEHRA can be used to purchase health insurance coverage through the individual market.

In June 2019, a new option was created for employers to offer an HRA in a way that can be integrated with coverage sold on the individual market (ICHRA). Money available through an ICHRA can be used to pay for health insurance premiums.

Employees who are offered an affordable ICHRA are prohibited from receiving APTCs. In some cases, employees would have received more affordable coverage if they remained eligible for APTCs rather than being offered the alternative HRA program. Employees who are offered an affordable QSEHRA have their APTC eligibility reduced, often to zero, by the amount of the QSEHRA.

Complicated eligibility rules and a lack of support tools may lead to confusion and imperfect decisions by employers and employees regarding what coverage options are best.

#### **Proposed action**

- Develop comprehensive tools to help consumers and employers assess the risks and benefits of adopting QSEHRAs or ICHRAs. Include enhanced education about financial trade-offs as well as limitations to benefit offerings or other consumers protections.
- Tighten oversight over requirements that ICHRA and QSEHRA recipients enroll in compliant insurance coverage.
- Revisit policies to enable receipt of modified APTCs in cases where money made available through the ICHRA would not make health plans sufficiently affordable.

#### **Relevant regulations and guidance**

• <u>Health Reimbursement Arrangements and Other Account-Based Group Health Plans</u>, June 2019

## Flexibility to Enroll in Plans across Metal Levels

## Summary

Current rules place restrictions on which health plans a consumer may choose when qualifying for a special enrollment period (SEP). Specifically, the rules:

- Restrict enrollment in anything except an enrollees' current QHP when a dependent is added through an SEP
- Only allow for enrollment in a plan of the same metal level if a current enrollee qualifies for an SEP.

By limiting movement to other metal levels, the rules aim to restrict possible "gaming" by enrollees who may attempt to move into higher metal levels only in response to a mid-year change in coverage need.

However, restricting options may lead consumers to enroll in plans that may not meet their needs given the change in circumstance that triggered the SEP.

By restricting consumer options, the regulations may prohibit enrollment into a health plan with different cost-sharing, provider networks, benefit design, or other qualities that may be better suited to the needs of the consumer. This is especially true when the circumstance triggering the SEP is also associated with a change in income, geographic location, or family structure. Greater flexibility to allow for enrollment across plan options better enables consumers to enroll in health insurance plans best suited to their needs.

## **Proposed action**

- Rescind regulations that limit enrollment options for consumer enrolling through an SEP.
- Promulgate new regulations to maximize availability of appropriate options to consumers who enroll during an SEP.

## Relevant regulations and guidance

- Patient Protection and Affordable Care Act; Market Stabilization, April 2017
- Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2019

# Adjusting Actuarial Value Calculators to Allow Greater Flexibility for the Sale of Bronze Plans

## Summary

Plans sold through the health insurance marketplaces must meet a certain actuarial value (AV), the calculation used to estimate likely out-of-pocket spending a consumer may face if they opt to purchase that plan. AV is used to sort plans into one of four metal tiers—bronze, silver, gold and platinum.

Each year, CMS releases a modified calculator used to assess the AV of health insurance plans. The calculator is developed based on national data on cost-sharing and utilization available from commercial health insurance.

Changes in both market conditions and how AV is calculated have placed excessive strain on the ability of health insurers to offer bronze plans within the full range of AV acceptable for bronze, meaning insurers are limited to offering plans at the highest AV possible for bronze. It is possible if cost trends continue, it may not be at all feasible for insurers to offer any plan at the bronze-level.

Bronze plans offer the lowest monthly premiums for many consumers and are especially popular among the "young invincible" population. Elimination of bronze plan options may deter many from enrolling in marketplace coverage.

## **Proposed action**

Reevaluate the annual AV calculator to enable greater flexibility for bronze offerings. Explore regulatory levers to open flexibility for additional bronze offerings through the marketplaces.

## **Relevant regulations and guidance**

• Letter from the Center for Medicare and Medicaid Services on the Final 2021 Actuarial Calculator Methodology, March 2020

## **Consumer Protections**

# Reinstate guaranteed issue protections for individuals who lose coverage due to non-payment of premiums.

#### Summary

Under the ACA, health plans are required to enroll all individuals regardless of health status or other factors that may be relevant to predicting a persons' use of health services (guaranteed issue).

Rules issued in April 2017 included language clarifying that insurers could prohibit new enrollments by individuals who owe past-due premiums in both the individual and small group markets.

The change serves as a de facto exemption to guaranteed issue in the case of non-payment. It also imposes barriers to coverage especially in markets with only one available insurer.

#### **Proposed action**

• Rescind preamble text allowing insurers to prohibit enrollments in the case of non-payment of past-due premiums.

#### **Relevant regulations and guidance**

• Patient Protection and Affordable Care Act; Market Stabilization, April 2017

## Stricter Oversight of and Requirements for Direct Enrollment Entities

#### Summary

In 2017, new regulations granted greater flexibility for a direct enrollment (DE) pathway, enabling consumers to determine their eligibility for coverage through certified, third-party websites.

Additional regulations promulgated in 2019 imposed standards on DE entities and enabled the ability of insurers to participate as DE entities.

Since implementation of these regulations, the number of direct enrollment entities has increased exponentially—all but 7 of the current DE entities are insurers.

DE entities are not required to display all available plans sold through the marketplace, nor are they required to display comparable information about each plan. Their platforms may provide consumers with incomplete or biased information about available options, leading consumers to select coverage that may not be best suited to the consumer's needs.

## **Proposed action**

- Set stricter standards for DE entities to prohibit participation by entities that may actively direct consumers to imperfect coverage options, or biased information.
- Set higher standards for consumer-choice architecture to ensure that consumers receive information appropriate to their needs and priorities, rather than those of the direct enrollment entity.
- Set stricter oversight requirements on direct enrollment entities to ensure they are meeting and maintain standards set in place related to plan display, and education regarding available insurance options.

Relevant regulations and guidance

- Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2020, April 2019
- <u>Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment</u> <u>Parameters for 2021; Notice Requirement for Non-Federal Governmental Plans, May</u> <u>2020</u>

## IV. Other Notable Issues

The following actions may serve to improve markets and consumer experience with purchasing health insurance, but do not require immediate action.

## **Reducing Market Segmentation**

# Limit other non-compliant products including healthcare sharing ministries and direct primary care arrangements

#### Summary

A 2019 executive order proposed increasing tax advantages for two types of products, direct primary care arrangements and health sharing ministries. Both are considered by some an alternative to traditional insurance coverage, yet only provide limited benefits. Such alternatives may draw individuals out of insurance markets, while not offering many consumer protections including financial protections.

## **Proposed action**

• Rescind orders that may lead to promulgation of insurance alternatives.

### **Relevant regulation and guidance**

- Executive Order on Improving Price and Quality Transparency in American Healthcare to Put Patients First, June 2019
- <u>President Donald J. Trump Is Implementing His America First Healthcare Agenda,</u> <u>September 2020</u>

## **Limit Wellness Program Incentives**

#### Summary

Actions taken under this current administration have encouraged promulgation of wellness programs in the individual market.

A state demonstration program was announced in September 2019 to develop wellness programs that grant incentives to individual who achieve health outcomes (such as lower premiums).

Rules issued in May 2020 allow for greater flexibility in counting wellness costs as part of allowable quality improvement activities that may be factored into medical loss ratio (MLR) calculations.

Evidence has not shown significant benefits to attest to the effectiveness of wellness programs. Wellness programs risk imposing discrimination on individuals based on health status.

#### **Proposed action**

- Revise/ limit allowable consideration of spending on wellness programs as part of MLR calculations.
- Limit promulgation of wellness programs and incentives offered by health insurers. Promote evidence-based practices for effective and efficient benefit requirements and offerings.

#### **Relevant regulations and guidance**

• <u>Centers for Medicare and Medicaid Services Bulletin: Opportunity for States to</u> <u>Participate in a Wellness Program Demonstration Project to Implement</u> <u>Health-Contingent Wellness Programs in the Individual Market, September 2019</u>

## **Consumer Protections**

#### Improve Consumer Access to 1095-B and 1095-C Forms

#### Summary

1095-B and C forms are issued to individuals to document proof of insurance coverage. Forms are issued by health insurers or employers (for businesses with less than 50 full-time employees).

The primary purpose of the form was to establish proof that consumers met MEC and are in compliance with the federal individual shared responsibility payment.

Congressional elimination of the responsibility payment has diminished the federal necessity of 1095-B and C forms. However, the forms are still a critical means for states to identify individuals with MEC. This is especially important for states that have implemented their own individual responsibility requirement.

## **Proposed action**

- Continue requirements for insurers and employers to issue 1095-B and C forms in a timely and comprehensive manner.
- Ensure that forms are provided in an easily accessible manner to individuals including provision by mail, or through online portals available from insurers and employers.
- Continue to allow SBMs to provide 1095-Bs electronically upon request.

## Relevant regulations and guidance

 Internal Revenue Service Notice 2020-76, Transition Relief Related to Health Coverage Reporting Required by Sections 6055 and 6056 for 2020

## Supporting State and Administrative Flexibility

## **Preserve Historical Documentation and Data**

#### Summary

A 2020 executive order requires federal agencies to establish an online guidance portal and rescind or eliminate guidance documents that are no longer active or valid. Preservation of historical information is necessary to understand and evaluate programs and policies.

## **Proposed action**

• Rescind 2020 order.

## **Relevant regulations and guidance**

• <u>Notice on Promoting the Rule of Law Through Improved Agency Guidance Documents</u>, <u>July 2020</u>

#### Continue state flexibility over financing for marketplace operations

#### Summary

Health insurance marketplaces are required by law to be financially self-sustaining. In order to finance their operations, SBMs have leveraged a variety of funding strategies for their operations, including an assessment on insurers.

In recent years, many SBMs have been able to lower assessment rates charged to their issuers as they have achieved greater efficiency and ability to operate at lower cost.

#### **Proposed action**

• Maintain ability for SBMs to develop and implement their own financing strategies, including maximum flexibility on policies to place an assessment on insurers.

## **Recommended Best Practices Learned from SBMs**

## Federal Funding and Standards for Navigators

## Summary

Health insurance navigators established under the ACA are trained to provide fair and impartial guidance to individuals and small employers shopping for health insurance coverage. Despite increasing capacity for self-serving through marketplace websites, marketplace consumers exhibit a demonstrated need/ desire for in-person assistance.

The current administration has cut funding to navigator programs by 84%, with only \$10 million provided for the 2021 open enrollment period.

Current HHS standards for selecting and funding navigator programs is based on unreliable data (Government Accountability Office, July 2018).

## **Proposed action**

- Restore federal funding to support a robust Navigator program providing necessary, and unbiased, in-person enrollment assistance to consumers.
- Reconsider standards used to evaluate navigator programs including alternatives to consumer application data and clearer standards for setting and evaluating goals of navigator award recipients.
- Revert guidance encouraging that navigators guide individuals to coverage options inclusive of alternative plans such as short-term health plans.

## Relevant regulations and guidance

- <u>Centers for Medicare and Medicaid Services, Policies Related to the Navigator Program</u> and Enrollment Education for the Upcoming Enrollment Period, August 2017
- <u>Centers for Medicare and Medicaid Services, CMS Issues 2020 Federally-Facilitated</u> <u>Exchange Navigator Awards, August 2020</u>

## Maintain State Flexibility over Open Enrollment Windows

## Summary

The federally designated open enrollment period extends from November 1-December 15. Citing the need for prolonged shopping periods for individual market consumers, some SBMs have leveraged flexibility to extend their enrollment deadlines into January. This has led to success in increasing enrollment.

Technological advances have enabled quicker turn arounds for insurers to effectuate coverage, meaning many insurers have the capacity to begin coverage on the first of the month, even if a consumer enrolls on a date later than the 25th of the prior month.

## **Proposed action**

• Maintain flexibility so that SBMs can establish open enrollment windows per the needs of their markets and consumers.

## **Appendix A: Key Contact Information for State-Based Marketplaces**



California Peter Lee Executive Director Covered California peter.lee@covered.ca.gov



District of Columbia Mila Kofman Executive Director DC Health Benefit Exchange Authority mila.kofman@dc.gov\_



Maine Joanne Rawlings-Sekunda Policy Development Specialist Maine Bureau of Insurance Joanne.Rawlings-Sekunda@maine .gov



Colorado Kevin Patterson Chief Executive Officer Connect for Health Colorado kpatterson@c4hco.com



Idaho Pat Kelly Executive Director Your Health Idaho pat.kelly@yourhealthidaho.org



Maryland Michelle Eberle Executive Director Maryland Health Benefit Exchange <u>michele.eberle@maryland.gov</u>



**Connecticut** James Michel Chief Executive Officer Access Health CT <u>james.michel@ct.gov</u>



Kentucky Carrie Banahan Executive Director Kentucky Health Benefit Exchange carrie.banahan@ky.gov



Massachusetts Louis Gutierrez Executive Director Massachusetts Health Connector Authority Louis.gutierrez@state.ma.us



Minnesota Nathan Clark Chief Executive Officer MNsure <u>Nathan.clark@state.mn.us</u>



Oregon Chiqui Flowers Administrator Oregon Health Insurance Marketplace <u>chiqui.l.flowers@oregon.gov</u>



Vermont Adaline Strumolo Director Department of Vermont Health Access adaline.strumolo@vermont.gov



New Jersey Marlene Caride Commissioner New Jersey Department of Banking and Insurance Marlene.Caride@dobi.nj.gov



Pennsylvania Zachary Sherman Executive Director Pennsylvania Health <u>zsherman@pa.gov</u>



Washington Pam MacEwan Chief Executive Officer Washington Health Benefit Exchange pam.macewan@wahbexchange.or g



Nevada Heather Korbulic Executive Director Nevada Health Link hkorbulic@exchange.nv.gov



Rhode Island Lindsay Lang Director HealthSource RI <u>lindsay.lang@exchange.ri.gov</u>

## **Appendix B: State-Based Marketplace Comments on Relevant Federal** Regulations

This appendix includes a list of public comments submitted by state-based marketplaces (SBMs) in response to federal regulatory or other administrative changes affecting the marketplaces and/or health insurance

#### **Issues of Greatest Urgency**

#### **IRS Flexibility on Reconciliation**

Relevant document: Letter from State-based Marketplace to the Department of the Treasury Supporting COVID-19 Flexibilities, June 2020

#### **Access to Coverage for Immigrant Populations**

Relevant regulation: Inadmissibility of Public Charge Grounds, August 2019 Connect for Health Colorado DC Health Benefit Exchange Massachusetts Health Connector Vermont Health Access Washington Health Benefit Exchange MNsure

Relevant notice: Notice of Information Collection Under OMB Emergency Review: Immigrant Health Insurance Coverage, October 2019 Covered California MNsure Connect for Health Colorado Nevada Health Link DC Health Benefit Exchange Oregon Health Insurance Marketplace Massachusetts Health Connector

#### **Reversal of 1557 Nondiscrimination Regulations**

Relevant regulation: Nondiscrimination in Health and Health Education Programs or Activities, Delegation of Authority. June 2020 Covered California Massachusetts Health Connector Connect for Health Colorado MNsure DC Health Benefit Exchange Washington Health Benefit Exchange

#### **Rescind "double-billing" requirement for non-Hyde abortion services** Relevant regulation: Patient Protection and Affordable Care Act; Exchange Program Integrity,

December 2019 Covered California Connect for Health Colorado Access Health CT DC Health Benefit Exchange Massachusetts Health Connector

MNsure HealthSource RI NY State of Health Washington Health Benefit Exchange

## Reporting of state-mandated benefits in addition to essential health benefits

Relevant regulation: Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2021; Notice Requirement for Non-Federal Governmental Plans, May 2020
Covered California Connect for Health Colorado Access Health CT DC Health Benefit Exchange Your Health Idaho Massachusetts Health Connector MNsure

#### **Issues of High Priority**

#### Amend Annual Premium Adjustment percentage measure

Relevant regulation: Patient Protection and Affordable Care Act; HHS Notice and Benefit and<br/>Payment Parameters for 2020, April 2019Covered CaliforniaMNsureConnect for Health ColoradoNevada Health LinkAccess Health CTNY State of HealthDC Health Benefit ExchangeHealthSource RIYour Health IdahoWashington Health Benefit ExchangeMassachusetts Health ConnectorHealth Connector

#### No modifications that lower poverty threshold

Relevant regulation: Request for Comment on the Consumer Inflation Measures Produced byFederal Statistical Agencies, May 2019Massachusetts Health ConnectorCovered CaliforniaMassachusetts Health ConnectorConnect for Health ColoradoMNsureDC Health Benefit ExchangeWashington Health Benefit Exchange

#### **Issues of Moderate Priority**

# Clarity over options to related to use of health reimbursement arrangements to purchase marketplace coverage (QSEHRAs & ICHRAs)

Relevant regulation: <u>Health Reimbursement Arrangement and Other Account-Based Group</u> <u>Health Plans, June 2019</u>

<u>Covered California</u> <u>Connect for Health Colorado</u> <u>DC Health Benefit Exchange</u> <u>Massachusetts Health Connector</u> <u>MNsure</u> <u>Nevada Health Link</u> <u>Vermont Health Access</u> Washington Health Benefit Exchange

#### Limits to short-term, limited duration plans

Relevant regulation: <u>Excepted Benefits</u>; <u>Lifetime and Annual Limits</u>; <u>and Short-Term</u>, <u>Limited-Duration Insurance</u>, <u>October 2016</u> DC Health Benefit Exchange

Relevant regulation:Short-Term, Limited Duration Insurance, August 2018Covered CaliforniaDC Health Benefit ExchangeConnect for Health ColoradoMassachusetts Health Connector

<u>Nevada Health Link</u> <u>NY State of Health</u> <u>Pennsylvania Health Insurance Exchange</u> <u>Insurance Authority</u> <u>HealthSource RI</u> Washington Health Benefit Exchange MNsure Nevada Health Link

#### Association health plans

Relevant regulation:Definition of "Employer" Under Section 3(5) of ERISA—AssociationHealth Plans, June 2018DC Health Benefit ExchangeMassachusetts Health ConnectorWashington Health Benefit Exchange

#### Meaningful difference standards for qualified health plans (QHP)

Relevant regulation: Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2021; Notice Requirement for Non-Federal Governmental Plans, May 2020 Covered California Nevada Health Link Connect for Health Colorado NY State of Health Access Health CT Pennsylvania Health Insurance Exchange DC Health Benefit Exchange Insurance Authority Your Health Idaho HealthSource RI Massachusetts Health Connector Washington Health Benefit Exchange MNsure

# Reinstate guaranteed issue protections for individuals who lose coverage due to non-payment of premiums

Relevant regulation: Patient Protection and Affordable Care Act; Market Stabilization, April2017MNsureCovered CaliforniaMNsureConnect for Health ColoradoNevada Health LinkAccess Health CTNY State of HealthDC Health Benefit ExchangeHealthSource RIYour Health IdahoVermont Health AccessMassachusetts Health ConnectorWashington Health Benefit Exchange

#### Stricter oversight of and requirements for direct enrollment entities

Relevant regulation: <u>Patient Protection and Affordable Care Act; HHS Notice of Benefit and</u> Payment Parameters for 2020, April 2019

<u>Covered California</u> <u>Connect for Health Colorado</u> <u>Access Health CT</u> <u>DC Health Benefit Exchange</u>

<u>Your Health Idaho</u> <u>Massachusetts Health Connector</u> <u>MNsure</u> <u>HealthSource RI</u>

#### 1332 waiver guidance

Relevant regulation: <u>State Relief and Empowerment Waivers</u>, <u>October 2018</u> <u>DC Health Benefit Exchange</u> <u>MNsure</u>

#### Flexibility to enroll in plans across metal levels

Relevant regulations: Patient Protection and Affordable Care Act; Market Stabilization, April2017Covered CaliforniaMNsureConnect for Health ColoradoNevada Health LinkAccess Health CTNY State of HealthDC Health Benefit ExchangeHealthSource RIYour Health IdahoVermont Health AccessMassachusetts Health ConnectorWashington Health Benefit Exchange

27

### **Appendix C: Glossary of Terms**

1095 forms: 1095s are the tax forms used to report on health insurance coverage. 1095-A forms are provided from the health insurance marketplaces to the IRS to report about individuals who enroll in QHPs through the marketplace.1095-B and C forms are sent by health insurers or employers to individuals to verify their enrollment in minimum essential coverage. 1095-B forms are sent by health insurers or small employers (with less than 50 employees) while 1095-C forms are sent by large employers.

**1115 waiver:** State demonstrations authorized by the Social Security Act to test new or existing ways to deliver and pay for health care services in Medicaid and the Children's Health Insurance Program (CHIP).

**1332 waiver:** State demonstrations authorized by the Affordable Care Act to pursue innovations providing access to comprehensive, affordable, quality health care via Marketplace qualified health plans without reducing the number of covered state residents; waivers have been approved by the Centers for Medicare & Medicaid Services (CMS) to implement reinsurance programs.

**1332 guardrails:** The Patient Protection and Affordable Care Act (ACA) outlines four requirements or "guardrails" that all proposals must fulfill in order to be approved for a 1332 waiver:

- Coverage must be "at least as comprehensive as the coverage" provided under the ACA and offered through the marketplaces;
- Coverage must be "at least as affordable" as under the ACA including protections against excessive out-of-pocket spending;
- The proposal must provide coverage to "at least a comparable number of residents;" and
- The proposal may not increase the federal deficit.

Actuarial value: The percentage of total average costs for covered benefits that a health insurance plan will cover; for example, if a plan has an actuarial value of 70 percent the beneficiary would be responsible for 30 percent of the costs of all covered benefits in the plan.

Advanced premium tax credit (APTC): A federal tax credit offered in advance to those with a household earning between 100 percent to 400 percent of the federal poverty level (FPL) to lower their monthly health insurance premiums for marketplace plans.

Association health plans (AHPs): A type of group health insurance coverage where employer groups or similar associations may join together to purchase coverage, similar to the way coverage can be procured by a large employer.

**Benchmark plan:** (1) The second lowest cost qualified health plan sold at the silver metal tier in a specific geographic region. This plan is used as the basis for calculating the amount of APTCs that an enrollee may be eligible for. (2) The health insurance plan used as the standard for the provisions of essential health benefits as designated by a state.

**CARES Act:** The Coronavirus Aid, Relief, and Economic Security Act passed in March 2020 to provide both economic stimulus and public health protections in response to the growing COVID-19 pandemic. Among its many other provisions. the law provided an additional \$600 per week in unemployment benefits from March 27 to July 26, 2020.

**Cost-sharing:** The share of covered service costs paid out-of-pocket by an enrollee. This generally includes deductibles, coinsurance, and copayments, or similar charges, but not premiums, surprise billing amounts, or the cost of non-covered services.

**Cost-sharing reduction (CSR):** An ACA mandated payment made my insurers to qualified individuals to cover out-of-pocket expenses (cost-sharing) for health care services including discounts on deductibles, copayments, and coinsurance. To qualify, individuals must earn between 100 to 250 percent of the FPL, must not be eligible for Medicaid, and must enroll in a silver-level qualified health plan through the health insurance marketplace.

**Direct enrollment (DE):** The process of signing up for a qualified health plan outside of a health insurance marketplace (usually directly through a health insurance company or a health insurance broker). An Enhanced Direct Enrollment (EDE) pathway, established in 2018, allows these entities to handle the entire application and enrollment process for consumers. In addition to qualified health plans, DE entities may offer non-ACA compliant coverage, may preferentially display coverage options based on the DE's business needs, and may exclude presenting all available coverage options to consumers.

**Direct primary care arrangement:** An arrangement made directly between a patient and their primary care provider in which the provider agrees to provide a certain set of services for a set annual or monthly fee.

**Employee Retirement Income Security Act (ERISA):** The federal law governing most health insurance plans obtained through private-sector employers, including all employers that offer pension plans. ERISA preempts most state laws regulating insurance obtained through the private sector. ERISA does not cover group health plans established or maintained by governmental entities, churches for their employees, or plans which are maintained solely to comply with applicable workers compensation, unemployment, or disability laws.

**Employer sponsored insurance (ESI):** Health insurance obtained through an employer as opposed to through the Marketplace or through a public plan such as Medicaid, Medicare, or CHIP. Also known as employer sponsored coverage. ESI is deemed to be affordable for an employee as long as premiums are below 9.78 percent of the employee's household income.

**Essential health benefits (EHB):** A set of 10 categories of services (benefits) health insurance plans are required to cover. These include ambulatory services, emergency services, hospitalization, maternity and newborn care, mental health and substance use services, prescription drug coverage, rehabilitative and habilitative services and devices, laboratory services, preventative and wellness services (including chronic disease management), and pediatric services.

**Federal poverty level (FPL):** A measure of annual income used to determine eligibility for certain federal benefits and programs. In 2020, the poverty line was set to \$12,760 for an individual and \$26,200 for a family of four.

**Guaranteed issue:** A requirement (guarantee) that health insurance coverage will be offered to an applicant regardless of their health status, or factors that may be relevant to their health status (ex. pre-existing conditions, sex, age)

Health reimbursement arrangements (HRAs): A tax-advantaged health benefit through which employers may finance or reimburse employees for out-of-pocket medical expenses.

Health care sharing ministry (HCSM): An organization in which members who share a common set of ethical or religious believes join together to share medical expenses of incurred by members of the group.

**Hyde Amendment (for abortion services):** Law which prohibits use of federal funds to pay for abortion services except in the case of rape, incest, or if the pregnancy would endanger the woman's life.

**Individual mandate:** A requirement for that individuals must obtain qualified health insurance coverage. Usually, those who do not comply with an individual mandate are subject to a financial penalty unless they receive a hardship exemption.

**Market segmentation:** When individuals or groups of individuals are separated from the main health insurance risk pool because they opt for alternative options (ex. short-term plans, health care ministries) that are not included as part of the market's single risk pool. The ACA requires insurers to use a single risk pool when calculating premiums for plans sold in the individual insurance market. This prohibits insurers from separating, and therefore charging, their enrollees based on different levels of health risk plans).

**Meaningful difference:** A requirement that qualified health plans must be materially different from any other plan in order to be sold through the health insurance marketplaces.

**Medical loss ratio (MLR):** The percentage of premium dollars that an insurer must use to pay for medical claims/ services or care quality improvement activities rather than administrative expenses and profits. The ACA sets a minimum MLR for insurance markets — 85 percent for the large group market, and 80 percent for small group and individual markets. If the MLR threshold is not met by the insurer, they must reimburse consumers for excess administrative spending.

**Metal tier:** One of four categories (bronze, silver, gold, or platinum) in which health insurance plans are classified based on their actuarial value.

**Minimum essential coverage (MEC):** Any insurance plan that meets the Affordable Care Act requirement for having health coverage; examples include Marketplace plans, job-based plans, Medicare, Medicaid, and CHIP. Sometimes called "qualifying health coverage."

**Navigator programs:** Programs run by the health insurance marketplaces of (usually) community-based individuals or organizations who are trained to help consumers shop for healthcare coverage.

**Open enrollment period:** The limited, annual time period during which consumers may elect health insurance coverage for the year.

**Out-of-pocket (OOP) cost:** Expenses for medical care that aren't paid for by the insurer; includes deductibles, coinsurance, and copayments for covered services plus all costs for non-covered services.

**Premium adjustment percentage:** A measure of insurance premium growth used to set the annual limit on cost sharing, penalties under the employer mandate, and required contribution percentages to qualify for eligibility exemptions.

**Public benefit:** Includes most federally funded benefits including Medicaid (with certain exclusions, Section 8 Assistance, Supplemental Security Income, Temporary Assistance for Needy Families (TANF), and the Supplemental Nutrition Assistance Program (SNAP).

**Public charge:** An immigrant who received one or more public benefits for more than 12 months within a 36-month period (such that, for instance, receipt of two benefits in one month counts as two months).

**Qualified health plan (QHP):** A certified health insurance plan that meets all of the insurance requirements set forth under the ACA including the provision of essential health benefits, limits on cost sharing, and protections for individuals with pre-existing conditions.

**Rating rules:** Requirements that limit the ability of health insurers to vary premiums based on certain qualities of enrollees including geographic location, gender, tobacco use, and age.

**Reinsurance:** A program that protects insurers from very high claims costs, by reimbursing insurers who incur excessively costly claims. The programs are administered by a third party — usually the state or federal government.

**Risk pool:** A group of individuals whose medical costs are combined to calculate health insurance premiums; "pools" the higher costs of the less healthy with the relatively lower costs of healthy individuals.

Section 1557: A section of the ACA that prohibits discrimination on the basis of race, color, national origin, sex, age, and disability in the health insurance marketplaces, health plans that participate in the marketplaces and health programs that receive funding from or are administered by HHS.

Service area: The geographic area in which a health insurance plan accepts enrollees.

Short-term, limited duration insurance (STLDI): A health coverage option intended as a stop-gap alternative for individuals that are temporarily in need of coverage. STLDI is not required to meet QHP standards, meaning they are not required to cover EHBs, limit cost-sharing, or adhere to required pre-existing condition protections. These are also known as short-term plans.

**Silver-loading:** The practice wherein health insurers increase premiums of the benchmark silver-level QHPs to recoup the cost of federally required CSR reimbursements (see cost-sharing reductions).

**Special enrollment period (SEP):** A time outside the yearly open enrollment period during which an individual may qualify to enroll in health insurance triggered by a special life circumstance such as loss of prior health coverage, moving, getting married, having a baby, or adopting a child.

**Wellness programs:** Programs typically offered by employers and/or employee health plans intended to improve and promote health and fitness by incentivizing and tracking healthy activities such as smoking reduction, diabetes management programs, weight loss programs, and preventative health screening utilization.

November 2020

# Capping Prices or Creating a Public Option: How Would They Change What We Pay for Health Care?

Matthew Fiedler

USC-Brookings Schaeffer Initiative for Health Policy

This report is available online at: https://www.brookings.edu/research/capping-prices-or-creating-a-public-option-how-would-they-change-what-we-pay-for-health-care/



Leonard D. Schaeffer Center for Health Policy & Economics



Economic Studies at BROOKINGS

#### **EDITOR'S NOTE**

This white paper is part of the USC-Brookings Schaeffer Initiative for Health Policy, which is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics. The Initiative aims to inform the national health care debate with rigorous, evidence-based analysis leading to practical recommendations using the collaborative strengths of USC and Brookings. The Robert Wood Johnson Foundation provided a grant to the Brookings Institution that supported the writing of this paper.

#### **ACKNOWLEDGEMENTS**

I thank Loren Adler, Aviva Aron-Dine, Michael Chernew, Michael Cohen, Erin Duffy, John Holahan, Benedic Ippolito, Emily Gee, Paul Ginsburg, Tim Gronniger, Greg Leiserson, Christen Linke Young, and Erin Trish for helpful comments on a draft of this paper. I thank Kathleen Hannick, Sobin Lee, and Conrad Milhaupt for excellent research assistance, and Brieanna Nicker for excellent editorial assistance. All errors are my own.

### Contents

1	Exe	cutive Summary1				
	1.1	Capping Prices for Out-of-Network Services2				
	1.2	Regulating Both In-Network and Out-of-Network Prices4				
	1.3	Creating a Public Option				
1.4		Effects on Provider Networks9				
	1.5	Strategies for Ensuring Provider Compliance 10				
	1.6	Experience from Medicare Advantage10				
	1.7	Conclusion11				
2	Ove	rview of Current Pricing Institutions and Outcomes13				
	2.1	Determination of Prices in Commercial Insurance13				
	2.2	Determination of Prices in Public Programs13				
	2.3	Comparing Commercial and Medicare Prices14				
	2.3.	1 Average Differences Between Commercial and Medicare Prices				
	2.3.	2 Variation in Prices Across and Within Geographic Areas				
	2.3.	3 Why Are Commercial Prices So Much Higher?17				
3	Frai	mework for Policy Analysis				
4	Cap	ping Out-of-Network Prices19				
	4.1	Design of an Out-of-Network Cap19				
	4.2	Economic Model of the Effects of an Out-of-Network Cap 20				
	4.2.	1 Effects When Providers Cannot Credibly Threaten to Turn Away Patients 21				
	4.2.	2 Effects When Providers Can Credibly Threaten to Turn Away Patients22				
	4.3	Quantifying the Effects of an Out-of-Network Cap24				
	4.3.	1 When Can Providers Credibly Threaten to Reject Out-of-Network Patients?25				
	4.3.	2 How Effective is a Cap When Providers Can Reject Patients?27				
	4.4	Effect of Placing Both a Cap and a Floor on Out-of-Network Prices29				
5	Reg	ulating Both In-Network and Out-of-Network Prices				
	5.1	Comprehensive Price Cap Approaches				
	5.1.1	Design of a Comprehensive Price Cap32				
	5.1.2	2 Effects on Negotiated Prices in an Idealized Environment				
	5.1.3	3 Provider Efforts to Circumvent a Price Cap35				
	5.2	Default Contract Approaches				
	5.2.	1 Design of a Default Contract Policy				
	5.2.	2 Effects on Negotiated Prices 40				
	5.2.	Enforcement Challenges Under a Default Contract Approach				
6	Intr	oducing a Public Option41				

	6.1	Desi	gn of a Public Option	42
	6.2	Fact	ors Determining Market Outcomes Under a Public Option	46
	6.2.	1	Provider-Insurer Price Negotiations in the Presence of a Public Option	46
6.2.2 6.2.3			Non-Price Determinants of Plan Costs	51
			Enrollee Preferences for Public or Private Plans	57
	6.2.	4	Premium Setting Processes	58
	6.3	Sim	ulations of Market Equilibrium with a Public Option	59
	6.3.	1	Model Description and Assumptions	59
	6.3.2 Simulation		Simulation Results	64
	6.3.	3	Limitations	69
	6.4	Effe	cts of Making Provider Participation Voluntary	69
	6.4.	1	Benefits and Costs to Providers of Opting Out of the Public Option	70
	6.4.	2	Consequences of Limited Provider Participation	71
	6.4.	3	Setting Prices Through Negotiation, Rather than Administratively	72
7	Effe	ects or	1 Provider Networks	72
	7.1	Effe	cts on Relative Premiums of Broad and Narrow Network Plans	72
	7.2	Over	rall Effects on Enrollment in Broad and Narrow Network Plans	73
	7.2.3	1	Price Cap Policies	73
	7.2.:	2	Public Option	74
	7.3	Effe	cts on Other Types of Utilization Controls	74
8	Enfo	orcem	nent Approaches	74
	8.1	Free	e-Standing Monetary or Other Penalties	75
	8.2	Tie t	o Federal Health Care Coverage and Subsidy Programs	75
9	Exp	erien	ce from Medicare Advantage	76
	9.1	Back	ground on the MA Policy Environment	77
	9.2	Und	erstanding Pricing Outcomes in Medicare Advantage	78
	9.3	Why	V Is Physician Participation in Traditional Medicare So Robust?	79
10	C	onclu	ision	79
11	Refe	erence	es	82
Aţ	opendi	хA	Model of Capping Provider Prices	93
	A.1	Mod	lel Setup	93
	A.1.	1	Model Primitives	93
A.1.2		2	Nash Bargaining Framework	95
	A.1.	3	Modeling the Disagreement Payoffs	95
	A.1.	4	Bargained Agreements When Negotiated Prices are Unregulated	96
	A.1.	5	Equilibrium Outcomes in the Absence of a Price Cap	97

A.2	Effe	ects of an Out-of-Network Cap	99
A.2	.1	Outcomes When Providers Cannot Reject Patients	99
A.2.2		Outcomes When Providers Can Reject Patients	100
A.3	Effe	ects of a "Cap and Floor" Out-of-Network Policy	102
A.4	Effe	ects of a Comprehensive Price Cap	103
A.4	.1	Bargaining When Negotiated Prices are Capped	103
A.4	.2	Equilibrium Outcomes Under a Comprehensive Price Cap	104
A.5	Effe	ects of a Default Contract Policy	105
A.6	Fun	ctional Forms Used to Create Figures	106
Append	ix B	Model of a Public Option	107
B.1	Mo	del Setup	107
B.1.	.1	Model Primitives	107
B.1.	.2	Structure of Participation Decisions, Price Negotiations, and Enrollment	108
B.1.	.3	Assumptions Regarding Model Primitives	109
B.2	Mo	del with a Single Provider	110
B.2	.1	Insurer Premium Setting	110
B.2	.2	Provider-Insurer Price Negotiations	110
B.2	.3	Insurer Plan Offer Decision	112
B.3	Mo	del with Multiple Providers	112
B.3	.1	Insurer Premium Setting	112
B.3	.2	Provider-Insurer Price Negotiations	113
B.3	.3	Insurer Plan Offer Decision	117
B.4	Inco	orporating Risk Selection and Risk Adjustment	118
B.5	Sim	ulating Outcomes When Provider Participation is Mandatory	120
B.5	.1	Notation	120
B.5	.2	Calibration Assumptions	121
B.5	.3	Solution Method	121
B.5	•4	Parameter Calibration	122
B.5	•5	Expressing Results in Terms of Existing Private Plan Premiums	125
B.6	Lim	itations of a Model with a Single Private Insurer	125
B.6	.1	Role of Insurer-Insurer Competition in Disciplining Premiums	126
B.6	.2	Effects on Provider Profits from Shifts of Enrollment Among Private Plans.	126
B.6	.3	Would Nash-in-Nash Bargaining Still be a Reasonable Assumption?	127
<b>B.</b> 7	Pro	vider Public Option Participation Decisions	127
Append	ix C	Nash Bargaining Lemmas	130
Append	ix D	Price Cap Proofs	131

D.1 Sc	olution of Nash Bargaining Problem	131
D.1.1	Solution When Negotiated Prices Are Unregulated	131
D.1.2	Solution Under a Comprehensive Price Cap	131
D.2 Le	emmas for Proofs of Propositions	
D.3 Pr	roofs of Propositions	136
Appendix E	Public Option Proofs	

### I Executive Summary

Commercial health insurers pay much higher prices for health care services than public insurance programs like Medicare or Medicaid.<sup>1</sup> Commercial insurers pay around twice what Medicare pays for inpatient care on average, and the gap is even larger for outpatient care, as illustrated in Figure 1.1. Commercial insurers also generally pay more for physician services, although the gap is smaller.

These differences arise because commercial insurers and the Medicare program determine provider prices in different ways. In commercial insurance, provider prices are negotiated between providers and insurers. In practice, many health care providers face limited competition (e.g., Fulton 2017), which can often allow a provider to extract prices well above the minimum prices that would make serving an insurer's enrollees attractive to the provider. By contrast, Medicare generally sets provider prices administratively (i.e., via fee schedules established through legislative and regulatory processes). Historically, Medicare's prices have been set high enough to ensure that Medicare beneficiaries have a broad choice of providers (e.g., MedPAC 2020a), but policymakers' desire to contain the cost of the Medicare program has kept them well below commercial prices.

The large differential between the prices paid by Medicare and commercial insurers has led some policymakers to propose using some form of regulated or administered pricing in commercial insurance markets.<sup>2</sup> This paper examines three tools policymakers might use: (1) capping prices for out-of-network services; (2) regulating prices for both in-network and out-of-network services; and (3) creating a public option, a publicly operated plan that would set prices administratively and could be purchased in lieu of private plans. To gain insight into these policies, this paper develops economic models that combine economic theory with available empirical evidence. The main text summarizes the main insights from those models, and the appendices provide full mathematical details.



#### Figure 1.1: Average Commercial Prices as a Percentage of Medicare Prices

### <sup>1</sup> Throughout, I use the term commercial insurance to encompass private insurance plans sold in the individual, small group, or large group markets, as well as self-insured group health plans offered by employers.

<sup>&</sup>lt;sup>2</sup> This paper focuses on approaches to reducing the prices of health care services and largely does not consider prescription drugs in light of the major differences between prescription drugs and health care services.

The focus of this paper is understanding how these different policy tools would affect provider prices and premiums, which is of obvious interest in ongoing policy debates. Importantly, however, this paper does not seek to answer the question of whether policymakers *should* use these tools to reduce prices and, if so, how aggressively. To answer that question, it is necessary to understand how price changes caused by these policies would cause providers to change their service offerings and care delivery processes over the long run, as well as how those changes would affect the quantity and quality of the health care services patients received and the real economic resources consumed by the health care sector. Analyzing those downstream effects is beyond the scope of this paper.

#### 1.1 Capping Prices for Out-of-Network Services

The paper first examines proposals to limit what providers can collect for out-of-network services, such as by limiting collections to some multiple of what Medicare would pay for the same services (e.g., Murray 2013; Berenson et al. 2015; Song 2017; Chernew, Pany, and Frank 2019; Melnick and Fonkych 2020b). This type of policy would directly reduce prices for out-of-network services. However, because out-of-network services account for only several percent of commercial market spending (Pelech 2020; Song et al. 2020; Chernew, Dafny, and Pany 2020), an out-of-network cap's most important effects would likely occur by changing the in-network prices negotiated by providers and insurers.

I reach the following main conclusions about this policy:

• For services delivered in emergency situations, limiting out-of-network prices would also, in effect, limit negotiated in-network prices. With an out-of-network cap, an insurer always has the option to break off negotiations with a provider and pay the provider the capped price. If the insurer can do this without jeopardizing its enrollees' access to the provider's services, then this option offers the insurer an attractive alternative to a negotiated agreement that would allow it to insist on an in-network price no higher than the cap. In fact, the insurer could often negotiate a price below the cap by offering the provider greater volume (via more generous coverage for the provider's services) in exchange for a lower price.

Because federal law requires hospitals to accept patients in emergency situations, the logic above implies that an out-of-network cap could greatly reduce the prices of services delivered in emergency situations. Using the Medical Expenditure Panel Survey, I estimate that emergency department visits and ensuing inpatient stays account for 13% of health care spending for people with commercial insurance; this share is 34% for hospital services, which is arguably the service category where market power concerns are most acute.

Naturally, the amount an out-of-network cap reduced prices would depend on where the cap was set. The gold line in Figure 1.2 illustrates the qualitative relationship between the level of the cap and the negotiated price using the formal model developed in this paper. As shown in the figure, an out-of-network cap set at a high enough level (specifically, above the provider's pre-policy charge) would have no effect on the negotiated price. But as the cap fell below that level, it would generate progressively larger reductions in the negotiated price.

• Outside of emergency situations, an out-of-network cap may have much less scope to affect negotiated prices. In non-emergency situations, providers are generally legally permitted to decline to treat out-of-network patients. As a result, if an insurer broke off negotiations and paid the provider the capped price, the provider could respond by turning away the insurer's enrollees (or otherwise limiting their access to its services). For this reason, an out-of-network cap would give the insurer much less leverage in non-emergency situations unless non-legal barriers (e.g., fear of public disapproval) prevented providers from turning away patients, which, as discussed further in the main text, seems unlikely.



Figure 1.2: Negotiated Prices Under an Out-of-Network Cap

#### **USC** Schaeffer

#### BROOKINGS

Even when a provider can turn away patients, an out-of-network cap would still weaken the provider's bargaining position to some degree. Today, a provider can generally treat *some* of an insurer's patients in the absence of a network agreement, but, with a cap, the provider's best option would often be to forgo *all* of the insurer's patients absent an agreement. How much a cap weakened the provider's bargaining position would depend on how much volume a provider can retain when out-of-network—and at what price—under the status quo. While evidence on this question is imperfect, most providers' ability to attract non-emergency out-of-network volume is likely limited.<sup>3</sup> Combining the fragmentary empirical evidence with the formal model developed in this paper, I conclude that an out-of-network cap could reduce negotiated prices for non-emergency services by around 10% or less.

Once again, outcomes under an out-of-network cap would depend on the level of the cap, as illustrated by the blue line in Figure 1.2. For an out-of-network cap set at a high level, serving out-of-network patients would remain lucrative, so the provider's best option would be to accept out-of-network patients at the capped price, and incrementally tightening the cap would cause small reductions in the negotiated price. But for a low enough cap, it would be in the provider's interest to forgo out-of-network patients, and further tightening the cap would have no effect on negotiated prices or other outcomes of interest.

• Capping out-of-network prices could make it harder to obtain non-emergency out-of-network services. The analysis above concludes that, for a stringent enough out-of-network cap, providers would wish to turn away out-of-network patients in order to protect their bargaining leverage vis-à-vis insurers. In practice, providers might find ways to accept out-of-network patients in cases where doing so would not undermine their bargaining

<sup>&</sup>lt;sup>3</sup> One notable exception is services delivered by ancillary physicians (radiologists, anesthesiologists, pathologists, or assistant surgeons) during a hospitalization. As noted in recent debates over surprise billing, these physicians often retain substantial volume even when out of network (e.g., Adler, Fiedler, Ginsburg, Hall, et al. 2019; Cooper, Scott Morton, and Shekita 2020). Spending on these services is a modest, but not trivial, share of commercial spending (Cooper et al. 2020; Duffy et al. 2020).

position (e.g., uninsured patients and traveling patients). Nevertheless, it still might become harder for insured patients to routinely access care from out-of-network providers.

The paper also briefly considers a related policy that would place *both* a cap on what providers can collect for out-of-network services *and* a floor on what insurers must pay for out-of-network services (and how much coverage insurers must offer for that care). Unlike an out-of-network cap, this policy has the potential to *increase* negotiated prices if the floor is set at a high level. In particular, a provider has no reason to accept a negotiated price below the floor price because, even if negotiations break down, the policy's floor on how much coverage the insurer must offer for out-of-network care would ensure that the provider could continue to attract significant volume and be paid the floor price.

Notably, in non-emergency situations, this type of policy could increase prices on average even if the floor is set at a moderate level, such as the average negotiated price under the status quo. This is because the floor portion of the policy would place upward pressure on the prices negotiated by low-priced providers, but high-priced providers could keep the cap portion of the policy from substantially reducing the prices they receive by threatening to turn away out-of-network patients.

#### I.2 Regulating Both In-Network and Out-of-Network Prices

Because an out-of-network cap would likely have little effect on negotiated prices for non-emergency services, policymakers might wish to consider policies that would directly regulate both in-network and out-of-network prices. The next section of the paper thus considers two approaches to doing so, which I call the "comprehensive price cap" and "default contract" approaches.

A comprehensive price cap, as I define it here, would directly limit the amounts providers can receive for delivering health care services, both in and out of network (e.g., Skinner, Fisher, and Weinstein 2014; Murray and Berenson 2015; Blumberg et al. 2019; Roy 2019; Chernew, Dafny, and Pany 2020). The paper reaches the following conclusions about the effects of a comprehensive price cap:

- A comprehensive price cap could reduce prices for all health care services, including in settings where providers can turn away out-of-network patients. When providers must accept out-of-network patients, a comprehensive price cap and an out-of-network cap would be equally effective in reducing prices. But when providers can turn away out-of-network patients, a comprehensive price cap would have much greater scope to affect negotiated prices than an out-of-network cap. While a provider could keep the out-of-network portion of a comprehensive price cap from undermining its bargaining position by threatening to turn away out-of-network patients, the in-network portion of the cap would prevent the provider from translating a strong bargaining position into high prices.
- Under a comprehensive cap, providers could use the leverage that they could not translate into higher prices to extract other concessions, which could undermine the cap or have other undesirable effects. As noted above, a comprehensive price cap would reduce prices partly by directly limiting the prices providers and insurers could agree to rather than by reducing how much leverage providers held in network negotiations. But the leverage that providers could not translate into higher prices would not disappear, and providers could use that "excess" leverage to extract other types of concessions from insurers.

Providers might, for example, use their excess leverage to resist contract provisions intended to discourage inefficient utilization, such as prior authorization requirements or new payment models. Providers' incentives to increase volume was historically a concern under state hospital rate setting systems (e.g., Pauly and Town 2012; Murray and Berenson 2015).

Alternatively, providers might circumvent the cap by demanding insurers pay higher prices for service lines where the cap does not apply (or does not bind). For example, a health system with a high-priced flagship hospital could seek higher prices for its lower-priced community hospitals or its physician practices; systems might also accelerate acquisitions of hospitals or physician practices to maximize their ability to use this strategy. Evasion concerns would likely also require policymakers to limit use of alternative payment models, like bundled payments or shared savings contracts, since such contracts could be used to "hide" payments to providers. Policymakers would have options for addressing these problems, but it is unclear how effective they would be, and some might have undesirable side-effects of their own.

Motivated by the enforcement challenges that could arise under a comprehensive price cap, this paper also considers an alternative way of regulating health care prices that I call the "default contract" approach.<sup>4</sup> Under this approach, the government would publish a model network agreement (the "default contract") that specified both the prices the insurer would pay the provider *and* a minimum level of access the provider would be required to offer to the insurer's enrollees. A provider would be required to enter a default contract with any insurer that requested one, but providers and insurers would also be allowed to negotiate any alternative payment terms they wished. An insurer would be permitted to request a default contract with some providers but not others at its discretion.

The paper reaches the following main conclusions about the default contract approach:

• A default contract approach could reduce prices for all health care services, while avoiding the main enforcement challenges of a comprehensive price cap. Under a default contract policy, the insurer would always have the option to break off negotiations and give its enrollees access to the provider's services via a default contract. This option would allow the insurer to insist on prices at or below those in the default contract, at least if the default contract's access standards were reasonably stringent and effectively enforced.

Importantly, the default contract approach would limit prices by directly weakening a provider's leverage in network negotiations, rather than by limiting the provider's ability to translate leverage into high prices. For this reason, unlike a comprehensive price cap, it would not spur provider efforts to use leverage they cannot translate into higher prices to extract other concessions, such as higher volume or higher prices for service lines not subject to the price cap. Nor would it be necessary to limit use of alternative payment models.

• The core challenge of the default contract approach would be enforcing the access standards. The default contract approach would only be effective in reducing prices if implementing a default contract gave an insurer's enrollees real access to the provider's services, which would require the default contract's access standards to be effectively enforced. While not easy, enforcing these access standards would likely be easier than overcoming the various enforcement challenges that could arise under a comprehensive price cap.

Notably, enforcement efforts could focus on a single problematic behavior—provider attempts to turn away enrollees covered under a default contract—rather than the many different problematic behaviors that could arise under a comprehensive price cap. Additionally, provider compliance with the access standards would be comparatively straightforward to monitor directly via insurer or consumer complaints and, if necessary, audit studies.

Importantly, a default contract policy could be effective in reducing prices even if access standards were enforced imperfectly. While imperfect enforcement would reduce the leverage

<sup>&</sup>lt;sup>4</sup> Glied and Altman (2017) describe a version of this approach that would apply to a narrow subset of hospital services.

insurers derived from the ability to demand a default contract, policymakers could compensate for imperfect enforcement to some degree by specifying lower prices in the default contract.

#### I.3 Creating a Public Option

Another way to introduce regulated or administered pricing in the commercial market is to create a "public option," a publicly operated plan that consumers could purchase in lieu of a private plan. Introducing a public option was considered during the debate over the Affordable Care Act (ACA), and President-elect Biden's campaign platform included a public option. Many Congressional and think tank proposals also envision introducing a public option (T. Neuman et al. 2019).

Public option proposals vary widely in design. This paper focuses on a public option that would pay health care providers some percentage of the prices Medicare pays providers, require providers to accept public option patients, and charge a premium that covers its average costs. However, I also discuss how the effects of alternative public option designs might differ.

Market outcomes with a public option, including the prices providers received, the premiums enrollees paid, and the market share captured by the public option would depend on how private plans—and, particularly, private plans' negotiations with providers—changed in response to creation of a public option. To gain insight on these dynamics, this paper develops a formal model of health insurance markets in the presence of a public option. The main text presents the main insights from that model and the results of simulations using that model. Appendix B presents full details.

This analysis reaches the following main conclusions about the effects of introducing a public option:

• If a public option was much more attractive to consumers than existing private plans, then private plans would end up paying providers prices close to the public option's prices. The introduction of a public option that was much more attractive to consumers than existing private plans would reshape provider-insurer negotiations in two important ways. First, consumers would be unwilling to pay too much more for a private plan than for the public option, which would force private plans to set premiums close to the public option's premium. That, in turn, would make it unprofitable for private plans to pay providers prices too far above the public option's, making insurers willing to walk away from network negotiations rather than pay prices that high. Second, providers would recognize that if they did not join private plans' networks, some of their patients would instead enroll in the public option, and they would be paid the public option's prices. Thus, providers would be willing to walk away from negotiations rather than accept prices too far below the public option's prices.

Virtually any coherent economic model of provider-insurer bargaining predicts that a provider and insurer will negotiate a price that lies between the maximum price that makes an agreement profitable for the insurer and the minimum price that makes an agreement profitable for the provider. Thus, the considerations above imply that prices providers and insurers negotiated would end up neither too far above nor too far below the public option's prices. This conclusion contradicts assumptions in some prior analyses that introducing a public option would not meaningfully change the prices private plans could negotiate (Antos and Capretta 2019; FTI Consulting 2019; Koenig et al. 2019; Schaefer and Moffit 2020). This analysis also suggests that a public option that paid most providers less than existing private plans but paid some providers more could increase the prices that private plans paid those specific providers, even as it reduced the prices that private plans paid providers overall.

Importantly, the conclusions above depend on the public option being a strong competitor for private plans. If a public option had non-price cost disadvantages relative to private plans that

partially offset its pricing advantages (a possibility discussed below), then it would set correspondingly higher premiums and do less to constrain the premiums private plans set and the prices they paid providers. Indeed, if the public option had non-price cost disadvantages large enough to fully offset its pricing advantages, it would likely attract little enrollment and have little effect on market outcomes. Similarly, a public option that paid all providers more than existing private plans would also have little effect on market outcomes.

• A public option that paid providers less than existing private plans could both offer consumers a new lower-premium option and reduce the premiums of private plans. The preceding discussion implies that, in cases where the public option was more attractive to consumers than existing private plans, both private plans and the public option would pay providers prices that were reasonably close to the public option's prices. Thus, if a public option paid providers less than existing private plans and did not have large non-price cost disadvantages, the premiums set by both the public option and the private plans competing with it would likely be lower than the premiums of existing private plans.

Notably, employer plans pay providers very different prices in different parts of the country (e.g., Chernew, Hicks, and Shah 2020), and it is generally believed that individual market plans pay providers less than employer plans (e.g., Blumberg et al. 2020). Thus, if a public option paid providers the same prices in all settings, it would likely have different effects on premiums and prices in different geographic areas and different insurance markets. Specifically, it would tend to reduce premiums the most in areas and markets where private plans currently pay the highest prices, but generate smaller, if any, savings in lower-priced areas or markets.

• A public option would differ from private plans in ways other than what it paid providers, including non-price determinants of plan costs (e.g., utilization, nonclaims costs, risk selection, and diagnosis coding) and how it set premiums. In particular, experience from Medicare Advantage (e.g., Curto et al. 2019) suggests that a public option would have higher utilization than its private competitors for comparable enrollees, at least in the individual market, where private plans are often tightly managed. On the other hand, data on non-claims expenses in traditional Medicare and existing private plans suggests that a public option might have lower non-claims expenses than competing private plans.

In the individual and small group markets, the public option would likely also differ from private plans in what types of enrollees it attracted and how aggressively it coded diagnoses for risk adjustment purposes. Experience from Medicare Advantage suggests that private plans might attract a healthier mix of enrollees and succeed in making comparable enrollees look sicker for risk adjustment purposes (e.g., Curto et al. 2019; Geruso and Layton 2020). Both factors would tend to increase the public option's costs relative to private plans.

A public option would also set premiums differently from private plans. While the public option would set a premium to cover its average costs, private plans set premiums to maximize their profits. Correspondingly, private plans would set premiums that incorporate a markup over their costs, ceding some enrollment to the public option in exchange for positive margins. Because of this difference in premium-setting behavior, introducing a public option could be particularly consequential in areas with few competing insurers (and, thus, high markups).



#### Figure 1.3: Public Option Market Share

Note: The figure reflects a scenario in which existing plans pay providers 180% of Medicare rates, on average.

**USC** Schaeffer

BROOKINGS

• The public option's market share could vary widely depending on how it compared to private plans, but private plans would retain substantial enrollment in most plausible scenarios. Figure 1.3 illustrates this fact using the simulations conducted in this paper. The figure examines several scenarios in which a public option is introduced in a market where existing private plans pay providers 180% of Medicare rates. (As discussed in the main text, the model used here includes only a single private plan, which may cause it to overstate private plans' premiums and understate their market share. However, while the results displayed in Figure 1.3 should not be taken too literally, they do help illustrate how and why the public option's market share would likely vary across different scenarios.)

The first set of scenarios assumes that the public option and private plan are identical, except for determining provider prices and premiums differently. These scenarios are unrealistic but offer a useful benchmark. In these scenarios, the public option captures about four-fifths of the market. This occurs because the private plan's premium incorporates a markup over its costs and thus charges a higher premium despite having an identical cost structure.

The second set of scenarios reflects assumptions plausible for a public option offered in the individual market. For these scenarios, I assume that the public option has higher utilization than the private plan, attracts sicker enrollees, and codes diagnoses less aggressively in risk adjustment, but has lower non-claims costs. The private plan also has a narrower network that allows it to negotiate prices modestly below the public option's prices. Thus, the public option charges a higher premium than the private plan and captures only a minority of the market.

The final scenarios reflect assumptions plausible for a public option offered to large employers. Since private plans in the employer market have broader networks and weaker utilization controls, I assume that a public option offered to employers would have a smaller utilization disadvantage; the private plan's broader network also causes it to pay prices closer to the public option's. Additionally, because I assume that an employer market public option would only offer third-party administrator services, risk selection is no longer relevant. Consequently, the public option's premium is lower relative to the private plan's than in the second set of scenarios, so the public option captures half or more of the market.

The consequences of introducing a public option would differ if the design of a public option differed from the one considered in this paper's primary analyses. In particular:

• If providers could opt out of serving public option patients, many providers might do so, potentially leading to a very different market equilibrium. A provider that opted out of the public option would become more valuable to private plans—because private plans could now offer exclusive access to the provider's services—and thus be able to negotiate higher prices with private plans. While opting out would also have costs for providers, primarily lost profits on public option volume, it is plausible that many providers would opt out, at least if the public option set low payment rates. Providers that command high prices under the status quo would likely have the most to gain by opting out.

The consequences of provider opt outs would depend on how widespread they were. If the public option's network ended up far narrower than existing private plans, then introducing a public option might have little effect on market outcomes, either because the public option would attract little enrollment or because policymakers would be forced to pull the public option from the market. If the public option ended up with a narrow, but viable network, the situation is more complex. Relative to the case where providers must participate in the public option, private plans would likely pay providers more and charge higher premiums, while the public option might have lower utilization and suffer from less adverse selection (Liu et al. 2020). The net change in the public option's market share relative to the case with mandatory provider participation from a narrower network and a lower relative premium is uncertain.

• If a public option negotiated prices with providers rather than setting them administratively, it is doubtful that a public option would pay lower prices than existing private plans. If policymakers wished to make participation in the public option voluntary for providers but still allow the public option to attract a broad network, they could implement a public option that set prices through negotiation with providers, rather than administratively. However, there is little reason to believe that a public option would be able to negotiate lower prices than existing private plans. A public option might still charge a modestly lower premium by virtue of setting a premium that does not incorporate a profit margin or by having lower non-claims costs, but these advantages might be offset in practice if the public option had higher utilization or experienced adverse selection.

#### 1.4 Effects on Provider Networks

Most of the analysis in this paper focuses on how a price cap or public option might affect prices and premiums generally, but these policies would likely have different effects on plans with broader and narrower networks and change what types of networks enrollees select. While this paper does not offer a full analysis of potential effects of these policies on plans' networks, I reach the following qualitative conclusions about the effects of a price cap or a public option on these outcomes:

• These policies would likely reduce the difference in premiums between broad and narrow network private plans. Because all of the policies considered in this paper would reduce the overall level of provider prices, they would reduce the savings insurers could realize using narrow networks; when the overall level of prices is lower, an insurer's scope to use a narrow network to negotiate still lower prices is smaller, and the potential savings from using a narrow network to steer enrollees away from high-priced or high-utilizing providers is smaller too. Correspondingly, these policies are likely to shrink the gap in premiums between broad and narrow network plans. For a public option offered in the individual market or small group market, changes in risk selection patterns could also affect the relative premiums of broad and narrow network plans, although the direction of this effect is uncertain.

• While reductions in the relative premiums of broad network plans would generally push consumers toward broader networks, some factors could push in the opposite direction. In particular, the price cap policies would reduce consumers' exposure to balance billing when they receive out-of-network care, which could make narrow network plans modestly more appealing, perhaps partially offsetting the fact that opting for a narrow network plan would now offer smaller premium savings. Under a public option, the public option might siphon off many enrollees who prefer broad network plans, which could cause *private plan* enrollment to shift toward narrower networks even though narrow networks would now offer smaller premium savings, although *overall* enrollment (inclusive of public option enrollment) would still likely shift toward broader networks.

Any shift toward broader networks in private plans would tend to partially offset the downward pressure on average provider prices and premiums created by a price cap or public option.

#### 1.5 Strategies for Ensuring Provider Compliance

Either a price cap or a public option would impose requirements on health care providers, and a natural question is how those requirements would be enforced. Policymakers would have two broad categories of options. First—and most straightforward—they could directly penalize non-compliant providers. For example, policymakers could fine non-compliant providers, and state policymakers could consider making compliance a condition of provider licensure.

Second, federal policymakers could require providers to comply with a price cap or accept patients under a public option in order to serve patients with various forms of federally subsidized coverage. A narrow version of this approach might encompass only public programs like Medicare and Medicaid, while a broader version could also encompass private insurance plans offered on the group and individual markets, which are subsidized via the tax exclusion for employer-provided coverage and the ACA's Marketplace subsidies. Naturally, the more types of subsidized coverage included, the more successful this approach would likely be in ensuring compliance with the price cap or public option.

Importantly, one risk of this approach is that providers might opt out of the relevant forms of publicly subsidized coverage rather than comply with the price cap or public option. That concern would be most acute for a price cap that was set at a low level or that affected a broad array of services, as well as public option that paid low prices. It would also be larger for a price cap or a public option that was implemented in the group market in addition to the individual market. On the other hand, it would tend to be smaller if all (or almost all) forms of federally subsidized coverage were included in this type of approach. Virtually all existing coverage is federally subsidized in some way, so being locked out of all forms of federally subsidized coverage would likely be viable for few, if any, providers.

#### 1.6 Experience from Medicare Advantage

Experience with most of the policy tools considered in this paper is relatively limited in the United States. But the Medicare program is an important exception. In Medicare, private Medicare Advantage (MA) plans compete alongside traditional Medicare, which plays the role of a public option, and providers are subject to an out-of-network cap set at traditional Medicare rates when treating MA enrollees. The Medicare program thus offers an interesting empirical setting in which to assess and apply the largely theoretical analysis presented in the rest of this paper.

A striking fact is that MA plans pay hospitals and physicians prices very close to traditional Medicare's prices in almost all cases, a stark contrast with the much higher and widely varying prices paid by commercial plans (Berenson et al. 2015; Baker et al. 2016; Trish et al. 2017; Maeda and Nelson 2018; Pelech 2020). Applying this paper's theoretical analysis to MA yields two conclusions, which offer both some support for this paper's analysis and some insight into dynamics in MA:

- The presence of traditional Medicare can largely explain the prices observed in MA. Medicare program rules make it impossible for institutional providers to turn away traditional Medicare patients while still serving MA enrollees, and traditional Medicare's large market share likely makes turning away traditional Medicare patients unattractive to physicians too. Traditional Medicare is thus analogous to a public option with mandatory provider participation. Correspondingly, the analysis of a public option in this paper implies that the presence of traditional Medicare should allow MA plans to negotiate prices close to traditional Medicare's, consistent with the prices actually observed in MA. This echoes some prior analyses of MA that have also posited a major role for traditional Medicare in explaining the prices observed in MA (e.g., Berenson et al. 2015; Trish et al. 2017).
- While the MA out-of-network cap likely plays at least a supporting role in explaining the prices observed in MA, that role may be smaller than sometimes suggested. There do not appear to be clear legal or other barriers keeping providers from turning away out-of-network MA enrollees (or otherwise limiting access) in non-emergency situations. Thus, the analysis of an out-of-network cap in this paper suggests that the out-of-network cap likely has only modest effects on the prices MA plans can negotiate for non-emergency services. This conclusion differs from prior work that assigns the out-of-network cap a more central role in shaping prices in MA (e.g., Maeda and Nelson 2018; Pelech 2020).

The presence of an out-of-network cap may nevertheless play a supporting role in shaping negotiated prices in MA. Even when providers can turn away patients, an out-of-network cap does have some limited scope to reduce prices. This may matter in cases where competitive pressure from traditional Medicare leaves the prices negotiated by MA plans modestly above traditional Medicare's prices. In these cases, the out-of-network cap may push negotiated prices the rest of the way toward traditional Medicare's, which may help explain why MA prices are *uniformly* close to traditional Medicare's across different providers and geographic areas.

#### I.7 Conclusion

The analysis in this paper demonstrates that an appropriately designed price cap or public option can reduce the prices of health care services. It also offers some guidance on how policymakers that wished to use a price cap or a public option to reduce prices should choose among these policies:

- Neither an out-of-network cap nor a comprehensive price cap is likely to be policymakers' best option to reduce provider prices. It is questionable at best whether an out-of-network cap could reduce the prices of services delivered in non-emergency situations, and it could reduce patients' ability to access out-of-network care. A comprehensive price cap could, on paper, reduce prices in all settings, but enforcement challenges might threaten the integrity of the cap, and the cap could have various undesirable side effects, including increased utilization, greater consolidation, and less adoption of alternative payment models. By contrast, a default contract policy could reduce prices in all settings while avoiding the main enforcement challenges and undesirable side-effects of the other approaches.
- If policymakers' sole goal is to reduce provider prices, a default contract policy is a simpler and more flexible tool than a public option. A default contract policy could

be applied solely to specific services (à la Glied and Altman 2017; Roy 2019), whereas a public option would need to set prices for all types of services and, correspondingly, would affect prices for all types of services. Additionally, a default contract policy could be targeted primarily at the highest-priced providers (à la Chernew, Dafny, and Pany 2020) by specifying high prices in the default contract. By contrast, a public option that paid all providers more than existing private plans would be uncompetitive and thus have little or no effect on prices, and a public option that paid somewhat lower prices would increase prices received by low-priced providers in addition to reducing the prices received by high-priced providers.

Implementing a public option would also entail operating an insurance plan, which would be administratively complex. Related, if the public option had disadvantages in utilization, risk selection, or diagnosis coding, that could undermine its ability to reduce provider prices.

• A public option can address insurer market power, which the price cap policies cannot. Policymakers may have goals other than reducing provider prices. Notably, many insurance markets are concentrated (Fulton 2017), which can allow insurers to charge higher premiums (e.g., Dafny, Duggan, and Ramanarayanan 2012; Dafny, Gruber, and Ody 2015). Introducing a public option could reduce premiums by forcing insurers to accept smaller profit margins (although such margins are already generally modest) or by creating pressure for insurers to operate more efficiently along other dimensions. These considerations can provide a rationale for implementing a public option instead of or in addition to a price cap.

While this paper focuses on the substantive effects of these policies, policymakers would also need to consider the political feasibility of alternative policy approaches. Political considerations might be particularly important to the choice between a public option and some form of price cap. Notably, introducing a public option would threaten the interests of health insurers in addition to health care providers and thus could spark broader industry opposition. However, health insurers are deeply distrusted by the public (Commonwealth Fund, New York Times, and Harvard T.H. Chan School of Public Health 2019; KFF 2020a), so a public option that offered consumers a concrete alternative to private insurance plans could have broad public appeal. Indeed, this antipathy for private insurers may well be part of the reason that public opinion survey data show that public option proposals command broad public support (Kirzinger, Kearney, and Brodie 2020).

### 2 Overview of Current Pricing Institutions and Outcomes

To provide a foundation for the rest of the paper, I begin by briefly describing the decentralized, negotiation-based processes used to determine provider prices in commercial insurance and the administrative processes used to determine provider prices in public programs. I then briefly review literature documenting that provider prices in commercial insurance are far higher than in Medicare and discuss what features of health care provider markets may lead to this outcome.

#### 2.1 Determination of Prices in Commercial Insurance

In commercial insurance, the vast majority of health care services—accounting for more than 90% of total spending—are delivered by providers included in the insurer's network, the list of providers for which the insurer offers more generous coverage (Pelech 2020; Song et al. 2020; Chernew, Dafny, and Pany 2020). Indeed, many commercial plans, including more than two-thirds of individual market plans (Hempstead 2018; Coe, Luterek, and Oatman 2018), offer no coverage for services delivered by providers outside the plan's network.<sup>5</sup> Even when private plans do provide out-of-network coverage, as most employer plans do (KFF 2020b), enrollee cost-sharing obligations are generally higher.

The prices of in-network services are determined through provider-insurer negotiations. When successful, these negotiations result in an agreement under which the provider commits to accept a specified price and the insurer commits to including the provider in its network. As discussed in much greater detail in the rest of the paper, the prices providers and insurers negotiate are shaped by a wide variety of factors, including how much competition a provider faces (e.g., Gaynor and Town 2011; Cooper et al. 2019; Koch and Ulrick 2017), the provider's reputation (e.g., D. G. Pope 2009), the rules governing out-of-network care (as I discuss in the context of an out-of-network cap), and the insurer's ability to extract high premiums from enrollees (as I discuss in the context of a public option).

The prices of out-of-network services are determined very differently. Each provider unilaterally sets a "charge" that, at least in principle, is its price for services delivered in the absence of a network agreement. Charges tend to be very high, roughly double negotiated in-network prices, on average (Bai and Anderson 2017; Cooper et al. 2019).<sup>6</sup> In practice, providers often fail to collect their full charges since many insurers refuse to pay full charges and collecting the remaining amount due from patients via "balance billing" is often challenging, although systematic data on this point is scarce. Nevertheless, providers' typical out-of-network collections likely exceed typical negotiated prices. Even though out-of-network care accounts for a small minority of the care actually delivered, expected out-of-network outcomes play a major role in shaping negotiated in-network prices, as discussed in section 4.

#### 2.2 Determination of Prices in Public Programs

The decentralized approach used to determine the prices of health care services in commercial insurance contrasts sharply with the administered pricing systems generally used in public insurance

<sup>&</sup>lt;sup>5</sup> Due to data limitations, Hempstead (2018) and Coe, Luterek, and Oatman (2018) estimate the share of individual market *plans* without out-of-network coverage, not the share of enrollees with such coverage. To the extent that individual market enrollees gravitate toward lower-premium plans, the share of enrollees lacking out-of-network coverage may be higher.

<sup>&</sup>lt;sup>6</sup> Bai and Anderson (2017) only compare physicians' charges to Medicare rates. However, in a sample of Medicare claims, they estimate that, for the median claim, physicians' charges were 2.5 times what Medicare pays in 2014. For comparison, MedPAC (2016) estimates that negotiated prices in commercial coverage were 1.28 times Medicare's payment rates for the same services, on average, in the same year. While these estimates are not precisely comparable, they are consistent with the view that charges are roughly twice commercial prices, on average.

programs. I focus on traditional Medicare's payment system since most proposals for making greater use of administered prices, at least at the federal level, are based upon Medicare's prices.<sup>7</sup>

The Centers for Medicare and Medicaid Services (CMS) generally directly sets the prices that the traditional Medicare program pays for health care services.<sup>8</sup> The precise methods used vary by type of service, but the systems used to pay for most services—including hospital and physician services—have a similar broad structure.<sup>9</sup> CMS starts by producing estimates of the relative resource intensity of delivering different services. It then adjusts those amounts for differences in input costs across areas, generating various area-specific relative resource intensities. In a final step, CMS converts those relative resource intensities to dollar terms by multiplying them by a common dollar amount.<sup>10</sup>

An important goal of federal policymakers is for Medicare beneficiaries to have robust access to health care providers, which generally requires that Medicare's prices exceed providers' marginal cost of delivering services. Medicare's prices achieve that objective in practice. Based on data from hospitals' cost reports to CMS, the Medicare Payment Advisory Commission (MedPAC) estimates that Medicare hospital payments were 8% higher than hospital's marginal cost of treating an additional Medicare patient in 2018, on average across providers, although about 9% lower than hospitals' average cost of treating Medicare patients. (MedPAC 2020a). Similar cost data are not available for physician services. However, only a tiny fraction of physicians have opted out of Medicare, and beneficiary surveys indicate that Medicare beneficiaries generally have little trouble finding a physician when they need one (MedPAC 2020a). This suggests that treating an additional Medicare patient is financially attractive to most physicians and, therefore, implies that Medicare's payment rates must generally exceed physicians' marginal cost of delivering those services.

State Medicaid programs also generally set provider prices through administrative mechanisms, at least in the fee-or-service portions of their programs, but the precise methods used vary tremendously from state to state, so I do not review them here.<sup>11</sup> On average, however, the prices Medicaid pays for inpatient services are comparable to Medicare's, while the prices Medicaid pays for physician services tend to be lower (MACPAC 2017; Zuckerman, Skopec, and Epstein 2017), although in both cases there is very wide variation in payment levels across states.

#### 2.3 Comparing Commercial and Medicare Prices

Many studies compare the prices commercial insurers pay for health care services to the prices that the federal government pays for the same services under traditional Medicare. This literature supports two main conclusions: (1) commercial insurers pay much higher prices than Medicare, particularly for hospital services; and (2) the gap between commercial and Medicare prices for a given service varies widely across and within regions. This section closes by considering *why* commercial prices are higher.

<sup>&</sup>lt;sup>7</sup> Increasing fractions of both Medicare and Medicaid enrollees receive care through managed care plans, which generally negotiate prices with health care providers, like commercial plans. I consider the illuminating experience under the Medicare Advantage program in section 9.

<sup>&</sup>lt;sup>8</sup> There are exceptions. For example, prices for durable medical equipment are now set partially through competitive bidding, and prices for laboratory services are set based on average prices paid in the private market.

<sup>9</sup> For a more detailed description of Medicare's payment systems, see MedPAC (2020b).

<sup>&</sup>lt;sup>10</sup> In practice, Medicare rates also incorporate other adjustments. For example, CMS adjusts most payment rates up and down based on measures of the quality and efficiency of the care providers deliver. Teaching hospitals and hospitals that treat high numbers of low-income patients also generally receive higher payment rates. CMS also increasingly uses "alternative payment models," which may link payment to the overall cost and quality of the care patients receive during a year (in the case of accountable care organization models) or a clinical episode (in the case of bundled payment models).

<sup>&</sup>lt;sup>11</sup> For an overview of Medicaid payment systems, see MACPAC (n.d.).



#### Figure 2.1: Average Commercial Prices as a Percentage of Medicare Prices

#### **USC** Schaeffer

#### 2.3.1 Average Differences Between Commercial and Medicare Prices

Figure 2.1 summarizes several recent studies that used health care claims databases to compare commercial and traditional Medicare prices for broad categories of services. <sup>12</sup> While there are slight differences in methodology across the studies, each study reports an estimate that reflects the ratio of what commercial insurers pay for the relevant services to what Medicare pays for the same services. The claims data sources used in these studies are briefly summarized in Table 2.1.

The differential between commercial and Medicare prices varies substantially by service category. For inpatient hospital services, commercial insurers pay around twice what Medicare pays, on average, although point estimates vary modestly across the studies shown. Differentials for outpatient facility services are generally larger, but estimates are more variable, with commercial prices ranging from more than twice to more than three times Medicare prices depending on the study.<sup>13</sup>

Differentials for physician services are generally smaller, ranging from 20% in the lowest estimate to 63% in the largest estimate, but still substantial. Other analyses that examine specific physician services find that the differential between commercial and Medicare prices varies by type of service. with office visits generally showing small differentials and specialty and imaging services often showing much larger payment differentials than office visits (Pelech 2020; Trish et al. 2017).

There are exceptions to the general pattern of private insurers paying more than Medicare for health care services. Using data from one larger insurer, Trish et al. (2017) report that private insurers historically paid about 25% less than Medicare, on average, for certain common lab services and varieties of durable medical equipment, although this may no longer be true in light of recent changes

<sup>&</sup>lt;sup>12</sup> The research team responsible for the Whaley et al. (2020) estimates has reported multiple generations of estimates using related methodologies. I include only the most recent estimates in Figure 2.1.

<sup>&</sup>lt;sup>13</sup> The studies examining outpatient facility services vary in which services they include, which may be part of why these estimates vary. While Chernew, Hicks, and Shah (2020) examine all outpatient facility services, Whaley et al. (2020) examine only hospital services, excluding the roughly 10 percent of services that Chernew, Hicks, and Shah estimate happen in other settings. Blumberg et al. (2020) examine a set of common services that account for about half of total outpatient facility spending.

#### Table 2.1: Studies Comparing Commercial and Medicare Payment Rates

Study	Data Year	Data Source and Description	
Blumberg et al. (2020)	2017- 2018	FAIR Health, which holds claims for commercial insurers and third-party administrators with 150 million covered lives.	
Chernew, Hicks, and Shah (2020)	2017	IBM Marketscan, which holds claims for employer-sponsored plans with 27 million covered lives.	
Cooper, Craig et al. (2019)	2011	Health Care Cost Institute, which holds claims from Aetna, Humana, and United Healthcare.	
Maeda and Nelson (2018)	2013	Health Care Cost Institute, which holds claims from Aetna, Humana, and United Healthcare.	
MedPAC (2020a)	2018	Preferred provider organization plans offered by a large national insurer.	
Whaley et al. (2020)	2018	Convenience sample of self-insured employers, health plans, and state all-payer claims databases.	

to Medicare's payment policies in these areas (MedPAC 2019a; 2019b). Even within physician services there are some exceptions. For example, commercial insurers' payment rates for common in-network mental health services were 13-14% lower, on average, than the corresponding Medicare payment rates (Pelech and Hayford 2019), possibly reflecting efforts by commercial insurers to reduce claims spending by making their plans less attractive to people with significant mental health care needs.

The estimates presented above generally reflect prices in employer-sponsored coverage because the authors either entirely exclude claims from individual market plans or use claims databases that include only a small number of such claims. The narrow network insurance products that insurers have tended to offer in the individual market may have allowed them to negotiate lower prices with providers in that market, and there is some qualitative evidence in support of that view (Holahan et al. 2019). Unfortunately, systematic quantitative comparisons of how individual market provider prices compare to those in the employer market and Medicare are not available.

#### 2.3.2 Variation in Prices Across and Within Geographic Areas

The prices paid by commercial insurers vary widely across the country, both in absolute terms and relative to Medicare rates (e.g., Blumberg et al. 2020; Cooper et al. 2019; Chernew, Hicks, and Shah 2020; Maeda and Nelson 2018; Pelech 2020; Whaley et al. 2020). It is, however, uncommon for commercial insurers to pay less than Medicare. Maeda and Nelson (2018) find that commercial insurers pay 144% of what Medicare pays in the metropolitan area at the 10<sup>th</sup> percentile of the distribution, and 248% of what Medicare pays in the metropolitan area at the 90<sup>th</sup> percentile of the distribution. For physician services, Blumberg et al. (2020) estimate that that commercial insurers pay 150% of what Medicare pays in the 90<sup>th</sup> percentile geographic market and about 90% of what Medicare pays even in the 10<sup>th</sup> percentile geographic market. Area-level prices are positively correlated with measures of provider market concentration (e.g., Cooper et al. 2019; Dunn and Shapiro 2014), suggesting that at least part of this variation reflects differences in competitive conditions across areas.

The prices that commercial insurers pay providers also vary widely *within* a geographic area (Cooper et al. 2019; Maeda and Nelson 2018; Pelech 2020; Whaley et al. 2020). For physician services, Pelech (2020) estimates that, for the specific services she examines, the price commercial insurers pay to the

90<sup>th</sup> percentile provider is at least 50% higher than the price paid to the 10<sup>th</sup> percentile providers in at least half of metropolitan areas. For inpatient services, Cooper et al. (2019) report that the within-area standard deviation of prices is about 22% of the mean price; roughly speaking, that level of dispersion implies around a 78% difference between the 10<sup>th</sup> percentile and the 90<sup>th</sup> percentile provider in a typical geographic area.<sup>14</sup> This variation may reflect many factors, including differences in providers' costs, reputations, and quality (e.g., D. G. Pope 2009; Garthwaite, Ody, and Starc 2020).

#### 2.3.3 Why Are Commercial Prices So Much Higher?

The large gap between commercial and Medicare prices reflects the different processes used to set them. As noted above, Medicare's prices are set administratively and, by design, roughly approximate providers' cost of delivering services, whereas commercial prices are set via negotiation. In wellfunctioning markets, commercial insurers would be expected to negotiate prices that, like Medicare's prices, approximate providers' costs, but in practice that clearly does not occur.

One important ingredient in this outcome is that many health care provider markets are highly concentrated. Fulton (2017) estimates that the hospital markets in 90% of metropolitan statistical areas would have been considered highly concentrated under federal merger guidelines in 2016. The situation is better for physician services, but only modestly so; Fulton estimates that 65% of specialty physician markets and 39% of primary care physician markets were highly concentrated in 2016. In practice, markets may be even more concentrated than these estimates would suggest since the relevant geographic market may often be smaller than a metropolitan statistical area.<sup>15</sup>

High market concentration might not give providers that much pricing power if consumers viewed different providers as interchangeable, but that is clearly not the case. Indeed, the value consumers place on broad choice of providers is likely why take-up of narrow network plans has been so limited in the employer market (KFF 2020b) despite the fact that plans with narrower networks frequently offer much lower premiums (e.g., Dafny et al. 2017; Gruber and McKnight 2016).

In an environment where there are few competing providers and many consumers strongly prefer receiving care from *particular* providers, an insurer that excludes any particular provider from its network is likely to see a substantial reduction in demand for its plans because many consumers will view the plan as lacking acceptable substitutes. As a result, insurers are likely to place a high value on reaching agreement with each specific provider, allowing providers to insist on high prices. Indeed, empirical analyses of provider mergers in hospital and physician markets find that they substantially increase prices (e.g., Gaynor and Town 2011; Cooper et al. 2019; Koch and Ulrick 2017), consistent with the view that limited competition is a driver of high commercial prices.

Public policy likely magnifies the pricing power that providers derive from the underlying lack of competition and consumers' preferences from receiving care from particular providers. For example, certain regulatory requirements on health insurers (e.g., network adequacy and any willing provider requirements) limit insurers' leverage in network negotiations. Similarly, the tax exclusion for employer-sponsored coverage may reduce employers' sensitivity to high premiums, which may in turn make insurers more willing to agree to high prices. Additionally, in some cases, market concentration may itself be a consequence of poor public policy, particularly inadequate enforcement of antitrust laws. Gaynor, Mostashari, and Ginsburg (2017) and Gaynor (2020) review the role of these public policy failures in more detail and examine a variety of potential solutions.

<sup>&</sup>lt;sup>14</sup> This calculation converts the coefficient of variation reported by Cooper et al. to a 90/10 ratio under the assumption that the underlying distribution is normal, so it only approximates the actual 90/10 ratio.

<sup>&</sup>lt;sup>15</sup> This proviso applies to Fulton's estimates of market concentration for hospital and specialty physician services, but not his estimates for primary care services, which use a geographically smaller market definition.

As a final note, it is sometimes argued, particularly by health care providers themselves (e.g., AHIP et al. 2008), that high commercial prices result from "cost shifting," not provider market power. The cost shifting explanation posits that providers demand high prices from commercial plans to compensate for inadequate payment rates under public programs. But this explanation has both theoretical and empirical problems. As a theoretical matter, it supposes that providers would not exploit the pricing power they hold—and thus leave substantial money on the table—if public programs paid more, which seems unlikely. As an empirical matter, recent research has found that reductions in Medicare's prices tend to *reduce* the prices paid by commercial insurances, the opposite of what would be expected under a cost-shifting explanation of high commercial prices (Clemens and Gottlieb 2016; White 2013).

### 3 Framework for Policy Analysis

The remainder of this paper analyzes how three policy tools—capping what providers can collect for out-of-network care, regulating both in-network and out-of-network prices, or creating a public option—would affect the prices paid for health care services in commercial insurance markets, as well as other outcomes of interest to policymakers, particularly enrollee premiums. To gain insight on the potential effects of these policies, this paper develops economic models that combine economic theory with available empirical evidence. The main text presents the main insights from these models, and appendices present the models in their full mathematical detail.

In the interest of tractability, I limit the scope of this analysis in two important ways.<sup>16</sup> First, I do not consider effects these policies might have on the structure of the health care delivery system, including how many providers offer health care services and how those providers deliver care. In reality, changing provider prices would likely spur delivery system changes over the long run, particularly if implemented in the employer market in addition to the individual market.

These types of delivery system changes could, in turn, cause price changes that are not captured in this analysis. For example, if revenue pressure created by these policies caused providers to reduce their costs of delivering care, that could reinforce any downward pressure on prices generated by these policies. On the other hand, if lower prices caused some providers to shut down, thereby reducing competition, that could create countervailing upward pressure on prices, although the scope for this type of effect would be more limited for policies that placed a tight upper limit on prices.

Perhaps more importantly, delivery system changes could also have consequences for the quantity and quality of the services providers deliver, as well as the real resources consumed by the health sector. Understanding these effects would be necessary to answer the normative question of whether policymakers *should* use the policy tools considered in this paper and, if so, how aggressively. Expanding the analysis to account for these effects is thus an important area for future work.

The second way I limit the scope of this analysis is that I generally take as given commercial insurers' networks, as well as enrollees' preferences for different types of networks. This approach is born largely of necessity, as modeling insurer network determination is difficult (e.g., Shepard 2016; Ho and Lee 2019). However, section 7 offers an informal discussion of how the policies in this paper might change plan networks, as well as how changes in plan networks might alter the conclusions in the rest of the paper. Further analyzing effects related to plan networks is a useful area for future work.

<sup>&</sup>lt;sup>16</sup> I also confine my attention to polices under which price limits (or the prices paid by a public option) exceed providers' marginal cost of delivering services so that it would be in providers' interest to serve patients. As a practical matter, this is not a particularly important limitation. As noted above, even Medicare rates appear to exceed providers' marginal costs.

### 4 Capping Out-of-Network Prices

One commonly discussed approach to regulating provider prices is limiting how much providers can collect for out-of-network services (e.g., Murray 2013; Berenson et al. 2015; Song 2017; Chernew, Pany, and Frank 2019). Such a policy could directly reduce amounts paid for out-of-network care and limit patients' exposure to large medical bills if they inadvertently see an out-of-network provider.

But importantly, capping out-of-network prices could also reduce in-network prices by reducing the leverage providers derive from the ability to collect high prices for out-of-network care. In practice, the overwhelming majority of care is delivered in-network (Pelech 2020; Song et al. 2020; Chernew, Dafny, and Pany 2020), and a majority of care is delivered in-network even in emergency situations (Garmon and Chartock 2017; Cooper, Scott Morton, and Shekita 2020). Thus, a cap's effects on in-network prices may be much more important than its effect on out-of-network prices.

For this reason, this section focuses on how introducing an out-of-network cap would affect in-network prices. I start by specifying the features of the out-of-network cap policy I analyze in this paper and briefly discuss how the policy I consider compares to those considered elsewhere. I then describe the model I use to assess the effects of an out-of-network cap, the full details of which are presented in Appendix A, and use that framework to quantify the potential effects of an out-of-network cap.

In brief, I conclude that capping out-of-network prices would reduce in-network negotiated prices in instances where providers cannot credibly threaten to turn away out-of-network patients, particularly emergency situations. But for most other services, an out-of-network cap would likely have limited ability to reduce negotiated prices since providers would retain the ability to turn away out-of-network patients and thus retain most of the bargaining leverage they have today. In these cases, an out-of-network cap might also have the unintended consequence of making it harder to access out-of-network care. I also show that a policy that paired an out-of-network cap with a lower limit on what insurers must pay for out-of-network services could increase, rather than reduce, negotiated prices.

#### 4.1 Design of an Out-of-Network Cap

An out-of-network cap limits what providers can collect for services delivered in the absence of a contract between the provider and the patient's insurer. Such caps generally limit the total amount providers can collect for such services from all sources, including the patient and the patient's insurer.

Policymakers wishing to implement an out-of-network cap would need to define the types of health care services the cap would apply to, which insurance markets it would apply in, and how price limits themselves would be set. Below, I briefly discuss the options policymakers would have along each dimension and specify the characteristics of the form of out-of-network cap I analyze in this paper:

- Scope of services included: A cap could apply to some services but not others. For the purposes of this analysis, I consider an out-of-network cap that applies to all health care services, consistent with the focus of this paper on strategies to broadly reduce provider prices. However, some out-of-network cap proposals encompass a narrower set of services. For example, some proposals encompass only emergency services (e.g., Melnick and Fonkych 2020b), while many recent Congressional proposals aimed at addressing "surprise billing" encompass only emergency services and physician services delivered at an in-network facility.
- **Insurance markets included:** An out-of-network cap could be applied broadly or limited to specific insurance markets. Some proposals to introduce an out-of-network cap only do so for people with individual market coverage (e.g., Song 2017), while others envision imposing a cap in employer coverage too (e.g., Murray 2013; Chernew, Pany, and Frank 2019). For this

analysis, I do not specify where the out-of-network cap would apply since an out-of-network cap would likely function similarly in any market in which it applied.

• **Methodology for setting price limits:** To implement a price cap, policymakers would need to: (1) define the units of care to which price limits applied; and (2) specify a methodology for determining the price limit for each unit of care. In general, I assume that an out-of-network cap would apply at the service level and use service definitions similar to those embodied in Medicare's various fee schedules. Given the nature of out-of-network care, applying the cap at anything other than the service level (e.g., applying the cap to bundles of services delivered by multiple different providers) might not be administratively viable.

Policymakers could set price limits for each such service in many ways. One commonly discussed approach is to set each limit as a multiple of the price traditional Medicare pays for the same service (e.g., Murray 2013; Song 2017). Alternatively, limits could be set based on negotiated commercial prices observed before the cap took effect (e.g., Adler, Fiedler, Ginsburg, Hall, et al. 2019; Chernew, Pany, and Frank 2019); several recent Congressional proposals to address surprise billing have taken this approach. For the purposes of this analysis, I leave the methodology for setting price limits largely unspecified, as the details of how they are set are largely unimportant to the analysis that follows. I do, however, assume that price limits are set at the level of specific services and that neither insurers nor providers can influence the applicable price limits through their contracting decisions.<sup>17</sup>

Policymakers might consider placing *both* an upper limit on what providers can collect for out-ofnetwork care *and* a lower limit on what insurers must pay for out-of-network care (and how much coverage insurers must offer for that care). Most of this section focuses on policies that would only cap out of-network prices, but section 4.4 discusses policies that would also place requirements on how much coverage insurers must offer for out-of-network care.

I note that federal law already places these types of requirements on insurers in the context of emergency care, so implementing an out-of-network cap would, in effect, bring about this type of "cap and floor" policy in the context of emergency care. The analysis in section 4.4 shows that the distinction between a pure out-of-network cap and a "cap and floor" policy is of limited importance in the context of emergency care but could be considerably more important in the context of other types of care.

#### 4.2 Economic Model of the Effects of an Out-of-Network Cap

To analyze the effect of introducing an out-of-network cap, I develop a stylized model of providerinsurer network negotiations. In the model, a provider and insurer bargain over the price the provider will receive for its services and the level of coverage the insurer will offer for those services. If network negotiations break down, then the provider unilaterally sets its price (or "charge"),<sup>18</sup> and the insurer unilaterally sets its level of out-of-network coverage. In either case, enrollees decide how much of the provider's services to use based on the provider's price and the insurer's level of coverage.

<sup>&</sup>lt;sup>17</sup> Under some recent Congressional proposals to address surprise billing, price limits would have been set based on typical in-network rates and would have been updated as in-network rates changed over time (e.g., Adler, Fiedler, Ginsburg, and Linke Young 2019a). This type of approach would have complicated effects on provider-insurer negotiations because insurers and providers could affect the price limits that applied in the future through their current contracting decisions. These dynamics would make an out-of-network cap policy much harder to analyze.

<sup>&</sup>lt;sup>18</sup> As discussed in section 2, providers are often unable to collect their full charges when they deliver out-of-network care. Thus, while I use the term "charge" for simplicity, this amount is likely better understood to be the provider's expected outof-network collection, which is determined by both its actual charge and other factors.

Given this landscape, the parties are assumed to negotiate agreements in which each party gains a meaningful amount from a network agreement, measured relative to outcomes with no agreement.<sup>19</sup> Economists refer to this type of model as a "Nash bargaining" model, and it has recently become the workhorse approach for modeling how health care providers and private insurers negotiate network agreements and prices (e.g., Gowrisankaran, Nevo, and Town 2015; Clemens and Gottlieb 2016; Ho and Lee 2017; Cooper, Scott Morton, and Shekita 2020).<sup>20</sup> Crucially, this modeling approach implies that the prices providers and insurers negotiate depend strongly on what they expect to happen absent an agreement, a point that has also been emphasized in other recent work modeling provider-insurer bargaining (e.g., Cooper, Scott Morton, and Shekita 2020; Prager and Tilipman 2020).

This section summarizes the conclusions that emerge from this model, as well as the logic underlying them, with full details in Appendix A. The model implies that the effects of an out-of-network cap would depend strongly on whether a provider could credibly threaten to turn away an insurer's enrollees if the provider and insurer failed to reach a network agreement. Thus, I first consider cases where providers *cannot* turn away patients, and then consider cases where they can do so.

#### 4.2.1 Effects When Providers Cannot Credibly Threaten to Turn Away Patients

In some cases, providers will be not be able to credibly threaten to turn away an insurer's enrollees if the provider and insurer fail to reach a network agreement. Notably, under the Emergency Medical Treatment and Labor Act (EMTALA), hospitals must treat people seeking emergency services regardless of their insurance status or ability to pay. (There may also be other reasons providers may be unable to credibly threaten to turn way out-of-network patients, a point I return to in section 4.3.)

In this scenario, implementing an out-of-network cap would reduce in-network prices by giving the insurer a more attractive alternative to a negotiated agreement. With an out-of-network cap in place, the insurer always has the option to break off negotiations and let its enrollees access the provider's services on an out-of-network basis at the capped price. If the insurer wishes, it can even treat those services as in-network for cost-sharing purposes, making the lack of a network agreement largely invisible to enrollees. A network agreement at a price above the cap is thus worse for the insurer than no agreement at all, allowing the insurer to insist on a negotiated price at the capped price or below.

This discussion makes clear that the negotiated prices that emerge under an out-of-network cap would depend on where the cap was set. The gold line in Figure 4.1 illustrates the qualitative relationship between the level of the cap and the level of negotiated prices that emerges from the formal model presented in Appendix A. Two features of this relationship are worth noting.

First, the negotiated price is always *strictly* below the level of the out-of-network cap (except when the cap exactly equals the provider's marginal cost of delivering services). This is because, even with a cap in place, it will generally be optimal for an insurer to offer something short of full in-network coverage for out-of-network services.<sup>21</sup> Signing a network agreement with an insurer thus typically increases a provider's volume, which the insurer will only agree to if the provider accepts a price below the cap.

<sup>&</sup>lt;sup>19</sup> This split is sometimes assumed to be exactly 50/50, but the model used here allows for an arbitrary split.

<sup>&</sup>lt;sup>20</sup> This approach is intuitive. If a provider offers terms under which the insurer gains little from an agreement, then the insurer is likely to reject that offer; the insurer loses little by doing so and can hope to secure a better deal later. For similar reasons, the provider is likely to reject offers slanted toward the insurer. Thus, the parties are only likely to agree when the provider is paid a price at which both parties gain substantially from an agreement. There is a long theoretical literature on when Nash bargaining is a reasonable modeling approach. Osborne and Rubenstein (1994) provide a textbook introduction.

<sup>&</sup>lt;sup>21</sup> Insurers may provide less than full-in network coverage for two reasons. First, the insurer may wish to discourage its enrollees from seeking high-priced care. Second, the insurer may strategically offer stingy out-of-network coverage to make failing to reach agreement unappealing to the provider. Both reasons are explored in more detail in Appendix A.



#### Figure 4.1: Negotiated Prices Under an Out-of-Network Cap When the Provider Cannot Reject Out-of-Network Patients

#### **USC** Schaeffer

Second, an out-of-network cap will reduce negotiated prices when it is set below the *charge* the provider would have set in the absence of the policy-even if it is set above the price the provider and insurer would negotiate without a cap. This is because such a cap worsens the provider's options in the absence of an agreement and, thus, weakens its bargaining position. However, a cap set only modestly below the charge the provider would set without a cap will often cause only small reductions in the negotiated price, the scenario illustrated in Figure 4.1.<sup>22</sup> Indeed, if the provider chooses its charge with the goal of putting itself in the strongest possible bargaining position, then it will set its pre-policy charge at a level where an incremental increase (or decrease) in that charge has no effect on its bargaining position. Correspondingly, forcing the provider to slightly reduce its charge will have little effect on its bargaining position, as will any adjustments the insurer makes in response.

More generally, the precise level of a provider's charge can only meaningfully affect the provider's bargaining position if substantial out-of-network care is delivered. But when the provider sets a high charge, out-of-network volume will typically be small (with the possible exception of emergency and "surprise billing" situations) since it will generally be in the insurer's interest to offer stingy out-ofnetwork coverage. Correspondingly, forcing a provider that currently sets a high charge to slightly reduce that charge will have only a small effect on the negotiated price. This will remain true until the charge falls low enough that the insurer wishes to offer reasonably generous out-of-network coverage.

#### 4.2.2 Effects When Providers Can Credibly Threaten to Turn Away Patients

In the preceding section, an out-of-network cap reduced negotiated prices because the insurer could give its enrollees access to the provider's services at the capped price even in the absence of a network agreement. But if the provider can credibly threaten to turn away patients in the absence of a network agreement, then the provider can keep the insurer from doing this, and the scope for an out-of-network cap to reduce negotiated prices is much smaller-and potentially negligible.

<sup>&</sup>lt;sup>22</sup> As discussed in Appendix A, under certain conditions, an out-of-network cap set just below the charge the provider would set without a cap can actually raise negotiated prices. In practice, however, the relevant conditions are unlikely to hold in practice, and any real-world cap is likely to be set low enough to avoid this possibility.

Share of Volume Retained in Absence of Network Agreement,	Ratio of Price for Out-of-Network Care to Negotiated Price, Pre-Policy Status Quo		
Pre-Policy Status Quo	1.25	1.5	2
l percent	< 1%	1%	1%
5 percent	1%	3%	5%
10 percent	3%	6%	11%
25 percent	8%	17%	33%

# Table 4.1: Upper Bound on Maximum Possible Reduction in Negotiated Prices Under an Out-of-Network Cap When Providers Can Reject Patients

Note: Proposition A4 in Appendix A provides a formal statement of the upper bound.

In this scenario, the scope for an out-of-network cap to reduce negotiated prices depends on how much volume the provider could have attracted in the absence of a network agreement—and at what price under the pre-policy status quo. If the provider would have received little volume in the absence of a network agreement under the pre-policy status quo, then threatening to turn away the insurer's enrollees in the absence of a network agreement under an out-of-network cap allows the provider to almost exactly reproduce its pre-policy bargaining position, so an out-of-network cap has little scope to reduce negotiated prices. By contrast, if the provider would have received considerable volume at a high price in the absence of a network agreement under the pre-policy status quo, then threatening to turn away the insurer's enrollees puts the provider in a much weaker bargaining position than under the pre-policy status quo, and an out-of-network cap will have more scope to reduce prices.

The formal model presented in Appendix A can be used to derive an upper bound on the maximum possible reduction in negotiated prices achievable with an out-of-network cap. Consistent with the discussion presented in the preceding paragraph, that bound depends on two parameters, both measured under the pre-policy status quo: (1) the share of the volume associated with a particular insurer that a provider can retain if it exits the insurer's network; and (2) the ratio of the price the provider receives for out-of-network care to the negotiated in-network price.

Table 4.1 reports this upper bound for a range of parameter values; it should be emphasized that these are upper bounds, and the actual potential reduction in negotiated prices under an out-of-network cap may, in fact, be meaningfully smaller. In general, the potential effectiveness of an out-of-network cap is larger when the provider can retain more volume or charge a higher price when out-of-network under the status quo. In section 4.3, I examine what parameter values are most plausible in practice and, thus, which cells of Table 4.1 are most relevant to predicting the effects of an out-of-network cap.

Naturally, whether it is actually in the provider's interest to turn away the insurer's enrollees in the absence of a network agreement depends on the level of the cap. Figure 4.2 illustrates the qualitative relationship between the level of the cap and the provider's decision about whether to accept out-of-network patients, again using the formal model in Appendix A. For an out-of-network cap modestly below the provider's pre-policy charge, the profits the provider earns from treating out-of-network patients (and the corresponding costs incurred by the insurer and its enrollees) are large enough that accepting out-of-network patients at the capped rate puts the provider in the strongest bargaining position. But once the out-of-network cap falls below some critical level, the profits the provider earns on out-of-network patients (and the corresponding costs incurred by the insurer and its enrollees) become small enough that turning away out-of-network patients puts the provider in a stronger bargaining position than accepting them. Beyond this point, the level of the out-of-network cap becomes irrelevant and negotiated prices do not change as the out-of-network cap tightens further.


Figure 4.2: Negotiated Prices Under an Out-of-Network Cap

#### **USC** Schaeffer

BROOKINGS

Importantly, this discussion implies that capping out-of-network prices may have the unintended consequence of making it harder for patients to obtain out-of-network care in some cases. Indeed, a provider's threat to refuse to treat out-of-network enrollees is only likely to be credible if the provider actually follows through on this threat when it is relevant. A provider likely could continue to accept out-of-network patients in some circumstances that are unlikely to meaningfully affect its bargaining position vis-à-vis the insurer. For example, providers could likely continue to deliver non-network care to uninsured patients or to patients covered by insurers that the provider does not expect to contract with in the future (e.g., patients traveling away from home). But providers would likely need to turn away out-of-network patients in many other circumstances.

#### 4.3 Quantifying the Effects of an Out-of-Network Cap

Building on the preceding analysis, I now seek to quantify the breadth and depth of the effects of an out-of-network cap on negotiated prices. Following the schematic laid out in Figure 4.3, I first seek to understand when providers cannot credibly threaten to turn away out-of-network patients and, thus, when an out-of-network cap is likely to be highly effective in reducing negotiated prices. I then seek to understand the likely effects of an out-of-network cap in situations where providers *can* credibly threaten to turn away out-of-network patients by drawing on (fragmentary) evidence on how much volume a provider can attract when out of network—and at what price—under the status quo.

In brief, I conclude that while providers are legally barred from turning away patients in emergency situations, they are likely to be able to credibly threaten to reject out-of-network patients in most non-emergency situations, which account for a large majority of health care spending. Furthermore, most providers' ability to attract out-of-network volume in non-emergency situations is likely limited, suggesting that an out-of-network cap will have limited scope to affect prices in these situations.





**USC** Schaeffer

BROOKINGS

#### 4.3.1 When Can Providers Credibly Threaten to Reject Out-of-Network Patients?

While it is clearly illegal for a hospital to turn away patients seeking emergency services, there are generally no legal barriers to turning away patients in non-emergency settings. There could, however, be other obstacles. Notably, turning away patients is not in the hospital's short-run financial interest and could harm its reputation. This section considers these obstacles and concludes that they likely would not keep providers from credibly threatening to turn away out-of-network patients in non-emergency settings. I then use the Medical Expenditure Panel Survey to estimate the share of health care spending in commercial coverage that occurs in emergency situations.

**Tension between providers' long-run and short-run interests**. While threatening to turn away an insurer's enrollees in the absence of a network agreement improves a provider's long-run bargaining position vis-à-vis an insurer, following through on that threat can make the provider worse off in the short-run. In particular, as long as the out-of-network cap is above the provider's marginal cost of treating patients, treating out-of-network patients is profitable for the provider. This fact could cause the insurer to suspect that the provider will renege on its threat to turn away patients if negotiations do in fact break down, rendering the provider's threat to turn away patients ineffective.

However, providers negotiate with insurers repeatedly. Providers are likely to recognize that failing to follow through on a threat to turn away an insurer's enrollees would cause that threat to be disbelieved in the future as well, greatly harming its long-run bargaining position. The theoretical literature on these types of bargaining interactions, which is briefly discussed in Appendix A, implies that reputational considerations can easily be enough to induce providers to follow through on these types of threats, making providers' threats credible from the perspective of the insurer.<sup>23</sup>

<sup>&</sup>lt;sup>23</sup> It seems particularly likely that providers will be able to make their threats credible when the out-of-network cap is set close to the provider's marginal cost of delivering services. In such a scenario, the short-run profits a provider accrues by treating an insurer's enrollees in the absence of a network agreement will be small relative to the potential gains.

As a practical matter, it is clear that providers frequently incur short-run costs in an effort to strengthen their long-run bargaining position. In particular, providers commonly threaten to leave insurers' networks if they are unable to secure acceptable contract terms and follow through on these threats when necessary (e.g., Anderson 2017; Baca 2018; Itkowitz 2017; Rice 2017). Indeed, providers' willingness to go out of network when insurers refuse to offer acceptable contract terms is likely essential to providers' ability to extract high prices from insurers under the status quo.

**Social disapproval and similar considerations.** A provider might also worry that turning away out-of-network patients would harm its public image or conflict with its mission. However, as just discussed, providers commonly threaten to leave insurers' networks and often follow through on those threats under the status quo, despite the fact that going out of network has the practical effect of exposing the insurer's enrollees to the provider's high charges and severely limiting enrollees' ability to access the provider's services. It is thus difficult to see why declining to serve out-of-network patients would be meaningfully more distasteful to providers than leaving an insurer's network.

Additionally, if social disapproval kept providers from *explicitly* turning away out-of-network patients, providers might be able to find other strategies that would have similar practical effects but were more socially acceptable. For example, an out-of-network provider could simply tell patients that it does not "accept" a particular plan without explaining that patients may be able to access its services under an out-of-network benefit or supporting them in doing so. An aggressive version of this approach might require patients to pay in full before receiving services (or, in cases where the price of the encounter could not be determined in advance, to make a substantial deposit based on the encounter's expected cost). This strategy could be particularly effective for inpatient care. In 2017, the average negotiated price for an inpatient stay in commercial coverage was almost \$21,000 (HCCI 2019). Making an upfront payment of this size would likely be a significant barrier to accessing the provider's care for many patients since many families have limited liquid savings (Bhutta and Dettling 2018).

Social disapproval would likely be a more important constraint in some specific circumstances. One important example is out-of-network inpatient care that follows a medical emergency. Once a patient has been stabilized, a hospital is legally permitted under EMTALA to transfer a patient to an innetwork facility. Insisting on a transfer in these cases would strengthen the provider's bargaining position in the same way as rejecting elective out-of-network patients. However, these patients may be particularly sympathetic, and providers might be reluctant to take this approach in these cases.

**Share of spending that occurs in emergency situations.** The preceding discussion implies that providers could credibly threaten to turn away out-of-network patients in most non-emergency situations, but not in emergency situations. I thus use the Medical Expenditure Panel Survey to estimate what share of commercial spending occurs in emergency situations.

In detail, I estimate the share of spending that is on: (1) emergency department care; or (2) inpatient care delivered to a patient admitted through the emergency department. Importantly, this definition *includes* post-stabilization inpatient care delivered to people admitted through the emergency department. <sup>24</sup> Per the discussion above, while EMTALA permits hospitals to decline to deliver this care, it seems unlikely that providers will be able to credibly threaten to do so in practice. If this

<sup>&</sup>lt;sup>24</sup> On the other hand, I do not include deliveries. While EMTALA bars hospitals from turning away women in labor, the access guarantees under EMTALA do not extend to scheduled deliveries or non-emergency prenatal hospital care, and hospitals have some scope to transfer women who present early in labor to another hospital. Particularly since most women are likely to want to plan to deliver at a hospital that can meet their full range of potential needs, it is most reasonable to treat hospitals as functionally being able to turn away women seeking to deliver at that hospital. In any case, even including all deliveries would increase the estimates reported in Table 4.2 by only around one-quarter.

# Table 4.2: Spending on Services Delivered in Emergency Encounters byCommercially Insured Patients, 2014-2018

Type of Emergency Encounter	Emergency Spending as a Percentage of		
	All Health Care Spending	Hospital Spending	
No inpatient stay	5	12	
With inpatient stay	8	22	
All emergency encounters	13	34	

Source: Medical Expenditure Panel Survey, Household Component, 2014-2018; author's calculations.

Methodological note: Sample limited to people under age 65 with private coverage in all months in which they are in the sample frame. In the first column, the numerator is facility and physician spending during the specified type of encounter, and the denominator is all health care expenditures. Because of data limitations, emergency room physician spending associated with encounters that result in an inpatient stay may erroneously be categorized as "no inpatient stay" spending. In the second column, the numerator is facility spending during the encounter and the denominator is all inpatient and hospital outpatient spending. Estimated shares were calculated by computing separate estimates for each year 2014 through 2018 and then taking the simple average of those estimates.

assumption is incorrect, then the share of services for which providers could not credibly threaten to turn away out-of-network patients would be smaller than shown here, perhaps considerably so.

Table 4.2 reports that about 13% of all health care spending by non-elderly people with commercial insurance occurs in connection with emergency encounters, suggesting that out-of-network caps can reduce prices for only a modest portion of health care spending.<sup>25</sup> Table 1 does suggest that out-of-network caps could have a somewhat larger effect on prices in the hospital sector, as slightly more than one-third of hospital spending occurs in emergency situations. This is notable since concerns that providers wield inappropriate market power are most acute with respect to the hospital sector.

#### 4.3.2 How Effective is a Cap When Providers Can Reject Patients?

To assess the potential effects of an out-of-network cap in cases where providers *can* credibly threaten to turn away patients in the absence of a network agreement, I now consider how attractive being out of network is for a provider under the status quo. I focus on non-emergency situations since status quo out-of-network outcomes are only relevant to estimating the effects of an out-of-network cap when providers can credibly threaten to turn away out-of-network patients.

Following the discussion in section 4.2.2, I focus on two specific parameters: (1) the share of the volume associated with a particular insurer that the provider retains if it exits the insurer's network; and (2) the ratio of the price the provider receives for out-of-network care to the negotiated price. I consider each parameter in turn and then, consistent with the discussion in section 4.2.2, use them to derive on upper bound on the effect of an out-of-network cap on negotiated prices.

<sup>&</sup>lt;sup>25</sup> A caveat to this conclusion is that some of hospitals' market power with respect to emergency care might be expressed in the form of higher prices for non-emergency care (e.g., C. Pope 2019). This could occur, for example, because hospitals and insurers often write contracts that specify prices as a constant multiple of Medicare's prices or the hospital's chargemaster across all service types (Cooper et al. 2019). If this is the case *and* hospitals enjoy relatively more market power with respect to services delivered in emergency situations, then the payments *attributed* to services delivered in emergency situations could understate the actual revenue that hospitals are able to extract by virtue of delivering those services, and the estimates in Table 4.2 could understate the scope of the effects of an out-of-network cap. However, it is unclear whether hospitals enjoy more market power in emergency or non-emergency situations. Patients are sometimes unable to choose a hospital in emergency situations, which likely increases hospitals' pricing power over these services (Melnick and Fonkych 2020a). But EMTALA guarantees access to hospitals' emergency services, and hospitals' tools for collecting unpaid bills from patients are imperfect (LeCuyer and Singhal 2007; Mahoney 2015), which may attenuate hospitals' pricing power in this context.

**Out-of-network volume retention.** A priori, it seems likely that most providers' ability to attract non-emergency out-of-network volume is small. As discussed in section 2.1, commercial plans generally offer much less coverage for out-of-network services than for in-network services (if they offer any out-of-network coverage at all) so patients have strong incentives to seek care in-network.

Unfortunately, there is little research examining how much non-emergency volume a typical innetwork provider can retain if it goes out of network.<sup>26</sup> One notable exception is Melnick and Fonkych (2020a), who examine decisions by five California hospitals to cancel all of their commercial network agreements in the mid-2000s.<sup>27</sup> The authors find that these hospitals retained most of their commercial emergency volume. On the other hand, their estimates imply that the hospitals retained at most 8% of their commercial non-emergency inpatient volume.<sup>28</sup>

**Out-of-network collections.** The evidence on what providers can collect for out-of-network care is better, albeit still imperfect. The best-case scenario from a provider's perspective is that it can collect its full charges from out-of-network patients. The evidence discussed in section 2.1 suggests that both hospitals and physicians set charges that are around twice their negotiated prices, on average. As discussed there, providers likely cannot collect their full charges from out-of-network patients, so the true figure is likely lower, perhaps much lower. Nevertheless, this estimate offers a useful upper bound.

**Combining the estimates.** The preceding estimates, fragmentary though they may be, suggest that it is reasonable to assume that a provider that leaves an insurer's network under the status quo can expect to retain less than 10% of its volume with that insurer and be paid at most twice what it receives in-network for the volume it retains. Combining these estimates with the bounds presented in Table 4.1 implies that an out-of-network cap could reduce negotiated prices for most non-emergency services by, at most, 11%. Because the parameter values used in this calculation are conservative and the values reported in Table 4.1 are bounds, not point estimates, the true value is most likely lower. It is also important to note that this bound would not be reached unless the cap was set low enough to push all providers to the point of turning away out-of-network patients.

**The special case of ancillary physician services.** While an out-of-network cap likely has little scope to reduce prices for most non-emergency services, services delivered by ancillary physicians (radiologists, anesthesiologists, pathologists, or assistant surgeons) during a hospitalization may be an exception. As highlighted by recent debates over "surprise billing" (e.g., Adler, Fiedler, Ginsburg, Hall, et al. 2019; Cooper, Scott Morton, and Shekita 2020), patients generally play no role in selecting these physicians, so they are able to retain substantial volume even when out of network.

Consistent with the discussion in in section 4.2.2 and the analysis of Cooper, Scott Morton, and Shekita (2020), this implies that out-of-network caps have much greater potential to reduce in-network prices for these services relative to other non-emergency services. A caveat, however, is that reducing in-

<sup>&</sup>lt;sup>26</sup> Importantly, several recent studies have estimated out-of-network spending as a share of overall commercial spending (Pelech 2020; Song et al. 2020; Chernew, Dafny, and Pany 2020). These studies conclude that this share is quite small. However, these estimates do not speak directly to the question of interest since commercial networks are relatively broad.

<sup>&</sup>lt;sup>27</sup> Shepard (2016) estimates the change in utilization of Partners Health Care System by enrollees of a large Commonwealth Care insurer when that insurer dropped Partners from its network. Shepard's estimates are broadly consistent with the Melnick and Fonkych estimates, but they do not disaggregate emergency and non-emergency utilization, and, as Shepard notes, reflect a combination of changes in the insurer's enrollment mix and changes in utilization patterns holding enrollment mix fixed. Only the latter change is of interest here.

 $<sup>^{28}</sup>$  In greater detail, Melnick and Fonkych report that commercial inpatient admissions not through the ED accounted for about 50% of commercial inpatient volume before the hospitals cancelled their contracts, but less than 10% after cancellation. They also report that total commercial volume, including both inpatient and outpatient volume, fell to 39% of its pre-cancellation level in the years following contract cancellation. Under the plausible assumption that inpatient volume fell at least as much as total volume, this implies that post-cancellation non-ED inpatient volume was at most 8% (=[0.1\*0.39]/0.5) of its pre-cancellation level at these hospitals.

network prices paid for these facility-based services could increase the amount facilities need to pay these physicians in order to ensure adequate staffing. That could, in turn, cause offsetting increases in the prices of facility services that partially or fully offset the reduction in prices for physician services.

Spending on ancillary physician services accounts for a modest, but not trivial, portion of commercial spending. Duffy et al. (2020) estimate that radiology, anesthesiology, and pathology professional services account for 6-7% of commercial plan spending, while Cooper, Nguyen et al. (2020) estimate that the same specialties plus assistant surgery services account for around 9% of plan spending. Importantly, some of this spending occurs in outpatient settings where these physicians' ability to retain out-of-network volume is likely more limited, so these estimates overstate the amount of spending where an out-of-network cap is likely to be an effective tool to reduce prices. Some also occurs in emergency situations and, thus, was already included in the estimates presented in Table 4.2.

#### 4.4 Effect of Placing Both a Cap and a Floor on Out-of-Network Prices

The analysis above focused on policies that would place an upper limit on what providers can collect for out-of-network services but would *not* place a lower limit on what insurers must pay (and how much coverage they must offer) for those services. This focus is consistent with many proposals to broadly regulate out-of-network prices in private insurance markets (e.g., Murray 2013; Berenson et al. 2015; Song 2017; Chernew, Pany, and Frank 2019; Chernew, Dafny, and Pany 2020).

However, many recent state and federal proposals aimed at addressing surprise billing (e.g., Adler, Fiedler, Ginsburg, Hall, et al. 2019; Adler et al. 2019; Adler, Fiedler, Ginsburg, and Linke Young 2019a; 2019b) place a lower limit on how much insurers must pay (and how much coverage they must offer) for out-of-network care in addition to limiting what providers can charge for out-of-network care. Furthermore, as noted earlier, federal law already places a lower limit on what insurers must pay (and how much coverage they must offer) for out-of-network emergency care, so implementing an out-of-network cap would, in effect, bring about this type of "cap and floor" policy for emergency care.

This subsection briefly considers a policy in this vein. Specifically, I consider a policy that would place an upper limit on what providers could collect for out-of-network care, but that would also require insurers to pay no less than that amount and impose no more than typical in-network cost-sharing when enrollees use out-of-network services.<sup>29</sup> Once again, Appendix A presents a formal model of such a policy and the main text summarizes the main conclusions that emerge from that modeling.

In general, this type of "cap and floor" policy is likely to lead to higher negotiated prices than a "cap only" policy. Indeed, a "cap and floor" policy can actually *increase* negotiated prices, rather than reduce them, if the payment standard is high enough. As with a simple out-of-network cap, the effect of the "cap and floor" policy is likely to differ depending on whether the provider can credibly threaten to turn away out-of-network patients, so I consider the two cases separately.

**Providers cannot credibly threaten to turn away patients.** When providers cannot credibly threaten to turn away out of-network patients, the negotiated price is likely to be very close to the payment standard, as depicted by the gold line in Figure 4.4. The reason is straightforward: without a network agreement, the provider will have to deliver its services at a price equal to the payment standard, and the insurer will have to provide an in-network level of coverage. The provider has no

<sup>&</sup>lt;sup>29</sup> The analysis that follows assumes that cost-sharing is the primary tool that insurers use to steer enrollees toward innetwork providers and, thus, that a "cap and floor" policy largely eliminates providers' ability to influence where enrollees receive care. But insurers have other ways of steering volume. For example, an insurer could encourage contracted primary care physicians to refer laboratory services to a preferred laboratory. There could also be situations where requirements on enrollee cost-sharing would be challenging to enforce. In those cases, the effects of a "cap and floor" policy on negotiated prices would likely fall in between those discussed here and those under a pure out-of-network cap.



#### USC Schaeffer

#### BROOKINGS

reason to agree to a lower price since the provider is already receiving an in-network volume level from the insurer, while the insurer has no reason to agree to a higher price since its enrollees already have access to the provider.<sup>30</sup> Thus, the policy will increase negotiated prices when the payment standard is above the pre-policy negotiated price and decrease negotiated prices otherwise. Comparing to Figure 4.2 also illustrates that negotiated prices are uniformly higher than under a pure out-of-network cap.

**Providers can credibly threaten to turn away patients.** The effect of the "cap and floor" policy changes when a provider can credibly threaten to turn away patients, as illustrated by the blue line in Figure 4.4. When the payment standard is set low enough, the provider's best option is to turn away the insurer's enrollees in the absence of a network agreement in order to protect its bargaining position, just as under a pure out-of-network cap. Thus, when providers can turn away patients, the scope for the "cap and floor" policy to *reduce* negotiated prices is likely limited, like for a pure out-of-

<sup>&</sup>lt;sup>30</sup> As discussed in Appendix A, if the payment standard is set very high—above the provider's charges under the status quo the negotiated price could actually exceed the cap, but this scenario is likely of limited practical relevance.

network cap. On the other hand, for higher payment standards, the negotiated price is likely to be very close to the payment standard for the same reasons as in the case where providers cannot turn away patients. Thus, unlike a pure out-of-network cap, the "cap and floor" policy can actually *increase* negotiated prices if the payment standard is set above the pre-policy negotiated price.

The fact that the "cap and floor" policy would increase negotiated prices if the payment standard exceeded pre-policy negotiated prices, but not substantially reduce them if the payment standard were set lower, means that it would be easy for this type of policy to increase average negotiated prices. Consider, for example, a policy with a payment standard equal to average negotiated prices under the status quo. The "cap" portion of the policy would have little ability to reduce the prices negotiated by providers who are paid above-average prices under the status quo. However, the "floor" portion of the policy would likely allow providers with below-average prices under the status quo to negotiate *higher* prices. On average, therefore, negotiated prices would likely increase. Because, as discussed in section 2.3.2, prices vary widely across providers, this type of effect could be important in practice.

## 5 Regulating Both In-Network and Out-of-Network Prices

Since an out-of-network cap may have limited scope to reduce the prices of services delivered in nonemergency situations, policymakers might wish to consider policies that would directly regulate both in-network and out-of-network prices. This section considers two potential approaches to doing so, which I refer to as the "comprehensive price cap" and "default contract" approaches.

A comprehensive price cap would directly limit the amounts providers could collect (from either insurers or patients) for delivering health care services, including both in-network and out-of-network services. This is arguably the most commonly discussed approach to regulating in-network prices (e.g., Skinner, Fisher, and Weinstein 2014; Murray and Berenson 2015; Blumberg et al. 2019; Roy 2019).

In this section, I conclude that a comprehensive price cap could reduce negotiated prices for a broad range of services, including non-emergency services, at least on paper. Importantly, however, a comprehensive price cap would reduce prices partly by directly limiting the prices providers and insurers could agree to, rather than by reducing providers' leverage in network negotiations. In practice, providers might use the leverage that they cannot translate into higher prices to extract other concessions from insurers, which could undermine the cap or have various undesirable effects.

For example, providers could resist contract terms intended to reduce utilization; this was one common concern with prior state efforts to regulate hospital prices (e.g., Pauly and Town 2012; Murray and Berenson 2015). Alternatively, providers might seek to circumvent the cap by demanding insurers pay higher prices for service lines where the cap does not apply or does not bind. Evasion concerns would likely also require policymakers to limit use of alternative payment models, like bundled payments or shared savings contracts, since such contracts could be used to "hide" additional payments from insurers to providers. Policymakers would have options to address these problems, but they would be of uncertain effectiveness and could have undesirable side effects of their own.

In light of the enforcement challenges under a comprehensive price cap, the second part of this section considers another approach to regulating in-network prices that I call the default contract approach.<sup>31</sup> Under this approach, the regulator would publish a model network agreement (the "default contract") that specified both the prices the insurer paid the provider *and* a minimum level of access the provider would be required to offer to the insurer's enrollees. Providers would be required to enter a default

<sup>&</sup>lt;sup>31</sup> Glied and Altman (2017) describe a version of this approach that would apply to a narrow subset of hospital services.

contract with any insurer that requested one, but providers and insurers would also be permitted to negotiate any alternative payment terms they wished.

If the requirement to accept a default contract could be effectively enforced—which would require significant effort from regulators but is likely feasible—then the ability to insist on a default contract would greatly strengthen insurers' hands in network negotiations, allowing insurers to secure prices close to or below the prices specified in the default contract. Moreover, because the approach would directly reduce the provider's leverage in network negotiations—rather than merely limit the provider's ability to use that leverage to secure higher prices—it would avoid the various enforcement challenges under a comprehensive price cap that were described above.

#### 5.1 Comprehensive Price Cap Approaches

I begin by analyzing the comprehensive price cap approach. The first part of this subsection describes the main choices policymakers would need to make in designing a comprehensive price cap. I then analyze how a comprehensive price cap would affect provider prices in an idealized environment, drawing again on the formal model in Appendix A. I then turn to some of the enforcement challenges that could arise under a comprehensive price cap and why these enforcement challenges could cause a real-world comprehensive price cap to fall short of this theoretical ideal.

#### 5.1.1 Design of a Comprehensive Price Cap

A comprehensive price cap would limit what providers can collect for both in-network and out-ofnetwork services. Like an out-of-network cap, a comprehensive price cap would limit the total amount providers can collect for such services from all sources, including the patient and the patient's insurer.

As with an out-of-network cap, policymakers wishing to cap health care prices would need to define what health care services the cap would apply to, which insurance markets it would apply in, and how price limits would be set. Below, I briefly discuss the options policymakers would have along each of these dimensions, and I specify the characteristics of the specific policies I analyze in this subsection:

- **Scope of services included:** A cap could apply to some services but not others. Some recent proposals (e.g., Skinner, Fisher, and Weinstein 2014; Blumberg et al. 2019) cap the prices of all health care services. However, many proposals envision limiting caps solely to hospital services (e.g., Murray and Berenson 2015) or even to a subset of hospital services (e.g., Glied and Altman 2017), often motivated by a desire to confine regulation to settings where providers are believed to wield particularly high levels of market power. Much of the discussion that follows applies regardless of the cap's scope, so I leave the scope unspecified for now. Later, I discuss why enforcing a cap that applied to some services but not others could be challenging.
- **Insurance market segments included:** A comprehensive price cap could be applied broadly or limited to particular insurance markets. Some proposals envision introducing caps only for services covered by individual market plans (e.g., Blumberg et al. 2019) while others envision imposing caps in employer coverage too (e.g., Skinner, Fisher, and Weinstein 2014; Murray and Berenson 2015; Roy 2019). Much of the discussion that follows applies regardless of what markets the cap applies in, so I leave this unspecified for now. Later, I discuss why enforcing a cap that applied in some insurance markets but not others could be challenging.
- **Methodology for setting price limits:** As with an out-of-network cap, policymakers would need to: (1) define the units of care to which price limits applied; and (2) specify a methodology for determining the price limit for each unit of care. As for an out-of-network cap, I assume that a comprehensive price cap would apply at the service level and use service definitions similar to those embodied in Medicare's various fee schedules. One important complication

that arises in the context of a comprehensive price cap but not an out-of-network cap is how to determine whether a network agreement that deviates from Medicare's fee-for-service structure complies with the cap; I defer this issue for now, but return to it in section 5.1.3.

Policymakers could also take a variety of approaches to setting price limits for each service. One commonly discussed approach is to set each limit as a multiple of the price traditional Medicare pays for the same service (e.g., Skinner, Fisher, and Weinstein 2014; Murray and Berenson 2015; Blumberg et al. 2019; Roy 2019). Alternatively, limits could be set based on negotiated commercial rates observed before the cap took effect. I leave the methodology for setting price limits largely unspecified, as my analysis applies to a broad range of potential price limits. As in the case of an out-of-network cap, however, I assume that price limits would be set at the level of individual services and that these limits would be set in such a way that neither insurers nor providers can influence the limit through their contracting decisions.

It is worth noting that there are some important structural differences between the price cap approaches considered here and earlier state efforts to regulate the prices of health care services.<sup>32</sup> A first important difference is that these prior efforts generally focused solely on hospital services, whereas the caps considered here could apply more broadly if desired. Second, these regulatory systems generally set different prices for different providers, sometimes based on a review of cost data for each provider, whereas the price cap proposals that are the focus of this paper would set a common price limit for all providers. Third, those systems often placed both a floor and a ceiling on the prices insurers could pay providers, rather than just a ceiling, which meant that those systems had the potential to increase prices rather than just reduce them. Finally, Clemens and Ippolito (2019) emphasize that these systems often were targeted not just at controlling the prices of hospital services, but also at shifting resources toward hospitals with high uncompensated care burdens.

#### 5.1.2 Effects on Negotiated Prices in an Idealized Environment

I now consider how a comprehensive price cap would affect the prices of health care services. To do so, I rely on the same basic model used to analyze an out-of-network cap. As before, the main text presents the main conclusions that that emerge from the model, while the full technical details are presented in Appendix A. To sidestep consideration of the various evasion opportunities that are discussed in section 5.1.3, I begin in an idealized setting. Specifically, I assume that the provider delivers a single type of service and contracts with the insurer in only one insurance market, and I assume there is no ambiguity about whether a particular in-network contract complies with the cap.

As with an out-of-network cap, the model implies that the effects of a comprehensive price cap would differ depending on whether a provider could credibly threaten to turn away an insurer's enrollees if the provider and the insurer failed to reach a network agreement, so I consider each case in turn.

**Providers cannot credibly threaten to turn away patients.** In this case, a comprehensive price cap is likely to function very similarly to an out-of-network cap. Like an out-of-network cap, it would allow an insurer's enrollees to access the provider's services at the capped price even without a network agreement, which would in turn allow insurers to insist on prices at or below the cap. The gold line in Figure 5.1 illustrates the relationship between the level of the cap and negotiated prices in this case, which exactly mirrors the relationship under an out-network cap depicted in Figure 4.1.

**Providers can credibly threaten to turn away patients.** As discussed in section 4.3.1, providers likely can turn away out-of-network patients in most non-emergency situations, and these situations

<sup>&</sup>lt;sup>32</sup> Most state efforts originated in the 1970s but have since been abandoned. Murray and Berenson (2015) and Clemens and Ippolito (2019) review the history of these systems in much greater detail.



Figure 5.1: Negotiated Price Under an Comprehensive Price Cap

#### **USC** Schaeffer

#### BROOKINGS

account for the majority of health care spending. In these cases, a provider could keep the out-ofnetwork portion of a comprehensive price cap from compromising its underlying bargaining position by threatening to turn away an insurer's enrollees in the absence of a network agreement. As illustrated in Figure 5.1, providers would elect to turn away patients if the cap were set low enough, limiting how much the out-of-network portion of a comprehensive price cap could reduce negotiated prices.

But importantly—and unlike an out-of-network cap—a comprehensive price cap also *directly* limits the prices that a provider and insurer negotiate. Thus, even though a provider can keep a comprehensive price cap from compromising its underlying bargaining position by threatening to turn away the insurer's enrollees in the absence of a network agreement, a comprehensive price cap set at a low enough level keeps the provider from translating that strong bargaining position into a high price. Thus, by setting a low enough cap, a comprehensive price cap can, at least on paper, allow policymakers to reduce prices as far as they wish, as illustrated in Figure 5.1.

It is important to note that, like an out-of-network cap, a comprehensive price cap would likely reduce patients' ability to access out-of-network care since, consistent with the discussion above, providers would often wish to turn away out-of-network patients in order to protect their bargaining position vis-à-vis insurers. Indeed, the gap between the gold line and the blue line in Figure 5.1 illustrates that the benefit of credibly threatening to turn away patients would often be substantial.<sup>33</sup>

**Empirical evidence from prior systems.** Before proceeding, I note that this theoretical discussion is broadly consistent with experience under prior state rate setting regimes. Research on experience under those regimes has concluded that they were often successful in constraining the unit prices of health care services (McDonough 1997; Pauly and Town 2012; Murray and Berenson 2015). As discussed below, however, there is more controversy about whether the types of provider responses discussed in the next section kept these systems from reducing overall health care spending.

<sup>&</sup>lt;sup>33</sup> Figure 5.1.arguably understates the benefit of being able to make this threat because it does not account for non-price concessions providers may be able to extract when the in-network portion of the cap binds.

#### 5.1.3 Provider Efforts to Circumvent a Price Cap

The preceding analysis shows that, in settings where providers can credibly threaten to turn away an insurer's enrollees in the absence of a network agreement, a comprehensive price cap can reduce negotiated prices by directly limiting providers' ability to translate a strong bargaining position into a high price. However, the leverage that providers could not translate into higher prices would not simply vanish, and providers might seek to use that "excess" leverage to extract concessions that did not technically violate the price cap but did undermine the cap or have other undesirable effects.

Providers might pursue many types of concessions. It is likely not possible to anticipate all of them in advance, but this section examines three types of responses that seem particularly likely. First, providers might seek contract terms that increased utilization of their services. Second, providers might seek to negotiate higher prices for service lines where the cap does not apply or does not bind. Third, if providers and insurers were given flexibility in how payment contracts were structured (e.g., allowed to use alternative payment models), they could seek to use that flexibility to "hide" high prices.

For each evasion strategy, I also discuss how policymakers might seek to prevent these types of responses. In general, I conclude that the options available to policymakers would be imperfect at best. I also note before proceeding that these various evasion strategies would likely be substitutable in practice, in which case blocking some, but not others, might accomplish relatively little.

**Increased utilization.** One way providers could deploy their excess leverage would be to seek contract terms that encourage utilization of their services, which would increase their profits without running afoul of the cap. These efforts could take a variety of concrete forms. Providers could, for example, seek less stringent prior authorization requirements or reductions in other forms of utilization management. Alternatively, they could resist payment arrangements designed to give them stronger incentives to manage utilization, such as shared savings contracts.

The possibility that capping prices could increase utilization is a longstanding concern. It is a common implication of economic models of provider behavior under administered or regulated pricing (e.g., McGuire (2000)). Moreover, evidence from older state hospital rate setting regimes suggests that these regimes did increase utilization, although there is disagreement about how effectively regulators coped with those pressures and whether higher utilization was large enough to fully offset savings from lower unit prices (McDonough 1997; Pauly and Town 2012; Murray and Berenson 2015).

Policymakers would have some options for preventing increases in utilization, but they would be of uncertain effectiveness and could have other downsides. One approach would be to reduce price caps for providers that have unusually high utilization or who see particularly rapid utilization growth after implementation of the cap (Murray and Berenson 2015). To pursue this approach, policymakers would need to be able to reliably measure utilization performance at the level of individual providers. While not impossible, this has proven challenging in the context of pay-for-performance programs due to variation in case mix, small sample problems, and the fact that any particular provider's performance often depends on the behavior of other providers (e.g., Fiedler et al. 2018; MedPAC 2018).

An alternative approach would be to directly require provider-insurer contracts to include certain types of provisions designed to encourage appropriate utilization. This approach, however, would require regulators to become much more deeply involved in the details of provider-insurer contracts and operations than they are today. That level of involvement is likely neither practical nor desirable.

**Price increases in other service lines.** Providers might also seek to use their excess leverage to negotiate higher prices for services not subject to the price cap. This would be particularly straightforward for providers that had some service lines for which the price cap was binding and others for which it was not. In these cases, a provider could refuse to sign a network agreement for

services where the cap did bind unless the insurer agreed to pay an inflated price for services where the cap did not bind, thereby effectively allowing the provider to circumvent the price cap.

This type of behavior could arise in myriad circumstances, but a few seem particularly important:

• **Hospital-owned physician practices:** Many proposals to implement a comprehensive price cap would constrain the prices of hospital services more than the prices of physician services. For example, the data discussed in section 2.3 suggest that a proposal to cap prices at 175% of Medicare rates would often bind for hospital services but not physician services. Moreover, as noted earlier, some proposals to impose price caps apply exclusively to hospital services or even to just a subset of hospital services (e.g., Glied and Altman 2017; Roy 2019). Thus, a hospital that owned physician practices could use the excess leverage it enjoys with respect to hospital services to extract higher prices for its physician practices.

Hospital ownership of physician practices is common. Data from Compendium of U.S. Health Systems produced by the Agency for Healthcare Research and Quality (AHRQ) indicate that 72% of non-federal acute care hospitals were part of a health system that included physicians in a broad range of specialties.<sup>34</sup> Moreover, ownership of physician practices is likely even more common among dominant hospitals that would be most constrained by a price cap. It is also likely that hospitals would accelerate their acquisition of physician practices if it became clear that doing so would offer them an opportunity to circumvent a system of price caps.

- **Multihospital systems:** The same AHRQ data indicate that 66% of non-federal acute care hospitals were part of a health system with at least two hospitals in 2018.<sup>35</sup> As discussed in section 2.3, negotiated prices vary widely across hospitals, and it is likely that price caps would sometimes bind for one hospital within a system but not others. For example, in a system with a flagship facility and several less prestigious community hospitals, the price cap might bind for the flagship but not the community hospitals. The system could thus use the excess leverage it holds via the flagship to extract higher prices for its affiliated community hospitals. Related, the ability to use this type of evasion strategy could also make community hospitals more attractive acquisition targets and thereby accelerate their movement into systems.
- **Contracts in multiple insurance markets:** Some proposals (e.g., Blumberg et al. 2019) would apply price caps in the individual health insurance market, but not the group market. However, many individual market insurers also operate in the group market. Indeed, CMS Medical Loss Ratio data show that, in 2018, 66% of individual market enrollment was accounted for by insurers that controlled at least 10% of the small group market in the same state.<sup>36</sup> When negotiating with insurers that operate in both markets, providers could use excess leverage they hold in the individual market to extract group market higher prices. Providers' desire to redeploy their excess leverage in this way could also lead them to refuse to contract with individual market insurers without significant group market business.

<sup>&</sup>lt;sup>34</sup> The AHRQ data do not distinguish between health systems in which the hospital and affiliated physician practices are under common ownership versus just being jointly managed, so this estimate includes both types of arrangements. In practice, either type of arrangement could likely facilitate evasion of a price cap.

<sup>&</sup>lt;sup>35</sup> The AHRQ definition of health system only encompasses entities that include a significant number of physician practices, so it would miss hospitals that are part of an entity that owns multiple hospitals but does not own any physician practices. Thus, this estimate may slightly understate the share of hospitals that are actually affiliated with another hospital.

<sup>&</sup>lt;sup>36</sup> For the purposes of this calculation, issuers were aggregated to the parent company level.

Regulators could seek to prevent this behavior by making it illegal for a provider to condition access to one of its service lines on an insurer's willingness to pay a high price for another service line.<sup>37</sup> This approach could make it harder for providers to explicitly demand this type of concession. However, providers would likely be able to find ways to make these types of demands *implicitly* (e.g., by only signing contracts in instances where insurers offer the desired concession and hoping insurers "get the message"), so this approach might only be partially effective in practice. Another policy response would be for regulators to directly monitor the prices for services where the cap does not apply (or does not bind) and impose penalties if there was evidence of unwarranted increases in prices for those services. However, this strategy could be challenging for regulators to implement since it would frequently be difficult for regulators to distinguish warranted and unwarranted price changes.

**Use of alternative contract structures.** Another challenge for a comprehensive price cap is how to handle contracts that deviated from the fee-for-service structure used to define the cap. These deviations might take many different forms. For example, if a price cap were specified in terms of Medicare's diagnosis related groups (DRGs), some hospitals and insurers might prefer to use per diem payments, a structure that was common historically (Ginsburg 2010). Others might want to deviate in more fundamental ways, such as by adopting bundled payment or shared savings arrangements that put providers at financial risk for beneficiaries' overall spending and health outcomes; such arrangements encompassed 30% of commercial market spending in 2018 (HCP-LAN 2019).

Allowing alternative contract structures in the context of a comprehensive price cap is not straightforward. Simply exempting these contracts from complying with cap would eviscerate the cap, as it would allow providers to use their leverage to insist on alternative contract structures with very generous payment terms.<sup>38</sup> For example, if the price cap were specified in terms of DRGs, a hospital could insist on being paid under a per diem contract with high per diem amounts.

Faced with these challenges, policymakers would have a few different options, none of them perfect:

• **Ban alternative contract structures:** One option would be to simply require all providerinsurer contracts to conform to the basic structure of the cap. For example, if a hospital price cap were specified in terms of Medicare DRGs, providers and insurers could be required to write contracts using Medicare DRGs. This approach would protect the cap's integrity.

This approach has the obvious downside that it would forfeit any benefits that new payment structures may create. For example, evidence suggests that bundled payment contracts and shared savings contracts can reduce health care spending, albeit modestly, and it is conceivable that public and private payers will develop more effective models in the future (Barnett et al. 2019; McWilliams et al. 2018; Song et al. 2019). On the other hand, greater standardization in payment structures might reduce administrative burdens for both providers and insurers.

• **Publish a menu of approved alternative contract structures:** An alternative to completely banning alternative contract structures would be to limit providers and insurers to a list of alternative structures pre-approved by the regulator. This approach would also preserve the integrity of the cap but would prevent providers and insurers from developing new contract structures that were not on the approved menu.

<sup>&</sup>lt;sup>37</sup> Policymakers may wish to consider banning these types of "all or nothing" contracts even outside the context of price regulation (Gaynor, Mostashari, and Ginsburg 2017). The Lower Health Care Costs Act of 2019 reported by the Senate Health, Education, Labor, and Pensions Committee included such a ban.

<sup>&</sup>lt;sup>38</sup> As a historical matter, many states' hospital rate setting systems did exempt managed care contracts and associated capitation arrangements, although such arrangements were still relatively uncommon at the time. Murray and Berenson (2015) and Clemens and Ippolito (2019) discuss problems created by these exemptions.

• **Review alternative contract structures on a case-by-case basis:** A final approach would be to allow providers and insurers broad flexibility to adopt alternative contract structures, provided that they showed that total spending under the contract was expected to be no higher than if the parties signed a contract that mirrored the structure of the price cap.<sup>39</sup> The regulator could enforce this requirement by prospectively reviewing proposed contracts or by requiring providers and insurers to conduct suitable analyses before implementing a contract and then periodically auditing those analyses for reasonableness.

This approach would also have weaknesses, however. First, it would likely fail to fully preserve the integrity of the cap. Assessing whether spending under a particular alternative contract structure would generate higher or lower spending would often require making assumptions about utilization changes, and the validity of those assumptions would likely be hard to assess, even after the fact. Second, this type of process could still discourage adoption of alternative contract structures by making adopting them more administratively burdensome. Related, in scenarios where compliance was audited after the fact, providers and insurers might be reluctant to take the risk that the regulator would later second-guess their judgements.

#### 5.2 Default Contract Approaches

Motivated by the enforcement challenges that would exist under a comprehensive price cap, I now consider the alternative "default contract" approach. The first part of this section describes the main choices policymakers would need to make in designing a default contract policy. I then argue that, provided that the requirement to accept patients under a default contract could be effectively enforced, this policy would be successful in reducing negotiated prices in a broad array of circumstances but would avoid the various enforcement challenges that arise in the context of a comprehensive price cap. Finally, I consider how policymakers could enforce the access standards under a default contract.

#### 5.2.1 Design of a Default Contract Policy

Under a default contract policy, the regulator would publish a model network agreement (the "default contract") that specified both the prices the insurer paid the provider *and* a minimum level of access the provider would be required to offer to an insurer's enrollees. A provider would be required to enter a default contract with any insurer that requested one, but providers and insurers would also be permitted to negotiate any alternative payment terms they wished. An insurer would be permitted to request a default contract from some providers but not others or, potentially, for some of a provider's service lines but not others. Below, I briefly discuss the options policymakers would have in designing a default contract and specify the characteristics of the particular policy I analyze below.

Many of the design decisions faced by policymakers wishing to implement a default contract policy would closely parallel the decisions that arise under a comprehensive price cap. In particular, policymakers would need to specify what types of providers were obliged to accept a default contract and what insurance markets the requirement applied to. They would also need to specify the payment terms in the default contract. Since the options related to these design decisions closely parallel those under a comprehensive price cap, I do not repeat that discussion here. For the analytic purposes, I assume that these decisions will be made in the same way as under a comprehensive price cap.

But some design decisions are specific to the default contract approach. Specifically, policymakers would need to specify: (1) the patient access standards under the default contract; (2) any exceptions

<sup>&</sup>lt;sup>39</sup> This comparison could account for any changes in utilization caused by the contract. The parties could also, in principle, be permitted to sign contracts with higher spending if they demonstrated that any increase in spending under the proposed contract was justified by improved quality of care.

to the general requirement to accept a default contract; and (3) what obligations insurers would bear under a default contract. I consider each of these in turn:

Patient access standards under the default contract: Most importantly, policymakers
would need to define the level of access a provider would be required to offer an insurer's
enrollees under a default contract. Broadly speaking, access standards could take two forms.

First, policymakers could impose a general requirement that providers accept default contract patients on the same terms as some other group of patients, such as patients covered under a negotiated network agreement. As discussed in detail in section 9, institutional providers that wish to participate in Medicare are subject to this type of requirement. Namely, they must agree to accept Medicare patients on the same terms as all other patients they treat.

Second, policymakers could implement substantive standards that govern specific dimensions of patient access. The standards could address the process by which patients access care. For example, they could bar the provider from collecting more than the patient's cost-sharing amount directly from the patient. Providers could also be required to answer patient inquiries about whether the provider accepts a particular form of insurance coverage the same way regardless of whether the provider has a negotiated agreement with the insurer or a default contract. The access standards could also, in principle, place quantitative limits on how long patients could be required to wait for an appointment, although this type of standard could be hard to tailor to different providers' circumstances and capacity constraints.

Policymakers could also combine these two approaches and, indeed, a hybrid approach might be policymakers' best option in practice. For the analysis below, I do not specify the details of the access standards under the default contract but instead consider a couple of illustrative scenarios. The benchmark analysis assumes that the default contract would ensure patients a level of access similar to that under a negotiated network agreement. The alternative scenario examines outcomes if policymaker specified weaker standards or could not perfectly enforce a stronger set of access standards. As the subsequent analysis makes clear, the weaker the access standards under the default contract, the less leverage insurers would derive from the option to insist on a default contract, and the higher negotiated prices will tend to be.

- Exceptions to the general requirement to accept a default contract: Policymakers could allow providers to decline a default contract in certain cases. For example, a provider could be allowed to turn down a default contract if it faced capacity constraints or if the insurer had failed to meet its obligations under a prior contract. However, the broader the exceptions under the policy, the less the policy would improve insurers' bargaining leverage. In the analysis that follows, I assume any exceptions like these would be relatively narrow.
- **Insurer obligations under a default contract:** Policymakers would also need to decide what requirements to impose on insurers under a default contract. At a minimum, a default contract would likely impose certain procedural requirements on the insurer, including a requirement to pay the provider in a timely fashion and give the provider the information it needed to determine patient cost-sharing and comply with prior authorization requirements.

The default contract could also, in principle, impose more substantive requirements on the insurer. For example, policymakers could require insurers to choose off a menu of standard cost-sharing structures and prior authorization processes in order to minimize administrative burden on providers. Or policymakers could go further and limit the amount of cost-sharing that could apply to services under a default contract or bar insurers from applying prior authorization requirements to those services. It is important to note, however, that imposing

overly stringent requirements on insurers would reduce how much leverage they derived from the option to insist on a default contract and raise negotiated prices. For the analysis below, I assume that any substantive requirements placed on the insurer would be limited in scope.

In practice, it would likely make sense to pair a default contract policy with an out-of-network cap set at a level matching the prices in the default contract. The addition of an out-of-network cap would not affect the analysis presented below (since the provider and insurer are expected to reach a negotiated agreement in equilibrium). But, in the real world, an out-of-network cap would offer enrollees financial protection in idiosyncratic cases in which they received out-of-network care.

Finally, I note that policymakers could, in principle, permit providers—not just insurers—to request a default contract. That type of policy would function differently from the policy I analyze here. Whereas the default contract policy I consider here could reduce prices but not raise them, price increases would be possible if providers could also request a default contract. That would be particularly true if insurers were required to offer a minimum level of coverage for services delivered under a default contract.

#### 5.2.2 Effects on Negotiated Prices

I now consider how a default contract policy would affect the prices providers and insurers negotiate. In doing so, I rely on the same basic model that I have used to analyze the preceding price cap policies. Once again, I present the main conclusions in the main text and full details in Appendix A.

Much like an out-of-network cap, a default contract policy would change the landscape for providerinsurer negotiations by giving the insurer an attractive alternative to a negotiated agreement. Under a default contract policy, the insurer always has the option to break off negotiations and give its patients access to the provider's services under a default contract. If the access standards under the default contract require the provider to offer an in-network level of access (or providers face other barriers to threatening to turn away patients), this option would give the insurer leverage to negotiate prices at or below the prices specified in the default contract. The gold line in Figure 5.2 illustrates how negotiated prices would depend on the level of the prices in the default contract.



#### Figure 5.2: Negotiated Prices Under a Default Contract Policy

**USC** Schaeffer

BROOKINGS

If policymakers set laxer access standards or had trouble enforcing those standards (and the provider faced no other barriers to turning away patients), then the scope for a default contract policy to reduce negotiated prices would be smaller. Once the prices specified in the default contract fell below a critical level, it would be in the provider's interest to restrict access to its services in the absence of a network agreement in order to protect its bargaining position. While even lax access standards would likely keep the provider from turning away all patients in the absence of a network agreement, the ability to restrict access to some degree would still reduce how attractive implementing a default contract is to the insurer. Correspondingly, with lax access standards, a default contract policy would have less scope to reduce negotiated prices, as illustrated by the blue line in Figure 5.2.

Importantly, because the default contract policy would change negotiated prices by strengthening the insurer's underlying bargaining position rather than by directly limiting the provider's ability to translate its strong bargaining position into high negotiated prices, the default contract policy would not create the same enforcement challenges as the comprehensive price cap approach. Because negotiated prices would remain unregulated, providers would have no reason to seek contract terms that increased utilization or to try to use market power in one service line to secure higher prices in another. Nor would policymakers need to place any limits on the use of alternative payment models.

It is also worth noting that the default contract policy would be less likely to reduce access to out-ofnetwork care than an out-of-network cap. While providers would have the same incentives to turn away an insurer's enrollees absent a network agreement, the insurer's ability to insist on implementing a default contract would limit the provider's ability to act on this incentive in practice.

#### 5.2.3 Enforcement Challenges Under a Default Contract Approach

The core enforcement challenge under the default contract approach would be ensuring compliance with the default contract's access standards. While this would require real effort, it would be easier than overcoming the enforcement challenges that would arise under a comprehensive price cap for a couple of reasons. First, enforcement efforts could focus on preventing a single type of behavior— provider attempts to avoid serving default contract patients—rather than the many different problematic behaviors that could arise under a comprehensive price cap. Second, wholesale non-compliance with the access standards under the default contract would be comparatively easy to observe and document via insurer complaints, consumer complaints, or audit studies. Third, it is likely that providers and insurers would generally opt to implement their own contracts rather than rely on the default contract, so the actual volume of enforcement activity would likely be modest.

It is also important to note that, as illustrated in Figure 5.2, the default contract policy could still reduce negotiated prices to some degree even if enforcement of the access standards was imperfect. It follows that policymakers could partially compensate for imperfect enforcement of the default contract's access standards by specifying lower prices in the default contract.

## 6 Introducing a Public Option

Another commonly discussed approach to expanding regulated or administered pricing is to create a "public option": a publicly operated insurance plan that people could purchase in lieu of a private insurance plan. Introducing a public option was considered during the debate over the ACA, and President-elect Biden's campaign platform included a public option. Many Congressional and think tank proposals also envision introducing a public option (T. Neuman et al. 2019).

Public option proposals vary along many dimensions. In this section, I focus on proposals under which the public option would pay health care providers some percentage of the prices Medicare pays

providers, require providers to accept public option patients, and charge a premium sufficient to cover its average claims and non-claims costs. I also briefly discuss certain other public option designs.

Market outcomes with a public option, including the prices providers received, the premiums enrollees paid, and the market share captured by the public option would depend on how private plans—and, particularly, private plans' negotiations with providers—changed in response to creation of a public option. To gain insight on these dynamics, this paper develops a formal model of health insurance markets in the presence of a public option. The main text presents the main insights from that model and the results of simulations using that model. Appendix B presents full details.

In brief, I conclude that, if the public option was much more attractive to consumers than existing private plans, then private plans competing with a public option would end up negotiating provider prices close to the public option's prices. In brief, competition from the public option would limit the premiums private plans can charge while still attracting meaningful enrollment, which would allow insurers to insist on prices that are not too far above the public option's prices when negotiating with providers. At the same time, providers would refuse to accept prices too far below the public option's prices since they would recognize that participating in private plans would cannibalize some of their public option volume. It follows that a public option that paid providers less than existing private plans could both offer consumers a new lower-premium option and reduce the premiums of private plans. This analysis contradicts assumptions made in some prior analyses of public option proposals that introducing a public option would not change the prices private plans could negotiate (Antos and Capretta 2019; FTI Consulting 2019; Koenig et al. 2019; Schaefer and Moffit 2020).

This section also highlights that the premiums charged by private plans and the public option, as well as the market shares captured by the two types of plans, would depend on features other than what they paid providers. Based on available evidence, it appears likely that private plans would have lower utilization, and, in the individual and small group market, would attract healthier enrollees and be more aggressive in recording enrollees' diagnoses for risk adjustment purposes; on the other hand, the public option might have lower non-claims expenses. Private plans' premiums would also presumably incorporate profit margins, whereas the public option's premium would not. In scenarios that reflect assumptions about these factors appropriate to an individual market public option, my simulations show the public option capturing less than half of the market. By contrast, in scenarios that reflect assumptions appropriate to a public option that offers large employers third-party administrator services, my simulations show the public option capturing more than 60% of the market.

This section of the paper proceeds as follows. First, I discuss the main choices policymakers would face in designing a public option and specify the features of the public option proposal I focus on in this paper. Second, I discuss the main factors that would determine market outcomes in the presence of a public option, including the prices that would emerge from provider-insurer negotiations and the plans' performance on various non-price determinants of plan costs. Third, I provide a brief description of the formal model developed in Appendix B, present the results of quantitative simulations using the model, and discuss some of the limitations of the model. Finally, I discuss how my conclusions might change if providers were not required to accept public option patients and, related, if the public option set provider prices through negotiation rather than administratively.

#### 6.1 Design of a Public Option

Policymakers would face many decisions in designing a public option. Thus, I begin by reviewing the several of these choices and specifying the features of the particular proposal I analyze in this paper. In doing so, my focus is on a public option that would be implemented at the federal level. The broad considerations would be similar at the state level, but some of the particulars would differ.

**Provider payment rates.** Policymakers would need to decide how a public option would pay providers. This analysis focuses on a public option that would set provider payment rates administratively. Administered payment rates could be established in many different ways. They could be set as a percentage of Medicare prices or be based in some way on the prices that commercial plans pay providers today. Most of the analysis of a public option in this paper would apply to a variety of approaches to setting the public option's payment rates, but for the quantitative simulations, I consider a public option that would set prices as a multiple of traditional Medicare's.<sup>40</sup>

While many public option proposals envision setting provider payment rates administratively, a public option could, in principle, negotiate rates with each provider, similar to how private plans determine prices today. In section 6.4, I briefly touch on this type of approach and discuss why relying on these types of negotiations would likely result in the public option paying health care providers prices similar to (or higher than) the prices providers receive under the status quo.

**Provider participation requirements.** Policymakers would need to decide whether providers would be required to accept public option enrollees. This analysis focuses on scenarios in which providers would be subject to this type of requirement, but I discuss how the analysis might change if providers could decline to treat public option enrollees in section 6.4.

If providers were required to accept public option enrollees, policymakers would need to define what level of access providers were expected to offer public option enrollees and monitor whether that level of access was being offered in practice. Otherwise, providers could notionally "participate" in the public option without actually serving public option patients. Policymakers' options for defining access standards would be essentially identical to those discussed in section 5.2 in connection with the default contract approach to price regulation, so I refer readers back to that section for further discussion.

**Eligibility rules.** Policymakers would need to decide who could enroll in the public option. Here, I consider a public option that could be purchased by individuals in the individual market and, potentially, by employers on behalf of their employees.<sup>41</sup> Some proposals, often cast as "Medicare buyins" would limit eligibility to people above a certain age; I do not consider such proposals here, but they would likely function quite differently from a public option available at all ages.<sup>42</sup>

I make one important assumption about the terms on which large employers could access the public option. Specifically, I assume that large employers would be permitted to hire the public option as a third-party administrator for a self-insured plan (that is, a plan under which the employer bears the cost of enrollee claims), but the public option would not offer insured coverage (that is, coverage under which the insurer bears the cost of enrollee claims) to large employers.

<sup>&</sup>lt;sup>40</sup> Medicare delivers prescription drug coverage through private insurers, so some other approach would be necessary to establish payment rates for prescription drugs. Because this paper is focused on payment for health care services, I do not delve into this question in depth here, but it merits attention in future work.

<sup>&</sup>lt;sup>41</sup> Even if a public option was not offered directly to employers, employers could give their employees access to an individual market public option by setting up an individual coverage health reimbursement arrangement, which allows employers to pay premiums for individual market plans on their employees' behalf. Depending on the public option's payment rates, this could be an attractive option for many employers, particularly employers with sicker workforces (Linke Young, Levitis, and Fiedler 2018). For the purposes of this analysis, I assume that if policymakers introduced a public option limited to the individual market, they would take action to prevent this type of migration out of the employer market.

<sup>&</sup>lt;sup>42</sup> Specifically, unlike the proposals considered here, these types of proposals would often give rise to a "bifurcated" equilibrium in which almost all people eligible for the Medicare buy-in opt for the buy-in, while others remain in private plans (Eibner et al. 2019). In this type of equilibrium, private plans would compete with the buy-in to a very limited extent, so introducing a buy-in would likely not change private plans in the same way as a public option.

This approach limits the potential for adverse selection against the public option in the large employer market.<sup>43</sup> Today, large employers either self-insure or purchase insured coverage with experience-rated premiums (that is, premiums that vary based on the employer's risk mix). In either case, employers with sicker workforces pay more to cover their workers. If a public option allowed large employers to purchase insured coverage but did not experience-rate its premiums, then the public option would likely disproportionately attract firms with sicker workforces and have to set very high premiums. It may not be feasible for a government agency to experience-rate premiums, so barring large employers from purchasing insured coverage might be the only way to avoid this problem.

Importantly, employers who hired the public option as a third-party administrator could still purchase stop-loss coverage from a private insurer that would limit their financial exposure, just as many employers who operate self-insured plans do today. Indeed, if employers wished, they could purchase stop-loss coverage that would essentially eliminate their claims risk exposure, effectively allowing the employer to replicate the predictability it would have under an insured plan.<sup>44</sup>

**Benefit design and utilization management practices.** Policymakers would need to determine what services a public option covered, how cost-sharing under the public option would be structured, and how the public option would manage enrollees' utilization. For this analysis, I assume that the public option would cover the essential health benefit package that individual and small group market insurance plans are required to cover under the ACA. I also assume that the public option would adopt traditional Medicare's utilization management practices, including traditional Medicare's limited use of prior authorization and similar tools (Jacobson and Neuman 2018), consistent with the fact that many public option proposals envision building on Medicare.

**Premium setting.** Policymakers would need to decide how the public option would set premiums (or for a public option serving as a third-party administrator for a self-insured plan, administration fees). I assume that the public option would set premiums to cover its expected claims and other costs, net of any risk adjustment revenues or payments, which broadly mirrors the approach used to set premiums in Parts A and B of Medicare.<sup>45</sup> Additionally, premiums would vary by age in accordance with the applicable age rating curve and across geographic areas in accordance with differences in claims and administrative expenses. I assume that the public option would set the administration fees it charges self-insured plans to cover a pro rata portion of its administrative costs.

For the purposes of this paper, I assume that the public option's administrative expenses would be considered to include a pro rata portion of the cost of any infrastructure (e.g., data systems) shared between the public option and Medicare. I also assume that the public option would be permitted to take out a "loan" from taxpayers to cover any required start-up or capital expenditures that it could repay (with interest, at the government's borrowing rate) over multiple years.

<sup>&</sup>lt;sup>43</sup> Analogous problems do not arise in the individual or small group market since insurers cannot vary premiums based on health status in those insurance markets.

<sup>&</sup>lt;sup>44</sup> Generous stop-loss coverage might be more widely available in connection with a public option since employers would have no control over the public option's design or operations. Thus, stop-loss insurers would not need to worry that the employer would respond to a generous stop-loss policy by encouraging its plan administrator to be more lenient in adjudicating claims and thereby drive up how much claims spending the stop-loss insurer was liable for.

<sup>&</sup>lt;sup>45</sup> An important difference with Medicare Part B is that CMS is required to set Part B premiums so that the Part B trust fund maintains an appropriate contingency reserve. Consequently, if forecast errors cause premiums for a year to fall short of expenses, CMS must set a higher Part B premium in future years to rebuild that contingency reserve. The opposite is true if premiums end up exceeding expenses. The resulting premium volatility is likely undesirable, so I assume that a public option would not use this type of trust fund structure. However, some have raised concerns that a public option would have incentives to set its premiums systematically too low (Church, Heil, and Chen 2020). If the statute establishing a public option clearly required the public option to set its premiums to cover its expenses, it is unclear whether this would be a major problem in practice, but a trust fund structure would be one way of addressing these concerns.

**Subsidy applicability.** Policymakers would need to decide how the various federal programs that subsidize insurance coverage would apply to the public option. I assume here that all federal subsidies available for the purchase of private insurance plans would also be available to people purchasing the public option. In particular, people who enrolled in the public option through the individual market would receive the same premium tax credit and cost-sharing reductions as private plan enrollees, and public option coverage purchased by an employer would be excluded from its employees' taxable compensation just like employer-provided coverage obtained from a private insurer.

Many proposals that include a public option combine creation of a public option with provisions that would make the ACA's individual market subsidies more generous or expand who is eligible for those subsidies (e.g., by expanding the circumstances in which people offered coverage at work can enroll in subsidized individual market coverage). Those types of subsidy expansions are not intrinsic features of a public option and generally would not meaningfully alter the dynamics of competition between a public option and private plans, so I do not consider them in this paper.

**Risk adjustment.** Policymakers would need to decide whether and how a public option would participate in the risk adjustment programs that exist in the individual and small group markets (which make payments to insurers with relatively sick enrollees and collect payments from insurers with relatively healthy enrollees). I assume that the public option would be subject to risk adjustment in the same way as private plans participate in those programs today.

**Applicability of taxes and fees.** Policymakers would also need to decide whether the public option would be subject to various taxes and fees levied on private plans. For the purposes of this analysis, I assume that the public option would be required to pay most federal taxes and fees that apply to private insurers, including the user fee for offering coverage through the Marketplace and the fee that funds the Patient Centered Outcomes Research Institute, as well as most state taxes and fees.<sup>46</sup> However, I assume that the public option would not pay state or federal corporate income taxes.

A note on the role of private insurers in operating a "public option." Before proceeding, I note that the term "public option" has also sometimes been applied to policies under which private insurers would contract with the government to offer plans that incorporated certain features, such as limits on the prices they paid providers, but the government would not directly operate an insurance plan. Washington State is implementing this type of policy in 2021, and Colorado has recently considered a similar policy. Labels aside, these proposals have more in common with the price regulation policies considered in the last section, so I do not consider them further in this section.

Even for a public option primarily operated by a government agency, however, policymakers would need to decide whether to contract out certain functions to private entities. It is likely that a public option would at least contract out most claims processing functions, as is the case under traditional Medicare. But policymakers could consider contracting out a broader array of activities.

For example, policymakers could consider delegating some control over the public option's benefit design, utilization management processes, or risk adjustment diagnosis coding processes to a private contractor. As discussed at length in section 6.2.2, there is evidence that private plans achieve lower utilization and are better at coding diagnoses for risk adjustment purposes than traditional Medicare, so enlisting a private entity to perform these functions might reduce the public option's costs. On the other hand, fees paid to the contractor would at least partially offset any savings the contractor

<sup>&</sup>lt;sup>46</sup> Congress would likely need to explicitly allow states to collect taxes or fees from a federal public option since states would otherwise face constitutional barriers to doing so. Congress might also wish to limit states' authority to impose taxes or fees on the public option to ensure that a state could not use this power to undermine the public option. In practice, it might be simpler to create a regime in which the public option was not technically subject to state taxes and fees but paid equivalent amounts to state governments in circumstances where certain conditions were met.

achieved. Policymakers would also need to weigh the risk that steps taken by the contractor would discourage utilization of valuable health care, create hassle costs for public option enrollees, or invest resources in socially unproductive diagnosis coding efforts. These concerns would likely be particularly acute if the federal government tried to create strong incentives for the contractor to control the public option's costs by transferring all or part of the public option's claims risk to the contractor.

Policymakers could also delegate premium setting to a private contractor. This could be attractive if policymakers were concerned that government agencies would have trouble predicting the public option's costs and, thus, setting appropriate premiums.<sup>47</sup> If policymakers were to pursue this approach, it would be important to create appropriate incentives for the contractor. One reasonable approach would be to tie the contractor's compensation to how closely the premiums it set matched the public option's realized expenses. Notably, simply making the contractor liable for the public option's expenses and then letting it set (and retain) whatever premium it wished would grant the contractor market power that it could use to set premiums above the public option's expected costs.

#### 6.2 Factors Determining Market Outcomes Under a Public Option

I now turn to analyzing the factors that would shape outcomes under a public option. This subsection discusses these factors in qualitative terms, guided by the formal model in Appendix B. Section 6.3 presents quantitative results from simulations using a calibrated version of that model.

Broadly speaking, outcomes under a public option would be shaped by four main factors:

- what prices private insurers could negotiate with providers in the presence of a public option;
- the performance of the public option and private plans with respect to non-price determinants of plan costs, including their effectiveness in managing utilization, their level of administrative spending, and whether they tended to attract relatively healthy or sick enrollees;
- whether non-premium differences between the public option and private plans, such as differences in benefit design or marketing, caused enrollees to prefer one over the other; and
- differences in how a public option and private plans set premiums.

I discuss each of these factors in turn.

#### 6.2.1 Provider-Insurer Price Negotiations in the Presence of a Public Option

I begin by analyzing how providers and private plans would negotiate prices in the presence of a public option, drawing extensively on the formal model in Appendix B. I focus on cases where the public option is much more attractive to consumers than existing private plans. In such cases, a public option would reshape provider-insurer negotiations in two ways. First, competition from the public option would tightly constrain the premiums private plans could set. Second, providers would recognize that if they did not join private plans' networks, some of their patients would instead enroll in the public option, and they would be paid the public option's prices to care for those patients.

Due to these dynamics, it will be in the mutual interest of a provider-insurer pair to reach agreements under which the insurer set its premium *as if* it were paying the provider a price similar to the public option's price. Setting a higher premium would reduce the parties' joint profits by sacrificing too much

<sup>&</sup>lt;sup>47</sup> This structure could also facilitate offering insured coverage to large employers since a contractor might be better positioned to develop experience-rated premiums and could be paid on the basis of how accurate its premiums proved to be after the fact. It is unclear, however, that this structure would offer any advantages over just permitting employers who hire the public option as a third-party administrator to obtain stop-loss coverage.

private plan enrollment, while setting a lower premium would do the same by cannibalizing too much of the provider's public option volume. The actual prices insurers pay providers could be lower or higher than the price notionally reflected in the insurer's premium but not too much higher or lower since one of the parties would then prefer no agreement to an agreement at that price.

It is important to note that the analysis presented in this section would generally *not* apply if the public option paid providers more than existing private plans or had non-price cost disadvantages large enough to offset its pricing advantages. Under those circumstances, the public option would set a higher premium than existing private plans and attract little enrollment. Thus, the forces considered here, which arise from competition between private plans and the public option, would be largely irrelevant, and competition among private plans would play the lead role in disciplining both private plans' premiums and the prices private plans pay providers, as under the status quo. Correspondingly, introducing this type of "weak" public option would likely have little effect on market outcomes.<sup>48</sup>

The rest of this section examines these dynamics in much greater detail through the lens of the formal model presented in Appendix B. For simplicity, I focus on a setting with a single private plan. As discussed in the appendix, when the public option is much more attractive to consumers than existing private plans—the scenario I focus on in this section of the paper—this simplifying assumption is likely of limited importance. However, this simplifying assumption would matter greatly in scenarios where the public option is a weak competitor for existing private plans since, as noted above, competition among private plans would then play the primary role in disciplining prices and premiums.

What type of agreements will a provider and the private plan want to reach? To start, I consider the broad incentives facing providers and the private plan. In general, it is reasonable to expect a provider-insurer pair to seek an agreement that maximizes their *joint* profits and then divides those profits between them. Otherwise, either party could propose some alternative agreement that generated higher joint profits and made both parties better off.

The private plan's premium is what ultimately determines the parties' joint profits. The premium determines how many people enroll in the private plan versus the public option and, thus, how much revenue the private plan collects from enrollees, how much revenue the provider collects from the public option, and what costs the provider incurs to deliver care. Thus, a provider-insurer pair should seek an agreement that leads the insurer to set a premium that maximizes their joint profits and then set the private plan pays the provider to split those profits in whatever way they wish.

To enable providers and the private plan to reach agreements that have this feature, the formal model developed in Appendix B (and the discussion below) assumes that providers and the private plan will negotiate two-part tariffs, contracts in which the insurer pays the provider a "per service price" for each service the provider delivers plus a lump-sum payment that is independent of volume. The per service price determines the private plan's marginal cost of attracting an additional enrollee and, thus, what premium the private plan wishes to set, while the per service price and the lump-sum payment together determine the "total price" the provider receives from the private plan.

Importantly, while assuming that providers and the private plan use two-part tariffs is convenient for expositional and modeling purposes, other contract structures that may feel more realistic would lead to identical outcomes. For example, the combination of a simple linear price and a commitment by the private plan to deliver a certain amount of volume to the provider would suffice. In practice, even a

<sup>&</sup>lt;sup>48</sup> There might be exceptions to this conclusion. For example, in cases where the prices providers charge under the status quo are constrained by a concern that setting a higher price would attract unwanted scrutiny from the public or from regulators, introducing a public option that "blessed" high prices could allow a provider to demand higher prices from private plans.

simple linear price (without a volume commitment) may lead to similar outcomes since the analysis below shows that the optimal lump-sum payment is likely to be relatively small.

What per service price maximizes joint profits? A provider-insurer pair will maximize its joint profits if the insurer pays the provider a per service price that exactly compensates the provider for the cost it bears when an enrollee switches out of the public option and into the private plan, as shown formally in Appendix B. Intuitively, paying this per service price leads the private plan to appropriately balance the revenue it gains when it lowers its premium to attract more enrollment against the costs that this shift in enrollment imposes on the provider.

The optimal per service price is thus the sum of two amounts: (1) the provider's direct cost of serving the marginal enrollee; and (2) the profits the provider loses from not serving the marginal enrollee under the public option. As shown in Appendix B and illustrated in Figure 6.1, this price is a linear combination of the provider's cost of delivering a service and the public option's payment rate. The weights placed on each amount depends on how the quantity of services an enrollee receives from the provider depends on whether that enrollee is covered by the public option or the private plan.

If the enrollee uses the same quantity of the provider's services when enrolled in either plan, then the optimal per service price exactly equals public option's payment rate. But if the enrollee uses more of the provider's services when enrolled in the public option (e.g., because the public option manages utilization less aggressively), then the optimal per service price is higher than the public option's payment rate; intuitively, when the private plan has lower utilization, compensating the provider for the volume it loses when an enrollee leaves the public option requires a higher price. By contrast, if the enrollee uses less of the provider's services when enrolled in the public option (e.g., because the private plan has a narrower network and directs more of its enrollees' care to the provider), then the optimal per service price is below the public option's payment rate. Indeed, in the simulations in section 6.3, the optimal per service price is modestly below the public option's payment rate.

What total price will the private plan pay providers? The total price the insurer pays the provider-that is, the insurer's total payment per service accounting for both the per service payment



Figure 6.1: Per Service Price that Maximizes Joint Profits

**USC** Schaeffer

and the lump-sum payment—determines how the profits generated when the insurer sets the optimal premium are divided between the two parties. It is reasonable to assume that the parties will agree on a price at which both parties benefit from a network agreement.<sup>49</sup> Thus, the total price will be between: (1) the minimum price that makes signing a network agreement profitable for the provider; and (2) the maximum price that makes signing a network agreement profitable for the insurer.

I consider the minimum and maximum prices in turn:

• **Minimum price:** The minimum price that makes signing a network agreement profitable for the provider must compensate the provider for: (1) the direct costs the provider incurs to serve the insurer's enrollees; and (2) any profits the provider loses under the public option because a network agreement spurs some enrollees to switch from the public option to the private plan.

This price will be (weakly) lower than the optimal per service price because only a portion of the private plan's enrollment will consist of people spurred to enroll in the private plan by the provider's presence in the private plan's network. Indeed, in the extreme case where adding the provider to the plan's network causes no change in the private plan's enrollment, the provider will lose no profits under the public option when it joins the private plan's network, so the minimum price will be just the provider's marginal cost. In the more typical case, the minimum price will lie between the provider's marginal cost and the optimal per service price.

• **Maximum price:** The maximum price the insurer can profitably pay is the price that fully absorbs the premium revenue the insurer gains when the provider joins the insurer's network (net of any changes in its non-claims spending and payments to other providers). Naturally, that price will depend on the value enrollees place on access to that specific provider. However, it is shown in Appendix B that the cost of paying *all providers* their respective maximum prices will not exceed the insurer's total premium revenue (net of its non-claims expenses), provided that a reasonable condition on consumers' preferences holds. (The relevant assumption is stated formally in the appendix but, roughly speaking, requires that the value enrollees place on having access to any specific provider shrinks as the insurer's network broadens.<sup>50</sup>)

Because the insurer maximizes its profits, its premium will equal its marginal cost (the cost of paying each provider the optimal per service price, plus any non-claim expenses) plus a markup that depends on the elasticity of demand for the private plan (that is, the sensitivity of enrollment in the private plan to its premium). Empirical evidence, which is discussed further in section 6.3 and Appendix B, suggests that the elasticity of demand for the private plan is likely to be reasonably large in cases where the public option is able to capture significant market share, so the insurer's profit-maximizing markup is likely to be relatively small. It follows that the insurer's total premium revenue cannot be too much larger than its cost of paying each provider the optimal per service price, which implies in turn that, on average, the maximum price cannot be too far above the optimal per service price.

In sum, the minimum price is likely to be modestly below the optimal per service price, while, at least on average, the maximum price is likely to be modestly above that price. It follows that, on average, the negotiated total price cannot be too far from the optimal per service price and, thus, the public option's payment rate.

<sup>&</sup>lt;sup>49</sup> Specifically, the model in Appendix B adopts the "Nash bargaining" modeling approach discussed in section 4.2, which assumes that the parties will agree on a price at which both gain a meaningful amount from a network agreement.

<sup>&</sup>lt;sup>50</sup> This assumption is closely related to the diminishing marginal contributions assumption of Collard-Wexler, Gowrinsankaran, and Lee (2019).

Exactly how close the minimum and maximum prices are to the optimal per service price is likely to depend on the public option's equilibrium market share. When the public option has a large market share, it is reasonable to expect demand for the private plan to be more elastic with respect to both the breadth of its network and its premium. This will tend to result in a lower maximum price and a higher minimum price. In practice, the maximum price is likely to be more sensitive to changes in market share because the minimum price is constrained in a relative narrow range between the provider's marginal cost and the optimal per service price. Thus, if the public option captures a larger market share, private plans are likely to pay lower total prices and vice versa.

In closing, I note that the preceding discussion implies that introducing a public option could actually put *upward* pressure on prices in cases where the public option pays more than existing private plans, so long as the public option still charged a competitive premium. For example, a public option that paid providers less than existing private plans on average but paid some specific providers more could exert upward pressure on the prices paid to those specific providers.

**An illustrative example.** A simple numerical example may help make this discussion more concrete. For the purposes of this example only, I consider a simple market that has a single provider (a hospital), a single insurer, and a public option. Consumer demand is such that the private plan's optimal markup is 20% of its marginal cost. For the sake of simplicity, I also assume that the public option and private plan manage utilization identically, and the private plan incurs no non-claims costs.

I first consider a scenario in which the public option pays \$10,000 per admission, which is depicted on the left-hand side of Figure 6.2. Because there are no utilization differences between the public option and private plan, the optimal per service price exactly equals the public option's payment rate, so the private plan will set a premium at which it collects \$12,000 (= $1.2 \times $10,000$ ) per admission. Since the private plan attracts no enrollment unless the hospital joins its network, the maximum price that makes a network agreement profitable for the insurer is also \$12,000 per admission.

For its part, the hospital will recognize that if it does not participate in the private plan, all of the consumers who are deciding between the public option and the private plan will enroll in the public



Figure 6.2: Determination of Negotiated Price in Private Plan

50

option, and it will be paid \$10,000 per admission for those enrollees. Thus, the minimum price that makes participating in the private plan's network attractive to the hospital is \$10,000 per admission. If the hospital and the insurer "split the difference" (consistent with the Nash bargaining assumption in the model), then the hospital and insurer would agree to a price of \$11,000 per admission.

Next, I consider a scenario in which the public option pays \$20,000 per admission, which is depicted on the right-hand side of Figure 6.2. As above, the optimal per service price exactly equals the public option's payment rate, so the private plan will set a premium at which it collects \$24,000 (=1.2 x \$20,000) per admission and be willing to pay at most \$24,000 per admission. As before, the hospital recognizes that every patient it treats under the private plan is a patient it does not treat under the public option, so it will demand a price of at least \$20,000 per admission to join the plan's network. If the hospital and insurer split the difference, then the new negotiated price is \$22,000 per admission.

#### 6.2.2 Non-Price Determinants of Plan Costs

Outcomes with a public option would also depend on plans' performance on determinants of plan costs other than provider prices. These include: plans' effectiveness in managing utilization; the level of their non-claims costs (administrative costs, taxes and fees, and the cost of capital); and, in the individual and small group markets, whether the public option and private plans attracted healthier or sicker enrollees or were better or worse at coding diagnoses for risk adjustment purposes.

In this section, I consider how a public option might compare on these dimensions to *both* existing private plans *and* the private plans that might exist after introduction of a public option. Comparing a public option to existing private plans offers insight on how introducing a public option would change premiums relative to the status quo. Comparing a public option to the plans insurers would offer to compete with a public option offers insight on how the premiums of a public option might compare to its competitors and, thus, what market share the public option might capture.

In brief, evidence from Medicare Advantage and elsewhere suggests that a public option would have higher utilization than existing private plans for comparable enrollees, although this utilization disadvantage might be smaller in the employer market than in the individual market. The private plans offered alongside a public option might have higher or lower utilization than existing private plans depending on how they adjusted their plan designs in response to introduction of a public option; I discuss these potential responses by private plans at greater length in section 7. On the other hand, prior experience suggests that a public option would have lower administrative costs and a lower cost of capital than both existing private plans and the private plans offered alongside a public option.

In the individual and small group markets, risk selection and risk adjustment would also be important considerations. Experience from Medicare Advantage suggests that a public option would attract sicker enrollees than competing private plans and be less effective at coding diagnoses for risk adjustment purposes than its private competitors. This would cause the public option to have higher costs than existing private plans, while causing private plans offered alongside a public option to have lower costs than existing plans. The rest of this section discusses these factors in more detail.

**Utilization.** I first consider how the public option's utilization might compare to existing private plans. My maintained assumption in this paper is that a public option would adopt utilization management practices similar to traditional Medicare, so it is informative to consider the findings of research that compares traditional Medicare to existing private plans.

Private plans—both in the commercial market and in Medicare Advantage—use a variety of strategies to reduce utilization that traditional Medicare does not. Perhaps most importantly, private plans generally have provider networks that exclude at least some providers in the plan's service area. While one motivation for excluding providers is to strengthen insurers' leverage when bargaining with

providers (e.g., Ho and Lee 2019), networks can also be used to reduce utilization, such as by steering patients away from high-utilizing providers (e.g., Skopec, Berenson, and Feder 2018). Typical network breadth varies by plan type. Narrow network plans (i.e., plans that exclude many providers) are common in the individual market (Coe, Lamb, and Rivera 2017; Dafny et al. 2017; Polsky, Cidav, and Swanson 2016), and a substantial fraction of Medicare Advantage enrollment is in narrow network plans as well (Jacobson et al. 2016; 2017; Feyman et al. 2019). By contrast, truly narrow networks are relatively uncommon in employer coverage, where only 7% of employers describe their largest plan as having a "somewhat" or "very" narrow network (KFF 2020b).<sup>51</sup>

Private plans also use a range of other utilization controls, such as prior authorization and referral requirements, that are generally not used in traditional Medicare. These types of requirements are the norm in Medicare Advantage and individual market plans (P. Neuman and Jacobson 2018; McKinsey and Company 2020), and exist in many employer plans as well (KFF 2020b).

Research comparing utilization in Medicare Advantage and traditional Medicare suggests that the tighter controls used by Medicare Advantage plans achieve their intended purpose of reducing utilization. Curto et al. (2019) directly compare spending by Medicare Advantage and traditional Medicare enrollees, adjusting for health status differences. In the Curto et al. analyses that adjust for the broadest set of health status differences, the authors estimate that Medicare Advantage enrollees spend 9% less than comparable traditional Medicare enrollees, with the differences concentrated in post-acute and physician spending. Since Medicare Advantage plans generally pay providers prices similar to traditional Medicare's, as discussed in detail in section 9, this difference appears to entirely reflect differences in utilization, not differences in provider prices.

A weakness of the Curto et al. (2019) research design is that they may not be able to fully adjust for differences in health status between traditional Medicare enrollees and Medicare Advantage enrollees. Duggan, Gruber, and Vabson (2018) attempt to avoid the need to adjust for differences in health status by examining how aggregate hospital utilization changed after discrete declines in Medicare Advantage penetration caused by Medicare Advantage plan withdrawals in New York State. The authors conclude that shifting an enrollee from traditional Medicare to Medicare Advantage reduces the number of hospital admissions that an enrollee experiences by 37%.<sup>52</sup>

Evidence suggests that these types of utilization controls can also reduce utilization in the under 65 population. This was the conclusion of a long literature that examined the managed care plans that diffused during the 1980s and 1990s (e.g., Glied 2000), and several more recent papers have reached similar conclusions. Gruber and McKnight (2016) examine an initiative by the state of Massachusetts to move state employees into narrower network plans and find meaningful reductions in utilization, as do Atwood and LoSasso (2016) in a comparison of employers that do and do not offer narrow network plans. Particularly compellingly, Geruso, Layton, and Wallace (2020) examine Medicaid enrollees randomly assigned to Medicaid managed care plans in New York City and find wide variation in spending, apparently reflecting differences in how tightly plans manage utilization.

Of course, as noted above, some private plans outside Medicare Advantage—particularly employer plans—have broad networks and lack other utilization controls as well, so these plans may have smaller

<sup>&</sup>lt;sup>51</sup> A caveat on cross-market comparisons of network breadth is that fully comparable measures of network breadth are not available. The research cited here on Medicare Advantage and the individual market uses publicly available plan provider directories to estimate what share of providers in a given area are included in a plan's network. But comparable measures are difficult or impossible to construct for employer plans. Nevertheless, the subjective assessments of employers that participate in the KFF survey suggest that employer networks are indeed broader than those in other private plans.

<sup>&</sup>lt;sup>52</sup> This finding is in some tension with the Curto et al. findings, which show little reduction in hospital utilization. This could reflect shortcomings in one or both research designs or differences between the particular Medicare Advantage plans studied by Duggan, Gruber, and Vabson and the broader universe of Medicare Advantage plans studied by Curto et al.

utilization advantages over traditional Medicare. Indeed, Wallace and Song (2016) compare utilization of imaging services and outpatient procedures among retirees just under age 65 who have employer coverage to retirees just over age 65 who have traditional Medicare, focusing on a sample of large employer plans likely to have broad networks and limited utilization controls. They find no evidence that these employer plans have lower utilization than traditional Medicare.

The evidence discussed above thus suggests that a public option based on traditional Medicare would have higher utilization than existing individual market plans given those plans' narrow networks and tight utilization controls. By contrast, utilization under a public option might be only modestly higher than existing employer market plans given those plans' more limited utilization controls.

I largely defer consideration of how utilization in private plans offered alongside a public option might compare to existing private plans. That would depend on whether and how the introduction of a public option caused private plans to adjust their plan designs, which I discuss in section 7. In brief, however, I conclude that it is plausible that introducing a public option could cause private plans to become either more or less aggressive in managing utilization than they are under the status quo.

Administrative expenses. I next consider how the administrative expenses of a public option might compare to the administrative expenses of private plans—both existing plans and those that would compete with a public option. Data from insurers' Medical Loss Ratio Filings with CMS show that private plans in the individual, small group, and large group markets incurred administrative expenses of \$482 per enrollee (10.3% of claims spending) in 2018 (Table 6.1). For comparison, federal administrative spending for Parts A and B of Medicare was \$229 per person enrolled in traditional Medicare in that year (4.9% of private market per enrollee claims spending), about half as large.<sup>53</sup>

This Medicare estimate is an imperfect guide to the administrative costs a public option would incur, but it is unclear whether is too high or too low. Because a public option would serve a population that uses fewer health care services, it would likely spend less on claims processing and related activities than traditional Medicare; at least one-third of Part A and B administrative spending is on activities that scale with utilization to some degree.<sup>54</sup> On the other hand, this cost estimate does not include administrative costs associated with offering prescription drug coverage.<sup>55</sup> Enrolling people in a public option might also be more administratively complex than enrolling them in traditional Medicare.

It is less clear why traditional Medicare incurs much lower administrative expenses than private plans. Private plans' more intensive approach to utilization management (discussed above), their greater marketing efforts (discussed below), and their efforts to improve risk selection and diagnosis coding (also discussed below) all likely increase their administrative costs to some degree. Traditional Medicare may also realize some economies of scale not available to private plans.

<sup>&</sup>lt;sup>53</sup> The Medicare estimate was calculated using data for the 2018 calendar year in the 2019 Medicare Trustees report. For Part A, I divide Part A administrative spending by the number of people with Part A coverage from traditional Medicare. I proceed similarly for Part B, except that I exclude a \$1.1 billion transfer to the Medicaid program that the Trustees categorize as an administrative expense but that funds some Medicare beneficiaries' Part B premiums. The figure reported in the text is the sum of the resulting Part A and Part B per enrollee amounts. Note that this method erroneously includes costs that the federal government incurs to administer Medicare Advantage, but the resulting upward bias is likely small.

<sup>&</sup>lt;sup>54</sup> GAO (2015) estimates that the Medicare Administrative Contractors (MACs) that handle claims processing and related functions for traditional Medicare were paid \$1.3 billion in fiscal year 2013. The Medicare Trustees report that an additional \$1.8 billion was spent in calendar year 2018 on activities aimed at reducing health care fraud and abuse. Extrapolating the MAC figure to calendar year 2018 implies that these two costs represented 38 percent of total federal administrative spending on Part A and B of Medicare in that year. This is a lower bound since various other Medicare administrative costs likely also scale with utilization to some degree.

<sup>&</sup>lt;sup>55</sup> Because Medicare offers drug coverage through private insurers, it is not possible to use experience under Medicare to gauge the administrative costs that a public option would incur when offering prescription drug coverage.

	Spending on Category		
Category of Expenditures	Per Member	As a %	
	Per Year (\$)	of Claims	
Administrative expenses			
Claims processing	106	2.3	
Direct sales and broker commissions	143	3.1	
Other administrative expenses	233	5.0	
Total administrative expenses	482	10.3	
Taxes and fees			
Federal corporate income tax	57	1.2	
ACA health insurance tax	91	1.9	
Other federal taxes and fees	39	0.8	
State taxes and fees	72	1.5	
Memo: Claims spending	4,688	100.0	

#### Table 6.1: Non-Claims Expenses of Private Insurers, 2018

Source: CMS MLR Public Use File; author's calculations.

Note: Table includes expenses for comprehensive major medical plans offered in the individual, small group, and large group markets. Administrative expenses are reported on section 5 of part 1 of the MLR form. The reported subcategories include the following line items: claims processing expenses (lines 5.1 and 5.2); direct sales and broker expenses (lines 5.3 and 5.4); and other administrative expenses (lines 5.5a, 5.5b, 5.5c, and 5.6). Taxes and fees are reported on section 3 of part 1 of the MLR form. The reported subcategories include the following line items: federal corporate income tax (line 3.1a); ACA health insurance tax (line 3.1c); other federal taxes and fees (lines 3.1b, 3.1d, 3.3a, and 3.3b); and state taxes and fees (lines 3.2a, 3.2b, and 3.2c). Line 3.3b (labeled "Other Federal and State regulatory licenses and fees") is categorized as federal because it consists overwhelmingly of user fees collected by the Health Insurance Marketplace but may include a small amount of state fees. The number of covered life-years is reported in part 1, line 7.4 and claims spending is reported in part 1, line 2.1.

In sum, while further work to estimate the administrative costs of a public option would be worthwhile, experience from Medicare suggests that a public option would likely incur lower administrative costs than existing private plans. By contrast, there is no clear reason to expect the administrative costs of private plans operating alongside a public option to differ from existing private plans.

**Taxes and fees.** Private plans pay various taxes and fees to federal and state governments, and I have assumed for this analysis that the public option would be subject to these taxes (excepting corporate income taxes, which I discuss separately) in the same way as private plans. Table 6.1 indicates that the amount of such taxes and fees is relatively modest. Excluding federal corporate income taxes and the ACA's health insurance tax (which has been repealed), private insurers in the individual, small group, and large group markets paid taxes and fees of \$111 per enrollee (2.4% of claims spending) in 2018.

**Cost of capital.** Private insurers rely on capital supplied by investors to fund long-term investments and maintain reserves required by regulators, and investors demand compensation for supplying that capital because they forgo the opportunity to invest those funds elsewhere and run the risk of losing their investment. Insurers also pay corporate income tax on the profits they earn to fund compensation paid to investors. The non-tax portion of the cost of capital is not captured in "accounting" measures of costs like those reported in Tables 6.1 and 6.2 (Litow 2006; Zycher 2007).

	Amount	
	Per Member	As a %
	rei ieai	
Premium revenue	5,073	118.8
Claims spending	4,269	100.0
Administrative and health care quality expenses	469	11.0
Taxes and fees		
Federal corporate income tax	57	1.3
All other taxes and fees	161	3.8
Underwriting margin		
Post-tax underwriting margin	117	2.7
Pre-corporate-tax underwriting margin	174	4.1

## Table 6.2: Revenues, Costs, and Margins for Insurance Plans Offered in theSmall and Large Group Markets, 2014-2018

Source: CMS Medical Loss Ratio Public Use File; author's calculations.

Note: Table reflects experience for comprehensive major medical plans offered in the small and large group markets, as reported on part 1 of the MLR reform. The line items included in each category are as follows: premium revenue (all line items in section 1): claims spending (line 2.1); administrative and health care quality expenses (all line items in sections 5 except items labeled "informational only", plus, for 2014-2016, all items in section 4 or, for 2017 and 2018, line 4.6); federal corporate income tax (line 3.1a); and all other taxes and fees (all other line items in section 3, except items labeled "informational only"). The post-tax underwriting margin is obtained by subtracting claims, administrative and health care quality expenses, and taxes and fees from premium revenue. The pre-corporate-tax underwriting margin is obtained by adding back federal corporate income taxes. The number of covered life-years is reported in part 1, line 7.4.

Directly estimating insurers' tax-inclusive costs of compensating investors is challenging, but these costs can be bounded using data on insurers' underwriting margins (that is, the difference between insurers' premium revenue and their accounting costs, including both their claims and non-claims expenses). In a perfectly competitive market, an insurer's expected pre-corporate-tax underwriting margin will equal the amount of revenue the insurer requires to cover its accounting costs, corporate taxes, and the required return to investors. In reality, insurers appear to hold some market power (e.g., Dafny, Duggan, and Ramanarayanan 2012; Dafny, Gruber, and Ody 2015), so insurers' underwriting margins are likely an upper bound on insurers' tax-inclusive cost of compensating investors.

Data from insurers' medical loss ratio filings with CMS, which are reported in Table 6.2, show that pre-corporate-tax underwriting margins in the small and large group markets were 4.1% of total claims spending over the 2014-2018 period.<sup>56</sup> This suggests that the cost of compensating investors increases insurers' costs by, at most, around 4% of claims spending, and perhaps meaningfully less to the extent that insurers wield market power that allows them to earn "excess" profits.

It is important to note that a public option might incur some capital costs as well. In particular, I have assumed here that a public option would fund long-term investments via loans from the federal

<sup>&</sup>lt;sup>56</sup> I exclude the individual market from these calculations because it was far from its long-term equilibrium during most of this period as it adapted to policy changes implemented by the ACA. I am unable to separate state corporate income taxes from other state taxes in the MLR data, which likely leads me to slightly understate pre-corporate-tax underwriting margins.

government on which it would be required to pay interest at the government's borrowing rate. The Congressional Budget Office currently projects that interest rate on a 10-year Treasury note will rise to 3.1% over the medium-run (CBO 2020), while a reasonable estimate of the pre-tax return required to compensate an insurer's investors is about 9%. <sup>57</sup> This implies that the public option's cost of capital would be about one-third as large as private plans' (if they had equivalent investment needs).

**Risk selection.** In the individual and small group markets, an additional consideration is whether the public option and private plans would attract different types of enrollees. If the public option attracted sicker enrollees than private plans, that would increase its costs, while reducing private plans' costs.<sup>58</sup> (Risk selection would not be relevant for a public option offered to large employers if, as I assume here, a public option only sold third-party administrator services to large employers.)

Evidence suggests that a public option, at least a broad-network public option like the one considered here, would attract sicker enrollees than private plans. Research examining Medicare Advantage and the individual market finds that private plans craft provider networks and drug formularies with the goal of attracting healthier enrollees (Geruso, Layton, and Prinz 2019; Kuziemko, Meckel, and Rossin-Slater 2018; Lavetti and Simon 2018; Shepard 2016), and it is likely that they do the same with other aspects of plan design. There is also some evidence that Medicare Advantage insurers target advertising to people in better health (Mehrotra, Grier, and Dudley 2006), although research has reached conflicting conclusions about whether advertising is an effective tool for risk selection in practice (Aizawa and Kim 2018; Shapiro 2020).

The risk adjustment programs that operate in the individual and small group markets could limit the scope for insurers to benefit from this type of risk selection. While risk adjustment likely reduces the benefits private plans could realize through selection, risk adjustment does not capture all dimensions of health status in practice (Brown et al. 2014; Newhouse et al. 2015; Cabral, Geruso, and Mahoney 2018; Curto et al. 2019). Indeed, Curto et al. (2019) estimate that differences in health status between traditional Medicare and Medicare Advantage enrollees reduce Medicare Advantage spending by 25% relative to traditional Medicare and that a differential of 17% remains after adjusting for differences in health status that are captured by the Medicare Advantage risk adjustment system.<sup>59</sup>

**Diagnosis coding.** A related question is whether private plans are better at documenting enrollees' health conditions for risk adjustment purposes. If so, their greater "coding intensity" will make their enrollees appear sicker in risk adjustment calculations, reducing what they pay (or increasing what they receive) in risk adjustment and allowing them to set lower premiums. Because risk adjustment is budget neutral, this would also put upward pressure on the public option's premium. (These considerations would be relevant for a public option offered in the individual or small group markets, but not one offered to large employers since large employer are not subject to risk adjustment.)

<sup>&</sup>lt;sup>57</sup> Damodaran (2019) reports that the arithmetic average equity premium relative to 10-year Treasury rates over the last 50 years was 4.0%. Combined with CBO's projection of the 10-year Treasury rate, this implies a required equity return of 7.2%. At the current corporate tax rate of 21%, funding that return would require a pre-corporate-tax return of 9.1% (=0.072/0.79).

<sup>&</sup>lt;sup>58</sup> Indeed, risk selection differences have been a central consideration in some earlier research on the effects of introducing a public option (Barbos and Deng 2015; Miller and Yeo 2019).

<sup>&</sup>lt;sup>59</sup> Specifically, Curto et al. (2019) report that average per beneficiary month spending in traditional Medicare is \$942 (for the specific mix of geographic areas they examine). This estimate falls to \$855 after reweighting to match the Medicare Advantage population along dimensions of health status captured in risk adjustment and to \$706 after reweighting to account for a broader set of health status differences. In their estimates, the total difference in spending attributable to health status difference is thus 25 percent (=  $1 - \frac{706}{\$942}$ ), while the difference after adjusts for factors captured in risk adjustment is 17 percent (= $1 - \frac{706}{\$855}$ ). The post-risk adjustment differential may be have shrunk modestly in recent years due to improvements in risk adjustment, particularly implementation of a larger coding intensity adjustment.

Experience in Medicare Advantage offers strong evidence that private plans are indeed better at documenting their enrollees' health conditions than traditional Medicare. Geruso and Layton (2020) estimate that Medicare Advantage plans' greater coding intensity increased their enrollees' risk scores by 6.4% on average during the 2006-2011 period. In Medicare, policymakers have responded to this fact by applying an across-the-board "coding intensity" adjustment to private plans' risk scores that offsets most (though not all) of this coding advantage. In this paper, I generally assume that a public option would participate in the individual and small group market risk adjustment programs on the same terms as private plans and, thus, that an analogous coding intensity adjustment would not be made. But policymakers could adopt the Medicare approach if they wished.

#### 6.2.3 Enrollee Preferences for Public or Private Plans

Market outcomes in the presence of a public option would also depend on whether enrollees tended to prefer the public option over private plans or vice versa at the same premium. Unfortunately, evidence on this question is comparatively thin. Notably, it is hard to draw analogies with Medicare, most importantly because Medicare beneficiaries are enrolled in traditional Medicare by default, which may have a large effect on enrollee decisions but might not occur with a public option.<sup>60</sup>

Nevertheless, this section discusses a few factors that might cause enrollees to prefer one type of plan over the other at the same premium. In general, it is unclear whether these factors would, on net, work in favor of private plans or the public option and what the magnitude of any advantage would be.

**Benefit design.** Private plans' benefit designs might differ from the public option's in ways that would make them more or less attractive to enrollees. As discussed above, private plans competing with a public option would likely adopt networks that exclude some providers and implement various other utilization controls. These features would likely make private plans somewhat less attractive to enrollees, holding premiums fixed. Indeed, evidence suggests that many beneficiaries will pay more for a broader network, although the magnitude of this difference appears to vary across settings and individuals (Drake 2019; Ericson and Starc 2015b; Gruber and McKnight 2016; Shepard 2016).

On the other hand, private plans might craft benefit designs that consumers would find more attractive in other respects, such as by covering services not covered by the public option or designing costsharing in ways that were more appealing to consumers. Private plans may be particularly likely to have this type of advantage over the long run since making major changes to a public option's benefit design might require legislation, as in Medicare, while private plans could likely be nimbler.

The Medicare program offers examples of this latter dynamic. For example, prescription drug coverage was close to universal in employer coverage by the time the Medicare program added a drug benefit in 2006 (KFF and HRET 2006). Medicare Advantage plans also feature modern benefit designs similar to those in commercial plans that, for example, limit enrollees' annual out-of-network pocket spending, whereas traditional Medicare's benefit design has remained largely unchanged for decades despite well-documented shortcomings and many proposals for reform (e.g., MedPAC 2012).<sup>61</sup>

<sup>&</sup>lt;sup>60</sup> Some proposals to automatically enroll people into insurance coverage might make a public option the default for some enrollees (e.g., Linke Young 2019). In those cases, the Medicare experience might be more relevant.

<sup>&</sup>lt;sup>61</sup> Medicare Advantage plans also offer more generous benefits than traditional Medicare on other dimensions, including lower cost-sharing and dental and vision coverage (KFF 2019). This likely partly reflects plans' efforts to cater to consumer tastes and partly reflects the federal government's generous payment terms for Medicare Advantage plans, some of which accrues to enrollees as richer benefit designs (Duggan, Starc, and Vabson 2016; Cabral, Geruso, and Mahoney 2018).

**Marketing effort.** Private plans devote significant resources to marketing.<sup>62</sup> Direct sales expenses and broker commissions account for 30% of plans' total administrative spending (3.1% of claims spending), as shown above in Table 6.2. Plans devote additional amounts to advertising, although this spending cannot be separated out from other administrative expenses in the MLR data and is likely small relative to direct sales and broker commissions.<sup>63</sup> While policymakers could, in principle, devote similar resources to marketing a public option, it is questionable whether they would do so in practice.

How many enrollees private plans might be able to attract via marketing is uncertain. Some recent research examining enrollment in the ACA Marketplaces and Medicare Advantage has concluded that mass media advertising does increase plan market shares, although the magnitude of the estimated effects is generally relatively modest (Aizawa and Kim 2018; Shapiro 2020; Aizawa and Kim 2020). To my knowledge, there is no published research examining how the much larger amounts that private insurers spend on direct sales and broker commissions affect enrollment.

**Intrinsic preferences for a public option.** It is also possible that some enrollees may have intrinsic preference for a publicly operated plan, either for ideological reasons or because they distrust private plans (Commonwealth Fund, New York Times, and Harvard T.H. Chan School of Public Health 2019; KFF 2020a). This may be particularly likely if creation of a public option was politically controversial, as seems likely to be the case in practice. Notably, there is some evidence that political views have affected individual decisions about whether or not to take up Marketplace coverage (Lerman, Sadin, and Trachtman 2017; Sances and Clinton 2019). Like many of the other effects discussed in this section, the potential magnitude of this effect is unclear.

#### 6.2.4 Premium Setting Processes

A final potentially important difference between a public option and private plans is that a public option would set premiums differently than private plans. In particular, private plans generally set premiums to maximize profits, and economic theory implies that the profit-maximizing premium equals the insurer's marginal cost of enrolling an additional person plus a markup that depends on the elasticity of demand for the insurer's plan with respect to its premium, which depends in turn on how much competition the insurer faces. By contrast, I have assumed that a public option would be legally required to set premiums that exactly covered its average per enrollee cost.

If there are few barriers to private plan entry, the difference in how the public option and private plans set premiums may not be particularly consequential in equilibrium. Without barriers to entry, private plans would be expected to continue to enter the market until the premium they could charge exactly matched their average costs (or, equivalently, until private plans' equilibrium markup exactly equaled any difference between their average cost and their marginal cost). Thus, in equilibrium, both private plans and the public option would set premiums that reflected their average costs.

If, however, there are meaningful barriers to entry, which is likely often the case in practice, then these differences may matter in two ways. First—and most obviously—private plans will set higher premiums than the public option even if the two sets of plans have identical cost structures.

<sup>&</sup>lt;sup>62</sup> This fact features prominently in a prior analysis of a public option from Cebul et al. (2011). Their model emphasizes that private plans' marketing effort may reflect high search costs and that introducing a public option could ameliorate that problem, potentially leading to reductions in socially unproductive marketing effort and reducing inefficient turnover. The mechanisms by which a public option could improve outcomes considered by Cebul et al. are largely not considered here.

<sup>&</sup>lt;sup>63</sup> Data from Kantar Media indicate that health insurers spent \$1.1 billion on advertising in 2015 across all product lines (Liesse 2016). For comparison, the MLR data indicate that insurers' spending on direct sales and broker commissions totaled \$10 billion in the individual, small group, and large group markets alone in 2018.

Second, the private plan's premium will depend on its *marginal* cost whereas the public option's premium will depend on its *average* cost. This could be important in at least two contexts:

- **Fixed costs:** A portion of plans' administrative spending consists of fixed costs that do not scale with enrollment. Examples include the cost of establishing payment procedures, credentialing providers, and designing claims processing systems. Fixed costs would be reflected in the public option's premium, but not private plans' premiums. This could reduce private plans' premiums relative to the public option, perhaps partially mitigating the administrative cost advantage a public option seems likely to hold.
- **Risk selection:** In settings with risk selection, an insurer's marginal cost depends on the characteristics of the *marginal* enrollee, not the insurer's *average* enrollee (e.g., Cabral, Geruso, and Mahoney 2018). For a private plan that benefits from advantageous selection, it is natural to expect the plan's marginal enrollee to be sicker than its average enrollee. Consequently, any downward pressure on private plans' premiums due to risk selection may be smaller than suggested by the average risk of the private plan's enrollees. Indeed, it is quite possible for the private plan's marginal enrollee to be sicker than the population average even when the average private plan enrollee is healthier than the population average and, thus, for risk selection to increase the premiums of *both* the public option and private plans. This is precisely what occurs in the simulations presented in the next section.

#### 6.3 Simulations of Market Equilibrium with a Public Option

Building on the preceding discussion, this section uses a calibrated version of the formal model presented in Appendix B to simulate market outcomes in the presence of a public option. While this model makes important simplifications and future work to refine it would be worthwhile, the results nevertheless help to illustrate the major factors that would shape the effects of introducing a public option. I begin this section by briefly describing the model and the main assumptions that underlie it. I then present the simulation results and discuss the model's main limitations.

#### 6.3.1 Model Description and Assumptions

The model used for the simulations is fully described in Appendix B. In brief, however, the model features a single private insurer that competes with a public option. The public option pays providers prices that are fixed in law at 100% of Medicare rates and sets its premium to cover its average costs.<sup>64</sup> By contrast, the private insurer negotiates prices with each provider (specifically, a "two-part tariff," as described in section 6.2.1). Based on the outcome of those negotiations, the insurer sets a premium that maximizes its profits. Enrollees then decide between the public option and the private plan based on the two plans' premiums, networks, and other characteristics. To simplify the analysis, the total number of people enrolling in any form of coverage is fixed; that is, the plans' premiums only affect how many enrollees choose one plan versus the other, not the total number of covered people.<sup>65</sup>

Consistent with the discussion in section 6.2.1, one important model parameter is the sensitivity of enrollees' plan choices to premium differences. To set this parameter, I reviewed studies that estimate the premium elasticity of demand for health plans offered on Massachusetts' pre-ACA individual market (Chan and Gruber 2010; Ericson and Starc 2015a; Jaffe and Shepard 2020) and the ACA

<sup>&</sup>lt;sup>64</sup> As noted above, Medicare prices do not exist for prescription drugs. The simulations implicitly assume that the prices the public option pays for drugs are the same percentage below the prices existing private plans pay for drugs as the prices the public option pays for other items and services *and* that introduction of a public option would affect the prices that private plans are able to negotiate for drugs in the same way it would affect the prices they negotiate for health care services.

<sup>&</sup>lt;sup>65</sup> This is unlikely to be important to the main outcomes of interest in this paper. It does mean, however, that this analysis cannot shed light on how introducing a public option would affect overall insurance enrollment.
Marketplaces (Abraham et al. 2017; Domurat 2018; Drake 2019; Saltzman 2019; Tebaldi 2017). Full details are in Appendix B, but this literature suggests that plan choices are highly price sensitive. Averaging across these authors' estimates, I obtain an average elasticity estimate of -7.4, meaning that a 1% increase in a plan's premium reduces enrollment in that plan by approximately 7.4%. I calibrate the model to match this elasticity when the private plan and public option have equal market shares.<sup>66</sup>

I simulate nine scenarios, which vary along three dimensions: (1) the prices that existing private plans pay providers; (2) the prices the public option pays providers; and (3) assumptions about various other characteristics of the public option and private plan. I discuss each dimension in turn.

**Prices paid by existing private plans.** The first factor that varies across simulation scenarios is the prices that existing private plans pay providers. In some scenarios, I assume that private plans currently pay providers 180% of Medicare prices on average across all services, which reflects an estimate of what employer-sponsored plans currently pay providers on average nationwide based on the studies reviewed in Figure 2.1.<sup>67</sup> In other scenarios, I assume that private plans currently pay providers 125% of Medicare prices on average across all services. These scenarios may offer a better guide to the effects of introducing a public option in the individual market (since individual market plans likely pay providers less than employer plans today) or in geographic areas with lower prices.

**Public option payment rates.** The second factor that varies across scenarios is the prices the public option pays providers. In one set of scenarios, the public option pays providers prices equal to 100% of Medicare's prices. In the other set of scenarios, the public option pays providers 150% of Medicare prices. As discussed in section 6.2.1 and further in section 6.3.3 below, the model used in this paper is not suitable for analyzing scenarios where the public option pays providers more than existing private plans. Thus, I do not report results for scenarios where the public option pays providers 150% of Medicare prices and existing private plans pay providers 125% of Medicare prices.

**Other plan characteristics.** The third factor that varies across scenarios is my assumptions about other characteristics of the public option and private plan. These characteristics include: the breadth of the private plan's network, which affects the prices the private plan can negotiate with providers and thus premiums (see section 6.2.1); the plans' performance with respect to non-price determinants of plan costs—specifically, utilization, non-claim expenses, risk selection, and diagnosis coding—which affect claims spending and thus premiums (see section 6.2.2); and enrollee perceptions of the two plans, which affect how many people enroll in each plan at a given set of premiums (see section 6.2.3).

I consider three sets of assumptions: one in which the public option and the private plan are essentially identical; one in which the two plans differ in ways plausible for a public option offered in the individual market; and one in which the two plans differ ins ways plausible for a public option offered in the large employer market. These scenarios help illustrate the consequences of differences in these characteristics and how the effects of introducing a public option in the individual market versus the employer market might differ. These assumptions are summarized in Table 6.3 and described below.

<sup>&</sup>lt;sup>66</sup> In the model (as in many models), the elasticity falls as the private plan's market share rises, reflecting the fact that as the private plan's market share rises, the pool of potential enrollees shrinks relative to the plan's current enrollment.

<sup>&</sup>lt;sup>67</sup> To arrive at this figure, I first calculate commercial-to-Medicare ratios for each major health care service category by taking an unweighted average of the estimated commercial-to-Medicare ratios surveyed in Figure 2.1. Additionally, I assume that commercial prices for all other non-drug items and services (which consist primarily of laboratory services and durable medical equipment) are comparable to Medicare, which is broadly consistent with available evidence (Trish et al. 2017). Combining these price ratios with estimates of spending by category in 2018 from the Health Care Cost Institute (2020) implies that existing private plans pay 78 percent more than Medicare for non-drug services on a weighted average basis. (As described above, the simulations assume that the differential between what a public option would pay for prescription drugs and what exiting private plans pay for prescription drugs would match the differential for services.)

Plan characteristic	Assumptions About Differences Between Public Option and Private Plans						
	Identical plans assumptions	Individual market assumptions	Large employer market assumptions				
Private plan network breadth	Includes all providers	Includes 40% of providers (on a utilization-weighted basis)	Includes 75% of providers (on a utilization-weighted basis)				
Utilization	No utilization differences	Relative to existing private plans, public option utilization is 10% higher, private plan utilization is unchanged.	Relative to existing private plans, public option utilization is 5% higher, private plan utilization is unchanged.				
Non-claims expenses	Both plans spend amount equivalent to 10.6% of per enrollee claims spending in current private plans	Public option: 7.9% of per enrollee claims spending in existing private plans Private plan: 10.6% of per enrollee claims spending in existing private plans					
Risk selection	No selection differences	Public option experiences adverse selection. See text and Appendix B for additional details.	No selection differences				
Diagnosis coding	No coding differences	Private plan enrollees appear 6% sicker than identical public option enrollees in risk adjustment	No coding differences				
Enrollee preferences	Enrollees equall either plan when p	y likely to select premiums are equal	Enrollees equally likely to select either plan when public option premium is 5% lower than private plan premium				

## Table 6.3: Assumptions About Public Option and Private Plan Characteristics

The details of the three sets of assumptions are as follows:

• **Identical plans assumptions.** These scenarios examine outcomes if the public option and private plan were identical to each other and existing plans except that the public option sets prices administratively (rather than via negotiation) and sets a premium to cover its costs (rather than to maximize profits). This scenario is unrealistic but is a useful benchmark.

In detail, for these scenarios, I assume that both the public option and the private plan offer broad networks, induce the same level of utilization as existing private plans, code diagnoses identically for risk adjustment purposes, and are equally attractive to enrollees. Additionally, I assume that both plans incur a constant per enrollee non-claims cost equal to 10.6% of the per enrollee claims spending of existing private plans. This assumption is derived from the estimates reported in Tables 6.1 and 6.2, and aims to approximate the *marginal* non-claims expenses incurred by existing private plans, including the cost of compensating investors.<sup>68</sup>

- **Individual market assumptions.** These scenarios incorporate assumptions appropriate to a public option offered in the individual market. In crafting these assumptions, I draw heavily on the evidence from Medicare Advantage reviewed in section 6.2.2 since it is the only existing health insurance market in which enrollees choose between private plans and a publicly operated alternative. In detail, I assume the following:
  - *Private plan network breadth:* I assume that the private plan's network would include 40% of providers in its market (on a utilization-weighted basis). This assumption is broadly consistent with evidence that many Medicare Advantage plans feature moderately narrow networks (Jacobson et al. 2016; 2017). This assumption also implies that the private plan's network would resemble many existing individual market networks (Coe, Lamb, and Rivera 2017; Dafny et al. 2017). As discussed in section 7, introducing a public option would encourage broader private plan networks in some ways and narrower networks in others, so this approach amounts to assuming that these competing forces would roughly offset each other.
  - *Utilization:* I assume that, holding enrollee characteristics fixed, the public option has utilization 10% higher than existing individual market plans, while the private plan's utilization is equal to existing individual market plans. This assumption is based on the Curto et al. (2019) estimate that utilization in traditional Medicare is roughly 10% higher than in Medicare Advantage plans for comparable enrollees.
  - *Non-Claims Expenses:* I assume that the public option would incur per enrollee nonclaims expenses equivalent to 7.9% of per enrollee claims spending in existing private plans. This amount reflects the sum of: the estimate of per enrollee administrative spending in traditional Medicare from section 6.2.2; the estimate of taxes and fees other than federal corporate income tax and the ACA health insurance tax from Table 6.1; and an estimate of the cost of compensating taxpayers for loans used to finance

<sup>&</sup>lt;sup>68</sup> In detail, I begin with the estimate in Table 6.1 that private plans incurred administrative expenses of 10.3% of claims spending in 2018. I then assume that half of private plans' pre-corporate-tax underwriting margins, as estimated in Table 6.2, reflects the cost of compensating investors for supplying capital, yielding total non-claims expenses of 12.3% of private plans' claims spending. I then reduce this amount by one-third as a crude way of excluding fixed costs and increase the result by 2.4 percentage points to account for the taxes reported in Table 6.1 (other than federal corporate taxes and the now repealed ACA health insurance tax), yielding the final estimate of 10.6% of existing private plans' claims spending.

start-up costs and capital investments.<sup>69</sup> By contrast, paralleling the identical plans assumptions, I assume that the private plan would incur per enrollee non-claims expenses equivalent to 10.6% of per enrollee claims spending in existing private plans.

- *Risk selection:* I assume that the public option attracts enrollees who use more health care services (in ways that are not offset by risk adjustment). My approach to modeling risk selection is discussed further in Appendix B, but I calibrate the degree of adverse selection based on the estimates of Curto et al. (2019) from Medicare Advantage. The effects of selection on plans' costs depends on their market shares, but in equilibrium, the public option's enrollees have claims risk 8-11% higher than the population average, while the marginal private plan enrollee has claims risk 2-7% higher than the population average, depending on the particular simulation results considered.
- *Diagnosis coding:* I assume that the private plan's coding efforts would raise its enrollees' risk scores by 6% relative to what they would be if the same individuals were enrolled in the public option. This estimate is roughly consistent with the Geruso and Layton (2020) estimate of upcoding by private plans in Medicare Advantage.
- *Enrollee preferences:* I assume that enrollees would be equally likely to choose the public option or the private plan if they charged the same premium. In essence, I assume that the private plan's narrower network would be offset by its potential advantages in benefit design and marketing discussed in section 6.2.3. I note that the evidence underlying this assumption is much weaker than the others made here.
- **Large employer market assumptions.** These scenarios incorporate assumptions appropriate to a public option offered in the large employer market. With the exception of nonclaims expenses, these assumptions differ from those in the individual market scenarios in recognition of the differences between the individual and large employer markets:
  - *Private plan network breadth:* I assume that the private plan's network would include 75% of providers in its market (on a utilization-weighted basis), mirroring the broad networks of existing employer plans (KFF 2020b). As discussed at greater length in section 7, introducing a public option would encourage broader private plan networks in some ways and narrower networks in others, so this approach amounts to assuming that these competing forces would offset each other.
  - *Utilization:* I assume that, for comparable enrollees, utilization under the public option would be 5% higher than existing employer plans, smaller than the 10% differential assumed in the individual market scenario. This difference in assumptions reflects the broader networks and less stringent utilization controls of existing employer plans relative to individual market plans. I assume that utilization under the private plan would be comparable to that under existing employer plans, paralleling my approach in the individual market scenarios and consistent with my assumption that the private plan would offer a network similar to existing employer plans.

<sup>&</sup>lt;sup>69</sup> In detail, I begin with the estimate discussed in section 6.2.2 that per enrollee administrative spending in traditional Medicare was equivalent to 4.9% of claims spending in commercial plans, to which I add 2.4 percentage points to account for the relevant taxes. I then add an additional 0.7 percentage points, which reflects one-third of the cost private plans incur to compensate investors described in an earlier footnote. This implicitly reflects an assumption that the capital intensity of the public option's operations is similar to the capital intensity of private plans' operations.

- *Risk selection:* Because the public option would offer only third-party administrator services (not insured coverage) to large employers, risk selection would play no role in determining either plan's claims spending, unlike in the individual market scenario.
- *Diagnosis coding:* There is no risk adjustment in the large employer market, so the private plan would derive no benefit from better diagnosis coding.
- *Enrollee preferences:* I assume that enrollees would be equally likely to select the private plan and the public option if the public option charged a premium 5% below the private plan's. This reflects an assumption that the private plan would have advantages in benefit design and marketing that would more than offset its modestly narrower network. As with the corresponding assumption for the individual market scenarios, the evidence base for this assumption is comparatively weak.

#### 6.3.2 Simulation Results

Tables 6.4 and 6.5 (which appear at the end of this section) report the full results for each of the nine scenarios specified above. In the rest of this section, I highlight three notable features of these results.

First, as illustrated in Figure 6.3, the per service prices the private plan pays providers are tightly linked to the public option's prices, consistent with the analysis in section 6.2.1. Indeed, when the public option and the private plan have identical utilization profiles, the two plans pay providers identical prices (at the margin). In the individual market and large employer market scenarios, the private plan's per service prices are somewhat lower than the public option's prices, reflecting the fact that the private plan excludes some providers from its network, which pushes the negotiated per service prices downward toward the provider's marginal cost, as discussed in section 6.2.1. This effect is largest in the individual market scenarios (since the private plan's network is narrower) and when the public option pays higher prices (since the public option's prices are farther from providers' marginal costs).



### Figure 6.3: Private Plan Per Service Prices

Note: Private plan per service prices are independent of the prices paid by existing private plans. USC Schaeffer

BROOKINGS



#### Figure 6.4: Plan Premiums and Market Shares, by Market Scenario and Prices Paid by Existing Private Plans

**USC** Schaeffer

BROOKINGS

Second, in all scenarios I examine, the premium of *both* the public option and the private plan are below the premiums of existing private plans, as illustrated in Figure 6.4. <sup>70</sup> This reflects the fact that I am examining scenarios where the public option pays providers less than existing private plans and, as described in the last paragraph, the private plan pays providers prices weakly lower than the public option's prices (at the margin). Naturally, the decline in the private plan's premium is larger when the public option's prices are farther below the prices paid by existing private plans. (Note that neither Figure 6.4 nor Table 6.5 report results for the case of a public option that pays providers 150% of Medicare rates in a market where existing private plans pay providers 125% of Medicare rates since, as discussed above, the model is likely to perform poorly in that case.)

<sup>&</sup>lt;sup>70</sup> The tables report premiums as a fraction of the premiums of existing private plans. To calculate these amounts, I compare the simulated premiums to premiums that reflect the prices, utilization patterns, non-claims expenses, and insurer margins under the status quo. I describe my methodology for constructing the status quo premiums in Appendix B. In principle, it would be preferable to use the same model to simulate outcomes both with and without a public option and compare the simulated amounts rather than comparing the simulated amounts with a public option to the constructed status quo premiums. Unfortunately, the model I use in this paper is not suitable for simulating outcomes without a public option.

Third, scenarios that reflect different assumptions about how the public option and private plan compare on dimensions other than what they pay providers generate notably different simulated outcomes, particularly regarding plan market shares, as also illustrated in Figure 6.4. In the identical plans scenarios, the public option's premium is lower than the private plan's premium, reflecting the fact that the private plan's profit maximizing strategy is to set a premium that incorporates a markup. That premium differential, together with the fact that enrollment decisions are highly price sensitive, leads the public option to capture 79% of the market in all scenarios with identical plans.

But the individual market scenarios yield markedly different results. The public option now sets a higher premium than in the identical plans scenarios, reflecting the fact that the public option is now assumed to have higher utilization, attract sicker enrollees, and pay risk adjustment transfers to the private plan, disadvantages that are only slightly offset by lower administrative spending (see Table 6.4 and Table 6.5). The private plan's premium is also higher, but more modestly so, reflecting the net effect of two opposing forces. On the one hand, the private plan's marginal claims cost is now lower, primarily because it is now assumed to have a narrower network and thus pays providers lower per service prices.<sup>71</sup> But the public option's higher premium makes it a weaker competitor for the private plan, so the private plan sets a premium that incorporates a larger markup (a portion of which is, in turn, captured by providers). The net effect of these premium changes is a large shift in enrollment toward the private plan that results in the private plan capturing the majority of the market.

The large employer market scenarios generate results intermediate between the first two set of scenarios. In these scenarios, the public option no longer has the risk selection and diagnosis coding disadvantages it had in the individual market scenarios, and it has a smaller utilization disadvantage, so it charges a much lower premium. The private plan also sets a lower premium than in the individual market scenarios, reflecting the fact that the public option is now a stronger competitor, which leads the private plan to price more aggressively; this effect is partially offset by the fact that the private plan is now assumed to offer a broader network and, thus, negotiates higher per service prices. On net, these premium changes cause enrollment to swing back toward the public option, although the private plan still attracts more enrollment than in the identical plans scenarios (in part because most enrollees are now assumed to slightly prefer the private plan to the public option at the same premium).

<sup>&</sup>lt;sup>71</sup> Perhaps surprisingly, risk selection actually slightly increases the private plan's marginal cost because the private plan's *marginal* enrollee is now sicker than the population average, even though its average enrollee is healthier.

Assumptions about plan characteristics:	Identic	al plans	Individual market assumptions		Large employer market assumptions	
	Private <sup>*</sup>	Public	Private <sup>*</sup>	Public	Private <sup>*</sup>	Public
Panel A: Public Option Pays 100% of Medicare Ra	ates					
Components of premium (% of premiums of existing private	þlans)					
Claims spending	48	48	46	57	47	50
Risk adjustment transfers	0	0	-1	2	0	0
Non-claims expenses	9	9	9	7	9	7
Markup	5	0	10	0	6	0
Total premium	62	57	64	65	62	57
Determinants of claims spending						
Risk-standardized utilization (% of status guo)	100	100	100	110	100	105
Enrollee risk (% of population average)	100	100	102	108	100	100
Provider price (% of Medicare)	100	100	96	100	98	100
Equilibrium market shares (%)	21	79	56	44	34	66
Panel B: Public Option Pays 150% of Medicare Ra	ites					
Combonents of bremium (% of bremiums of existing brivate	Þlans)					
Claims spending	′´´7I	71	60	87	66	75
Risk adjustment transfers	0	0	-1	3	0	0
Non-claims expenses	9	9	9	7	9	7
, Markup	8	0	23	0	11	0
Total premium	88	80	91	97	86	82
Determinants of claims spending						
Risk-standardized utilization (% of status quo)	100	100	100	110	100	105
Enrollee risk (% of population average)	100	100	107		100	100
Provider price (% of Medicare)	150	150	118	150	138	150
Eauilibrium market shares (%)	21	79	73	27	49	51

### Table 6.4: Public Option Simulation Results, Existing Private Plans Pay 180% of Medicare Rates

\* Private plan columns report amounts for the marginal enrollee rather than the average private plan enrollee. In all scenarios, the price the insurer pays providers on the margin may differ from the overall average price the insurer pays providers because the parties negotiate two-part tariffs. In the individual market scenarios, risk selection causes claims spending, the insurer's markup, and enrollee risk to differ between the marginal enrollee and the average enrollee.

Assumptions about plan characteristics:	Identic	Identical plans		Individual market assumptions		Large employer market assumptions	
	<b>P</b> rivate <sup>*</sup>	Public	Private <sup>*</sup>	Public	Private <sup>*</sup>	Public	
Panel A: Public Option Pays 100% of Medicare Ra	ates						
Components of premium (% of premiums of existing private	þlans)						
Claims spending	69	69	67	82	67	72	
Risk adjustment transfers	0	0	-2	3	0	0	
Non-claims expenses	9	9	9	7	9	7	
Markup	7	0	15	0	9	0	
Total premium	85	78	89	91	86	79	
Determinants of claims spending							
Risk-standardized utilization (% of status quo)	100	100	100	110	100	105	
Enrollee risk (% of population average)	100	100	103	109	100	100	
Provider price (% of Medicare)	100	100	96	100	98	100	
Equilibrium market shares (%)	21	79	59	41	37	63	
Panel B: Public Option Pays 150% of Medicare Ra	ites						
Components of premium (% of premiums of existing private	þlans)						
Claims spending	N/A	N/A	N/A	N/A	N/A	N/A	
Risk adjustment transfers	N/A	N/A	N/A	N/A	N/A	N/A	
Non-claims expenses	N/A	N/A	N/A	N/A	N/A	N/A	
Markup	N/A	N/A	N/A	N/A	N/A	N/A	
Total premium	N/A	N/A	N/A	N/A	N/A	N/A	
Determinants of claims spending							
Risk-standardized utilization (% of status quo)	N/A	N/A	N/A	N/A	N/A	N/A	
Enrollee risk (% of population average)	N/A	N/A	N/A	N/A	N/A	N/A	
Provider price (% of Medicare)	N/A	N/A	N/A	N/A	N/A	N/A	
Eauilibrium market shares (%)	N/A	N/A	N/A	N/A	N/A	N/A	

### Table 6.5: Public Option Simulation Results, Existing Private Plans Pay 125% of Medicare Rates

\* Private plan columns report amounts for the marginal enrollee rather than the average private plan enrollee. In all scenarios, the price the insurer pays providers on the margin may differ from the overall average price the insurer pays providers because the parties negotiate two-part tariffs. In the individual market scenarios, risk selection causes claims spending, the insurer's markup, and enrollee risk to differ between the marginal enrollee and the average enrollee. Panel B is not populated because the model used in this paper is not suitable for simulating scenarios where the public option's premium is likely to exceed the premium of existing private plans.

### 6.3.3 Limitations

The model used here has a few limitations that should be kept in mind in interpreting the simulation results. First—and likely most important—is that the model includes only a single private insurer, whereas most real-world markets have multiple private insurers. As discussed at length in Appendix B, the additional competitive pressure from the presence of multiple private plans could result in private plans setting somewhat lower premiums (and capturing somewhat more market share) than shown here, although this effect would likely be relatively modest in size since the presence of the public option already constrains the private plan's premium relatively tightly.

Additionally, if there were multiple private plans, then some of a private plan's marginal enrollees would come from other private plans rather than from the public option. As discussed in more detail in Appendix B, this would mean that the profits a provider loses when an enrollee switches into a given plan would depend on the prices the provider receives from other private plans in addition to the public option's prices. As illustrated in Figure 6.3 above, private plans' narrow networks are likely to allow them to negotiate prices (for the marginal services) that are somewhat below the public option's payment rates. This implies that accounting for this dynamic would tend to reduce the per service prices private plans are predicted negotiate, resulting in them setting lower premiums and capturing more market share. The magnitude of this bias is likely relatively small in the scenarios presented here, where per service prices are only slightly below the public option's prices. However, this bias would be much larger in scenarios where the public option paid providers more than existing private plans. Indeed, the model's failure to account for this dynamic is the fundamental reason that the model is a poor guide to outcomes in cases where the public option is a weak competitor for private plans.

Second, as described in detail in Appendix B, under the bargaining protocol used in the model, an insurer can threaten to exclude a provider from its network but cannot threaten to exclude a provider *and* immediately replace it with another provider. The latter type of threat is likely part of the reason that narrow network plans are able to negotiate lower prices (Ho and Lee 2019). The model may therefore modestly overestimate the prices that insurers offering narrow network plans can negotiate and, thus, their premiums. However, the magnitude of this bias is likely modest in most scenarios since negotiated prices in the presence of a public option are at most moderately above providers' marginal cost, which limits the scope for this negotiating tactic to enable further price reductions.

Finally, the variation in results across the identical plans, individual market, and large employer market scenarios illustrates that the results are sensitive to assumptions about utilization, risk selection, non-claims spending, and other factors. While these parameters of the model are calibrated based on the best available empirical evidence, this evidence is imperfect, and uncertainty about these parameters also contributes meaningful uncertainty to the results.

### 6.4 Effects of Making Provider Participation Voluntary

Most of this section has examined a scenario in which providers would be required to participate in the public option. But policymakers might instead make participation voluntary, and it is worth considering how a public option would function differently under this type of approach.<sup>72</sup>

This section begins by analyzing the benefits and costs providers would realize by opting out of the public option, guided again by the model in Appendix B. In general, it appears plausible that many providers would opt out of the public option, particularly providers that are able to command high prices under the status quo, at least if the public option's payment rates were set close to providers'

<sup>&</sup>lt;sup>72</sup> There is a question of how the public option would pay for emergency services delivered by non-participating providers in the case where provider participation was voluntary. For simplicity, the discussion that follows essentially ignores the existence of out-of-network care, emergency or otherwise. If providers were required to accept the public option's payment rates for emergency services, then even a voluntary public option would, in effect, remain partially mandatory for providers.

marginal cost of delivering care. However, quantifying the share of providers that would opt out of the public option in practice would require substantial additional analysis.

In light of the likelihood that at least some providers would opt out of a voluntary public option, I then consider how the effects of a public option with a narrow provider network might differ from one with mandatory provider participation. I also briefly consider the effects of a voluntary public option that would negotiate prices with providers, rather than set prices administratively.

### 6.4.1 Benefits and Costs to Providers of Opting Out of the Public Option

Opting out of the public option would have both benefits and costs for providers. I first consider the financial benefits and costs of opting out of the public option, which would likely play the lead role in providers' decisions. I then briefly consider non-financial factors that might also play a role.

**Financial considerations.** The main benefit to a provider of opting out of the public option is that it may allow the provider to negotiate higher prices with private plans.<sup>73</sup> In particular, if a provider opted out of the public option, then private plans could offer exclusive access to the provider's services. For this reason, private plans that added that provider to their networks would have a competitive advantage that would allow them to charge higher premiums, attract more enrollment, or both. Private plans would thus be particularly eager to reach a network agreement with these providers, which would, in turn, allow these providers to extract higher prices from insurers.

Opting out of the public option would also have costs for the provider. Most importantly, a provider that opted out of the public option would forgo the profits it could earn by serving public option patients. More subtly, opting out of the public option would weaken a provider's bargaining position vis-à-vis private plans in one respect. In particular, when a provider participates in the public option, it knows that failing to reach an agreement with a private plan will result in some of its patients shifting out of the public option, mitigating its volume losses from the failure to reach agreement. This dynamic modestly increases its leverage with the private plan.<sup>74</sup>

In many respects, the tradeoff a provider faces in deciding whether to participate in the public option is similar to the tradeoffs faced by a provider deciding what price it is willing to accept from a private plan today. However, the public option holds one important advantage over existing private plans that might lead providers to participate in the public option even if it paid less than existing private plans. Specifically, because the public option's prices would be specified in law and not subject to negotiation, the public option would effectively make a "take it or leave it" offer to each provider. Thus, it would be in a provider's interest to participate in the public option at the legislated price even if doing so left it only slightly better off on net. By contrast, a provider would be unlikely to accept a similar offer from a private plan because it could reasonably expect to successfully hold out for a higher price.

Predicting how many providers would actually opt out of a public option is beyond the scope of this paper and is likely to be a difficult modeling problem. But this discussion does provide some insights on the factors that would shape providers' decisions. First, providers whose services consumers value very highly—presumably the same providers that command the highest prices today—would be most likely to opt out of a public option. These providers would have the greatest ability to give private plans a competitive advantage over the public option and thus would have the most to gain by opting out.

<sup>&</sup>lt;sup>73</sup> Providers might also elect to opt out of the public option because they are limited in how many patients they serve and are paid more under the private plan (even if opting out does not change the price they receive from the private plan). Capacity constraints would likely matter in some cases but may be less important over the long run since providers have at least some ability to scale up their operations to accommodate additional demand.

<sup>&</sup>lt;sup>74</sup> Indeed, because of this effect, it is possible to construct scenarios where opting out of the public option actually *reduces* the revenue a provider can extract from private plans, but these scenarios seem unlikely in practice.

Second, this discussion suggests that a public option that paid lower prices would be more likely to have trouble attracting providers since public option volume would be less lucrative and, thus, less costly to forgo. Indeed, if the public option's payment rate equaled the provider's marginal cost, a provider would lose nothing by opting out of the public option and would very likely do so.

Third, the discussion suggests that a public option would attract more providers if it had features that allowed it to attract more enrollees (e.g., if some people were enrolled in the public option by default or the public option had non-price cost advantages that allowed it to set a low premium) since providers would then forfeit more volume by opting out of the public option. This fact also suggests that different providers' decisions about whether to participate in the public option may be interdependent. Namely, one provider's decision to opt out of the public option could reduce enrollment in the public option, thereby reducing other providers' cost of dropping out of the public option. This raises the possibility of multiple equilibria; that is, the public option's network might stay broad if it started with many providers but stay narrow if it started off with few providers.

**Non-financial considerations.** Providers' participation decisions would likely be driven primarily by financial considerations, but non-financial considerations could play a role too. Some providers' institutional mission might lead them to accept public option patients even if turning them away would increase profits. Providers might also fear that opting out of the public option would spur negative attention from policymakers or the public. These considerations are similar to those that might shape providers' decisions about whether to reject out-of-network patients under an out-of-network cap. As in that case, providers' willingness to bargain aggressively with private plans under the status quo suggests that these considerations may not play a large role in providers' decision-making.

Moreover, in other cases, providers might believe that opting out of the public option would allow them to extract concessions from policymakers, such as higher payment rates under the public option. This might be most important for a public option created by a state, where an individual provider such as a dominant hospital system—could single-handedly cripple the public option. A similar problem could emerge at the federal level if legislation creating a public option granted the Executive Branch discretion to increase payment rates in geographic areas with limited provider participation.

### 6.4.2 Consequences of Limited Provider Participation

If many providers declined to participate in a voluntary public option, it would likely function quite differently than a public option with mandatory provider participation. It is possible that the public option's network could end up being so narrow that it did not offer enrollees meaningful access to care. In this case, enrollees might be wary of enrolling in the public option, causing it to attract little enrollment and to have little effect on the market. (Alternatively, some enrollees might enroll in the public option despite its extremely narrow network, perhaps because they were unaware that few providers participated. Due to this possibility, policymakers might conclude that a public option should be removed from the market if it failed to attract an adequate network of providers.)

Another possibility is that the public option would assemble a narrow, but still viable network. In this case, private plans would likely pay providers more and set higher premiums than in the mandatory participation case since, as discussed above, providers would be most likely to opt out of the public option *precisely* when doing so gave private plans more pricing power. The public option's premium might change too. Having a narrower network might reduce the public option's utilization, consistent with the evidence cited earlier that Medicare Advantage plans' narrower networks are one source of their utilization advantage. In the individual market, a public option that offered a narrow network might also be less likely to experience adverse selection or might even experience advantageous selection (Liu et al. 2020). It is uncertain how enrollment in the public option would change on net

since any relative reduction in the public option's premium would be offset by the fact that the public option's narrower network would presumably make it less attractive to consumers.

### 6.4.3 Setting Prices Through Negotiation, Rather than Administratively

In light of the possibility that a voluntary public option that set prices administratively would struggle to attract providers, policymakers might consider having the public option set payment rates via negotiation. Setting prices via negotiation would likely allow the public option to attract a broader network, but only by paying providers prices comparable to those paid by existing private plans. A public option that negotiated prices could actually negotiate *higher* prices than private plans if it were less willing to use the tools that private plans use to extract lower prices (e.g., narrow networks). It could also be administratively complex since it would require the entity responsible for administering the public option to manage negotiations with many thousands of different health care providers.

Absent an ability to pay providers lower prices, the scope for a public option to offer consumers a lower-premium option would likely be limited. In insurance markets with limited competition and high insurer profit margins, a public option might still be able to reduce premiums by offering a plan that incorporates no profit margin, which might also induce private plans to price more competitively. As discussed earlier, a public option might also have lower non-claims costs than private plans, but this might be offset by disadvantages with respect to utilization, risk selection, and diagnosis coding.

# 7 Effects on Provider Networks

The analysis presented in the rest of this paper takes the networks offered by private plans as given. In practice, however, a price cap or public option could change the attractiveness of private plans that offer different types of networks and, in turn, the types of networks enrollees select. Network changes would be important in their own right and would also help determine the overall effects of a price cap or public option on provider prices and premiums. While a full analysis of how these policies would affect networks is beyond the scope of this paper, this section briefly considers this question.

In brief, I conclude that policies that reduced the overall level of provider prices—including a price cap or a public option with low enough payment rates—would generally reduce the premium gap between broad and narrow network private plans. This change in relative premiums would tend to push enrollment toward broad network plans. While some non-premium factors might push enrollees in the other direction, it appears most likely that both a price cap and a public option would, on net, cause a shift toward broader network plans on a market-wide basis. In the particular case of a public option, the effect on the network mix of *private plan* enrollment is more ambiguous, as the public option might siphon off many consumers interested in broad network plans.

In practice, shifts toward broader network plans could partially offset the overall reduction in premiums and provider prices caused by a price cap or a public option. However, because these policies would also tend to reduce the gap in premiums and provider prices between broad and narrow network plans, the magnitude of any such offset might be smaller than it would be under the status quo. It might be particularly small for a public option offered in the employer market since most enrollment in the employer market is already in relatively broad network plans (KFF 2020b).

### 7.1 Effects on Relative Premiums of Broad and Narrow Network Plans

I first consider how these public option and price cap policies might affect the premium gap between broad and narrow network private plans. In general, policies that reduce the overall level of provider prices would reduce this premium gap in two ways:

- **Reduced scope to use narrow networks to negotiate lower prices.** One reason insurers offer narrow network plans is to increase their leverage in negotiations with providers (e.g., Ho and Lee 2019). As discussed above, both price caps and a public option have the potential to greatly reduce the prices private plans negotiate with providers *even in broad network plans*, with the scope and magnitude of those effects depending on the version of the policy considered. By contrast, these policies are likely to do less to reduce the prices providers can negotiate under narrow network plans since negotiated prices generally can fall no lower than providers' marginal cost. Thus, at least under stringent versions of the price cap and public option policies, the price advantage held by narrow network plans is likely to fall, causing the premiums of the two types of plans to converge.
- Smaller savings from steering enrollees toward low-priced or low-utilization providers. Another reason insurers offer narrow networks is to steer enrollees toward providers that charge lower prices or encourage less utilization, thereby allowing insurers to offer lower premiums (e.g., Atwood and Lo Sasso 2016; Gruber and McKnight 2016). To the extent that a price cap or public option reduced unit prices, the savings achievable by reducing utilization would shrink. Similarly, a price cap or a public option would likely reduce *variation* in prices across providers, which would tend to shrink the potential savings from steering enrollees toward low-priced providers. It follows that the premium advantage that narrow network plans held over broader network plans would likely shrink.

For a public option offered in the individual or small group markets, there is an additional factor to consider. In particular, sicker enrollees often place a particularly high value on access to particular providers and thus may gravitate toward broad network plans (e.g., Shepard 2016). Risk selection can cause broad network plans to charge high premiums or, in extreme cases, drive them from the market entirely. With a public option, however, a broad network plan would be more likely to remain in the market and attract significant enrollment, which could change risk selection patterns.<sup>75</sup>

One possibility is that with most of the sickest consumers choosing the public option, private plans would be left to compete over a comparatively healthy and homogenous group of enrollees. In this case, changes in risk selection patterns could further narrow the premium differences between broad and narrow network private plans. However, depending on the details of consumer demand, it is conceivable that changes in risk selection could operate in the opposite direction. Additional analysis of changes in risk selection patterns in this context would be worthwhile.

## 7.2 Overall Effects on Enrollment in Broad and Narrow Network Plans

While changes in the relative premiums of broad and narrow network plans would play an important role in determining how a price cap or public option would change their market shares, non-premium factors would affect enrollee decisions too. For these purposes, I consider the price cap and public option policies separately, as the relevant considerations differ between the two types of policies.

### 7.2.1 Price Cap Policies

The price cap policies considered in this paper might influence enrollees' choices between broad and narrow network plans through two channels other than their effect on premiums. First, all price cap policies considered in this paper would limit enrollees' financial exposure in cases where they unexpectedly received out-of-network services (e.g., in emergency or "surprise billing" situations), which might make enrollees more willing to enroll in narrow network plans. Second, as discussed in

<sup>&</sup>lt;sup>75</sup> Consistent with the discussion in section 6, even if the public option experienced serious adverse selection, it might remain viable because the extent to which it constrained the premiums charged by private plans would wane, causing the premiums charged by private plans to rise in parallel.

sections 4 and 5, an out-of-network cap or a comprehensive price cap (but not a default contract policy) would create incentives for providers to turn away out-of-network patients in order to maximize their bargaining leverage with insurers. Enrollees' reduced ability to access out-of-network providers might make them more willing to pay a higher premium to enroll in a broad network plan.

The net effect of these two factors is uncertain. However, it is questionable whether either would be highly salient to enrollees and, thus, have a large effect on enrollment decisions. Thus, in light of the conclusion reached above that the price cap policies would reduce the relative premiums of broad network plans, these policies seem likely to drive enrollment toward broad network plans on net.

### 7.2.2 Public Option

For a public option, the most important non-premium factor is the presence of the public option itself. A public option (with mandatory provider participation) would offer consumers access to a broad network plan. The analysis in section 6 implies that the public option would attract significant enrollment, which would directly increase enrollment in broad network plans, particularly in the individual market, where narrow network plans dominate today (e.g., Coe, Lamb, and Rivera 2017). Thus, together with the likely reduction in the premium gap between broad and narrow network private plans that was discussed above, it appears likely that introducing a public option would shift *overall* insurance enrollment toward broader network plans.

Effects on the network mix of *private plans* could differ, however. In particular, the analysis in section 6 suggests that the public option would often have modestly lower premiums than a private plan with the same features, so it is plausible that many consumers who have strong preferences for broad network plans would choose to enroll in the public option. Thus, private plans might draw primarily from the pool of consumers who are open to narrower networks. In that case, the share of private plan enrollment accounted for by broad network plans might fall despite the fact that introducing a public option would reduce the premium difference between broad and narrow network private plans.

## 7.3 Effects on Other Types of Utilization Controls

Before proceeding, I note that much of the analysis in this section would carry over to plan utilization controls other than narrow networks. In particular, price cap and public option policies would likely reduce the premium gap between more and less tightly managed private plans since tighter utilization controls generate smaller reductions in claims spending when the unit prices of care are lower. On the other hand, paralleling the networks analysis, in the case of a public option offered in the individual or small group markets, changes in risk selection patterns could either offset or reinforce this shift in the relative premium of more and less tightly managed plans.

A reduction in the relative premiums of lightly managed plans would tend to push enrollment toward those plans. In the case of a public option, this shift in *overall* enrollment toward more lightly managed plans would likely be reinforced by the fact that the public option itself offered consumers a new lightly managed option. However, paralleling the networks analysis, it is ambiguous how introducing a public option would affect the share of *private plan* enrollment accounted for by lightly managed plans since the public option might siphon off many consumers who value lightly managed plans.

# 8 Enforcement Approaches

Each of the policy approaches considered in this paper would impose requirements on health care providers. The out-of-network and comprehensive price cap proposals would limit the prices providers can accept under specified circumstances, and a default contract approach to price regulation would require providers to accept a default contract if an insurer requested one. Similarly, the main public

option proposal analyzed in this paper would require providers to accept patients covered by the public option. This section discusses two ways these requirements on providers could be enforced.

## 8.1 Free-Standing Monetary or Other Penalties

The simplest approach would be to impose free-standing monetary or other penalties on providers that were out of compliance with the relevant requirements. At the federal level, fines would be the most natural tool, but state policymakers could consider conditioning provider licensure on compliance with the relevant requirements. This enforcement approach is straightforward and would give policymakers the flexibility to set penalties at whatever level was necessary to ensure compliance.

### 8.2 Tie to Federal Health Care Coverage and Subsidy Programs

If policymakers did not want to create free-standing penalties of this kind, they could also consider making compliance with these requirements a condition of serving patients with coverage that is provided or subsidized by the federal government. Most directly, policymakers could make compliance with these requirements a condition of participation in Medicare or state Medicaid programs.

However, the federal government also heavily subsidizes private coverage. The federal government implicitly covers around one-third of the cost of employer-sponsored health insurance via the tax exclusion for employer-provided coverage, and it subsidizes individual market coverage via the subsidies available to people purchasing coverage on the Affordable Care Act's Marketplaces. Policymakers thus could also consider barring insurance plans that wish to qualify for the tax exclusion or Marketplace subsidies from covering services delivered by non-compliant providers.<sup>76,77</sup>

For example, in the context of a public option proposal, employer-sponsored plans that received the tax exclusion would be barred from covering services delivered by a hospital that declined to accept public option patients. While this requirement would technically fall on the insurer, insurance plans that were ineligible for these subsidies would be unattractive to consumers. Thus, most insurance enrollment would likely flow to plans that did not cover non-compliant providers, seriously limiting the volume non-compliant providers could attract, thereby pressuring those providers to come into compliance with the public option or price cap. Naturally, this enforcement approach would be more likely to succeed if more forms of federally subsidized coverage were included.

One natural concern with using federal coverage programs or subsidies as an enforcement tool is that some providers might opt out of serving patients under those forms of coverage rather than come into compliance with the requirements imposed by a price cap or public option. Providers' propensity to opt out of subsidized coverage programs would likely depend on a few main factors:

• **Breadth of markets in which the price cap or public option existed.** One important factor would be the markets in which the price cap or public option was implemented. Notably, the individual market covers only around 5% of the population,<sup>78</sup> and, as noted earlier, there is some evidence that provider prices in the individual market are already lower than in the employer market. Consequently, very few providers would likely be willing to forfeit access to, for example, Medicare patients in order to avoid complying with price caps or a public option in the individual market. By contrast, providers might be willing to bear far larger costs to protect their pricing power in the larger and more lucrative employer market.

<sup>&</sup>lt;sup>76</sup> White and Whaley (2019) proposed a milder variant of this approach as a potential reform to the (now repealed) ACA excise tax on high-cost employer-sponsored plans (commonly known as the "Cadillac tax"). Under their proposal, the Cadillac tax would apply to claims paid at prices in excess of 300 percent of Medicare's prices.

<sup>77</sup> This prohibition could be qualified to some degree. For example, insurers could be permitted to cover services delivered by non-compliant providers in emergency situations.

<sup>&</sup>lt;sup>78</sup> See, for example, tabulations of the National Health Interview Survey in Fiedler and Linke Young (2019).

- **Stringency of the price cap or public option.** Another important factor is the stringency of the price cap or public option, which determines how much the provider would benefit from circumventing the policy. In particular, per the discussion in sections 4 and 5, providers would likely be willing to give up more to circumvent a price cap set at a lower level or one that applied to both in-network and out-of-network services. Similarly, per the discussion in section 6, the benefits of turning away public option patients would generally be larger if the public option paid lower prices. Notably, providers that can currently command high prices are likely to have more to gain from circumventing a price cap or public option and, thus, would be most willing to opt out of treating patients with federally subsidized coverage.
- **Breadth of the types of federally subsidized coverage at stake.** A final important factor is the breadth of federal coverage and subsidy programs used for enforcement purposes. For example, declining to comply with a price cap or provider participation requirement would be more costly to the provider if doing so required the provider to forgo treating patients covered by Medicare, Medicaid, and subsidized private coverage rather than just Medicare patients. Indeed, it is plausible that very few providers would be willing to completely forgo patients covered under Medicare, Medicaid, and subsidized private coverage since these coverage types account for virtually the entire insured population.

## 9 Experience from Medicare Advantage

Experience with most of the policy tools considered in this paper is relatively limited in the United States. But the Medicare program is an important exception. In Medicare, private Medicare Advantage (MA) plans compete alongside traditional Medicare, which plays the role of a public option, and providers are subject to an out-of-network cap at traditional Medicare rates when treating MA enrollees.<sup>79</sup> The Medicare program thus offers an interesting empirical setting in which to assess and apply the largely theoretical analysis presented in the rest of this paper.

A well-documented and striking fact is that MA plans pay hospitals and physicians prices very close to traditional Medicare's, not just on average but in almost all cases, a stark contrast with the higher and widely varying prices paid by commercial plans (Berenson et al. 2015; Baker et al. 2016; Trish et al. 2017; Maeda and Nelson 2018; Pelech 2020).<sup>80</sup> In this section, I examine this fact through the lens of the theoretical analysis presented in the rest of this paper. I draw two main conclusions, which offer some support to the theoretical models developed in this paper and some insight into dynamics in MA.

First, because institutional and other factors ensure broad provider participation in traditional Medicare, this paper's analysis of a public option implies that competition from traditional Medicare can largely explain why MA prices are so close to traditional Medicare's. This conclusion echoes prior work that posits a large role for traditional Medicare in disciplining the prices paid by MA plans (e.g.,

<sup>&</sup>lt;sup>79</sup> See sections 1852(k) and 1866(a)(1)(O) of the Social Security Act, and see 42 CFR § 422.214 for implementing regulations. The Medicare statute and regulations also require that the combination of the plan's payment and the enrollee's cost-sharing for out-of-network covered services total at least the traditional Medicare rate (CMS 2016). However, MA plans are generally not required to cover out-of-network services, and when they do cover out-of-network services, they generally may impose higher cost-sharing on those services. Thus, the MA out-of-network payment policy is closer to a pure out-of-network cap than to a "cap and floor" out-of-network policy like the one analyzed in section 4.4. In any case, the distinction between a pure out-of-network cap and a "cap and floor" policy is of limited importance in this case since the payment standard under the MA policy is set at a low level and the policies are nearly equivalent under those conditions.

<sup>&</sup>lt;sup>80</sup> This rule does not hold for all provider types. For example, Trish et al. (2017) document that MA plans pay less than traditional Medicare for certain common laboratory services and certain types of common durable medical equipment. Notably, these are both cases where commercial insurers have historically paid less than traditional Medicare.

Berenson et al. 2015; Trish et al. 2017). Second, because there are no apparent barriers keeping providers from turning away out-of-network MA patients in non-emergency situations, it is questionable whether the MA out-of-network cap on its own can explain the prices observed in MA, although it may play a supporting role. By contrast, some prior work assigns the MA out-of-network cap a more central role in shaping outcomes in MA (e.g., Maeda and Nelson 2018; Pelech 2020).

### 9.1 Background on the MA Policy Environment

Spurred by the analysis in the rest of the paper, I open this section by considering when providers can decline to treat Medicare patients. The analysis of a public option presented in section 6 emphasized that the effects of a public option would depend on whether providers were required to accept public option patients or could opt to serve only private plan patients; applied to Medicare, this insight implies that it is important to understand whether providers can turn away traditional Medicare patients while continuing to treat MA patients. Similarly, the analysis of an out-of-network cap presented in section 4 emphasized that the effects of an out-of-network cap would depend on whether providers can turn away out-of-network patients; applied to the MA setting, this conclusion implies that is important to understand whether providers can turn away out-of-network MA patients.

Importantly, institutional providers who wish to serve Medicare patients must accept Medicare patients on the same terms as they accept patients with other forms of coverage.<sup>81</sup> Specifically, CMS may expel an institutional provider from the program if it "places restrictions on the persons it will accept for treatment and it fails either to exempt Medicare beneficiaries from those restrictions or to apply them to Medicare beneficiaries the same as to all other persons seeking care."

This requirement, together with the requirement that MA plans deliver services through providers who meet the requirements to deliver services under traditional Medicare,<sup>82</sup> plainly bars an institutional provider from turning away traditional Medicare patients while still serving MA patients. And it seems likely that this constraint is binding in practice. I am unaware of any provider that has taken this approach, plausibly because providers fear CMS enforcement action if they did so. Indeed, CMS is likely motivated to prevent providers from declining to serve traditional Medicare patients while continuing to serve MA patients given the threat that this type of behavior would pose to the viability of traditional Medicare. This behavior would also be easy for CMS to detect. As discussed in section 6.4, the main potential advantage to a provider of turning away traditional Medicare patients is to allow MA plans to tout that they offer exclusive access to a provider's services. That advantage can only be realized if the provider is open about its intention to turn away traditional Medicare patients.

On its face, the requirement to accept Medicare and non-Medicare patients on equal terms might also seem to prevent an institutional provider from turning away out-of-network MA patients (unless it opts out of Medicare entirely). However, there are high-profile examples of institutional providers contemplating or actually implementing these types of restrictions, a strong indication that these rules do not prevent this behavior in practice.<sup>83</sup> And, in any case, as discussed in section 4.3.1, providers

 $<sup>^{81}</sup>$  The requirement to accept Medicare and non-Medicare patients on the same terms appears at 42 CFR § 489.53(a)(2). Per 42 CFR § 489.1, these requirements apply to "providers of services" as defined in section 1861(u) of the Social Security Act and the categories of institutional "suppliers" listed in 42 CFR § 488.1.

<sup>&</sup>lt;sup>82</sup> See section 1852(a)(1) of the Social Security Act and 42 CFR § 422.204.

<sup>&</sup>lt;sup>83</sup> The Mayo Clinic, for example, says that patients covered by certain Medicare Advantage plans "may not be seen" and explicitly states that these patients "cannot be seen on a self-pay basis" (Mayo Clinic 2019). Similarly, in 2019, University of Pittsburgh Medical Center (UPMC) threatened to require Highmark Blue Cross Blue Shield enrollees that wished to access its services on an out-of-network basis to pay in full before receiving care (UPMC 2019). UPMC later retreated from the policy with respect to Highmark's MA plans (though not Highmark's commercial plans). Federal officials expressed some interest in UPMC's policy, but never made any statements about the legality of the policy or gave any public indication they planned to take enforcement action (Gough 2018; Twedt 2019).

may be able to reduce out-of-network patients' ability to access their services in more subtle ways that would not obviously violate Medicare's rules, such as by simply declining to explain that a patient may be able to access its services on an out-of-network basis. It thus appears likely that institutional providers generally can decline to treat out-of-network MA enrollees if they wish, although further research to clarify how providers understand what is permitted would be worthwhile.

It is important to note that, unlike institutional providers, physicians are *not* required to accept Medicare and non-Medicare patients on equal terms. Consequently, physicians do not face legal barriers to turning away either traditional Medicare patients or out-of-network MA enrollees.<sup>84</sup>

### 9.2 Understanding Pricing Outcomes in Medicare Advantage

With this foundation established, I now examine provider prices in MA through the lens of the theoretical analysis presented in the rest of this paper. I consider the role of competition from traditional Medicare and the presence of the MA out-of-network cap in turn.

Competition from traditional Medicare can largely explain the prices observed in MA. As discussed above, institutional providers are required to accept traditional Medicare patients and, as an empirical matter, access to physician services via traditional Medicare is quite robust (MedPAC 2020a). Thus, traditional Medicare is akin to a public option with mandatory provider participation, and the analysis in this paper implies that the presence of traditional Medicare is likely to constrain the prices paid by MA plans to be close to traditional Medicare's, consistent with what is actually observed.

By contrast, the analysis in this paper suggests that the MA out-of-network cap likely cannot, on its own, explain why MA plans pay providers prices close to traditional Medicare's. As discussed above, in non-emergency situations, neither institutional providers nor physicians face clear legal barriers to turning away out-of-network MA enrollees, and the discussion in section 4.3.1 concluded that other barriers that would be unlikely to prevent providers from turning away out-of-network patients. Thus, consistent with the analysis of an out-of-network cap presented here, the scope for the MA out-ofnetwork cap to reduce negotiated prices in non-emergency situations may be modest.

It is important to note that "modest" is not zero. The discussion in section 4 implies that even when providers can turn away out-of-network patients, the presence of a cap nevertheless reduces negotiated prices to some degree. Thus, in cases where competitive pressure from traditional Medicare leaves the prices negotiated by MA plans somewhat above traditional Medicare's prices, the out-of-network cap may play a supporting role by pushing prices farther toward traditional Medicare's.

Indeed, explaining the fact that MA prices are *uniformly* close to traditional Medicare's prices may require positing some role for the out-of-network cap. Notably, Maeda and Nelson (2018) and Pelech (2018) both present evidence that the prices negotiated by MA plans are essentially unrelated to the market share held by traditional Medicare at the geographic area level. Under some (but not all) theories of what drives variation in traditional Medicare's market share across geographic areas, traditional Medicare would be expected to do less to discipline prices in MA when it holds less of the market.<sup>85</sup> Thus, this finding is (arguably) inconsistent with the presence of traditional Medicare being

<sup>&</sup>lt;sup>84</sup> An exception is physician practices that have been purchased by a hospital and now operate as part of a hospital outpatient department. These practices would be governed by Medicare's rules for institutional providers.

<sup>&</sup>lt;sup>85</sup> This would be the case if, for example, variation in traditional Medicare's market share was driven primarily by differences in enrollees' idiosyncratic preferences for MA plans or the generosity of plan benchmarks. But this would not be true under other theories of what drives variation in traditional Medicare's market share. For example, MA plans might tend to achieve higher penetration in markets where enrollees are more attentive to differences in plan premiums. In that case, the equilibrium demand elasticity faced by MA plans—and, thus, traditional Medicare's effectiveness in disciplining the premiums MA plans charge and the prices they pay providers—might not differ across high- and low-penetration markets.

the *sole* factor that allows MA plans to negotiate lower prices than their commercial counterparts. However, this pattern could be consistent with traditional Medicare playing the primary role in driving MA plans' negotiated prices toward traditional Medicare levels, and the out-of-network cap bringing those prices the rest of the way when competition from traditional Medicare alone falls short.<sup>86</sup>

Of course, it is also possible that providers do in fact face barriers to turning away out-of-network MA enrollees. In that case, the MA out-of-network cap would likely be sufficient on its own to drive negotiated prices to traditional Medicare levels. While this is clearly possible, there is reason to doubt this interpretation in the absence of a clear theory about *why* providers are unable to turn away out-of-network MA enrollees. This suggests that, at a minimum, the MA experience offers little reason to be *confident* that an out-of-network cap on its own can substantially reduce prices in non-emergency situations. Moreover, if providers do face barriers to turning away out-of-network MA patients, one likely barrier is the requirement under Medicare's rules that institutional providers accept Medicare and non-Medicare patients on the same terms. This suggests that even if an out-of-network cap is highly effective in reducing prices in MA, that might not generalize to commercial insurance markets, where a similar requirement to accept out-of-network patients clearly does not exist.

### 9.3 Why Is Physician Participation in Traditional Medicare So Robust?

A lingering question from the analysis above is *why* the vast majority of physicians accept traditional Medicare patients, as discussed in section 2.2. The discussion of a voluntary public option in section 6.4 concluded that it was plausible that many providers would decline to accept the public option in order to increase their leverage vis-à-vis private plans. And per the discussion in this section, physicians (unlike institutional providers) are not legally required to accept traditional Medicare patients on the same terms as MA patients. For a couple of reasons, however, broad physician participation in traditional Medicare may not be that surprising.

First, a purely voluntary public option differs from traditional Medicare in important ways that likely make participating in traditional Medicare much more attractive to physicians. Notably, Medicare rules ensure that traditional Medicare enrollees have access to a very broad network of *institutional* providers, and Medicare beneficiaries are enrolled in traditional Medicare by default. Thus, unlike a purely voluntary public option, traditional Medicare is almost guaranteed to attract substantial market share, meaning that declining to accept traditional Medicare likely requires a physician to forgo substantially more volume than declining to accept a purely voluntary public option.

Second, even in the context of a purely voluntary public option, physicians are likely to realize smaller benefits from opting out of a public option than other types of providers. Consistent with the analysis in section 6.4, the providers who can command the highest prices in the commercial market are likely the providers that have the most to gain by opting out of traditional Medicare. While physicians do command prices above traditional Medicare's on average, the gap is much smaller than for hospital services, as discussed in section 2, so opting out may be correspondingly less attractive.

# **10 Conclusion**

The analysis in this paper shows that an appropriately designed price cap or public option can reduce the prices of health care services. In closing, I consider how policymakers that wished to use one of these tools to reduce health care prices might choose among them. I consider two aspects of this choice:

<sup>&</sup>lt;sup>86</sup> Notably, in this scenario, it might not be particularly common for providers to even *threaten* to turn away out-of-network patients since the out-of-network cap might not reduce negotiated prices far enough to make it worth doing so.

(1) the choice among the various price cap policies (i.e., an out-of-network cap, a comprehensive price cap, or a default contract policy); and (2) the choice between the price cap policies and a public option.

Before proceeding, I note that I leave to the side the choice between implementing a price cap or public option (or both) and maintaining the status quo. As noted at the outset of this paper, that choice would depend on how the policy tools considered in this paper would affect providers' service offerings and care delivery processes over the long term and, in particular, the quantity and quality of the health care services that providers delivered. But modeling those effects is beyond the scope of this paper.

**Choosing among price cap policies.** Among the price cap policies considered in this paper, the default contract policy appears most likely to be effective in reducing prices and least likely to create undesirable side-effects. Indeed, it appears questionable (at best) whether an out-of-network price cap would be effective in reducing negotiated prices in non-emergency situations in light of providers' ability to turn away out-of-network patients. Closely related, this policy could cause providers to take steps that would make it harder for patients to access out-of-network services.

A comprehensive price cap would, on paper, have the potential to reduce prices in a greater range of settings. However, it would have the limitation that it would not reduce providers' underlying bargaining leverage but instead just block them from translating that leverage into high prices. That would create a variety of enforcement challenges that could threaten the integrity of the cap. Further, the cap itself (and efforts to enforce it) could also have a variety of undesirable side-effects, including increased utilization, greater consolidation, and less adoption of alternative payment models.

By contrast, a default contract policy would have the ability to reduce prices for all types of health care services without creating the same enforcement challenges or potential undesirable side-effects of the comprehensive price cap approach. Of course, a default contract policy would present its own challenges. Most importantly, an essential feature of a default contract policy is that it would require providers to accept patients under a default contract. Enforcing that requirement would present real, albeit surmountable, challenges. This type of requirement would also surely spur objections from health care providers, although it is not clear that resistance to a default contract policy would be qualitatively different from resistance to other policies that would achieve equivalent price reductions.

**Choosing between a price cap and a public option.** From a policy perspective, the choice between a price cap and a public option depends on whether policymakers are focused primarily on reducing provider prices or have other goals as well. If policymakers are focused primarily on reducing prices, then either policy could do the job, but a default contract policy has two distinct advantages.

First, a default contract policy is more flexible. It could be targeted to particular types of services (à la Glied and Altman 2017; Roy 2019), whereas a public option would need to set prices for all types of services and, correspondingly, would affect prices for all types of services. Additionally, a default contract policy could be targeted primarily at the highest-priced providers (à la Chernew, Dafny, and Pany 2020) by specifying high prices in the default contract. By contrast, a public option that paid all providers more than existing private plans would be uncompetitive and thus have little or no effect on prices, and a public option that paid lower prices would increase prices received by low-priced providers in addition to reducing the prices received by high-priced providers.

Second, a default contract policy avoids the operational complexity involved in setting up and operating the public option. Closely related, it avoids the risk that a public option would have disadvantages in utilization management, risk selection, or diagnosis coding that would keep it from being a strong competitor for private plans and thereby undermine its ability to reduce provider prices.

However, policymakers may have goals other than reducing provider prices. Notably, many insurance markets are quite concentrated (Fulton 2017), which allows insurers to charge higher premiums (e.g., Dafny, Duggan, and Ramanarayanan 2012; Dafny, Gruber, and Ody 2015).<sup>87</sup> Introducing a public option would place pressure on insurers to set lower premiums. The estimates of insurer profit margins presented in Table 6.2 suggest that the scope to reduce premiums by reducing insurer margins is likely modest, but enhancing competition might also reduce premiums through other channels, such as by driving insurers to manage utilization more aggressively. These considerations offer a rationale for implementing a public option instead of or in addition to some form of price cap.<sup>88</sup>

While this paper focuses on the substantive effects of these policies, policymakers would also need to consider the political feasibility of the alternative policy approaches. Notably, introducing a public option would threaten the interests of health insurers in addition to health care providers and thus could spark broader industry opposition. However, health insurers are deeply distrusted by the public (Commonwealth Fund, New York Times, and Harvard T.H. Chan School of Public Health 2019; KFF 2020a), so a public option that offered consumers a concrete alternative to private insurance plans could have broader public appeal. Perhaps for this reason, data from opinion surveys suggest that public option proposals command broad public support (Kirzinger, Kearney, and Brodie 2020).

**Directions for future research.** Finally, I discuss a few areas where further research could help clarify the effects of introducing some form of price cap or a public option. First, the dearth of information on what individual market plans (as opposed to commercial plans more broadly) currently pay health care providers makes it challenging to assess the consequences of introducing a price cap or a public option in the individual market. This gap is particularly glaring because many existing proposals to introduce a price cap or a public option would apply solely to the individual market.

Second, this paper's analysis of an out-of-network cap suggests that the effectiveness of an out-ofnetwork cap in non-emergency situations depends on how much volume providers can retain—and at what price—if they go out of network under the status quo. As discussed in section 4.3.2, empirical evidence on this question is sparse, with the notable—but limited—exceptions of Melnick and Fonkych (2020a) and recent research related to surprise billing (e.g., Garmon and Chartock 2017; Cooper et al. 2020; Cooper, Scott Morton, and Shekita 2020). More evidence on this question would be valuable.

Finally, there are areas where additional research could shed more light on the effects of introducing a public option in particular. As illustrated by the simulations in this paper, the effects of introducing a public option depend on, among other things, how utilization under a public option compares to private plans and the extent to which private plans have advantages with respect to risk selection or diagnosis coding. Better evidence on how the intensity of adverse selection against a public option might change as its market share changed would be particularly valuable, as discussed in Appendix B.

Additionally, as discussed in section 6.3, the current model makes the simplifying assumption that a public option competes with a single private plan. While this assumption likely does not affect the main qualitative conclusions of this paper, work to develop richer models that captured competition *among* private plans would allow the model to answer a broader array of questions and increase the accuracy of its quantitative predictions. A model that captured competition among private plans might

<sup>&</sup>lt;sup>87</sup> In the individual market, the structure of the premium tax credit, specifically the fact that the value of the credit in a geographic area is based on the premiums of the plans offered in that area, may magnify the consequences of limited insurance market competition by making insurers price less aggressively (Jaffe and Shepard 2020). This problem could become more acute if eligibility for the premium tax credit were extended to people above 400% of the federal poverty level, as many have proposed. This problem would also be mitigated by a public option.

<sup>&</sup>lt;sup>88</sup> There are other policies to address insurer market power, such as direct premium regulation or medical loss ratio requirements. A full analysis of these alternative approaches is beyond the scope of this paper.

be particularly useful in cases where the public option paid providers prices only modestly below those paid by existing private plans or where different private plans offered very different provider networks.

## **II References**

- Abraham, Jean, Coleman Drake, Daniel W. Sacks, and Kosali Simon. 2017. "Demand for Health Insurance Marketplace Plans Was Highly Elastic in 2014–2015." *Economics Letters* 159 (October): 69–73. https://doi.org/10.1016/j.econlet.2017.07.002.
- Abreu, Dilip, and David Pearce. 2007. "Bargaining, Reputation, and Equilibrium Selection in Repeated Games with Contracts." *Econometrica* 75 (3): 653–710. https://doi.org/10.1111/j.1468-0262.2007.00765.x.
- ----. 2015. "A Dynamic Reinterpretation of Nash Bargaining with Endogenous Threats." Econometrica 83 (4): 1641–55. https://doi.org/10.3982/ECTA11711.

Adler, Loren, Erin Duffy, Paul B. Ginsburg, Mark Hall, Erin Trish, and Christen Linke Young. 2019.
"Rep. Ruiz's Arbitration Proposal for Surprise Billing (H.R. 3502) Would Lead to Much Higher Costs and Deficits." *Brookings* (blog). July 16, 2019.
https://www.brookings.edu/blog/usc-brookings-schaeffer-on-healthpolicy/2019/07/16/rep-ruizs-arbitration-proposal-for-surprise-billing-h-r-3502-would-leadto-much-higher-costs-and-deficits/.

- Adler, Loren, Matthew Fiedler, Paul B. Ginsburg, Mark Hall, Erin Trish, Christen Linke Young, and Erin Duffy. 2019. "State Approaches to Mitigating Surprise Out-of-Network Billing." Brookings Institution. https://www.brookings.edu/research/state-approaches-to-mitigatingsurprise-out-of-network-billing/.
- Adler, Loren, Matthew Fiedler, Paul B. Ginsburg, and Christen Linke Young. 2019a. "Comments on the No Surprises Act." https://www.brookings.edu/opinions/comments-on-the-no-surprise-act/.
- ———. 2019b. "Comments on the Lower Health Care Costs Act of 2019." https://www.brookings.edu/opinions/comments-on-the-lower-health-care-costs-act-of-2019/.
- Aizawa, Naoki, and You Suk Kim. 2018. "Advertising and Risk Selection in Health Insurance Markets." *American Economic Review* 108 (3): 828–67. https://doi.org/10.1257/aer.20151485.
- ----. 2020. "Government Advertising in Market-Based Public Programs: Evidence from the Health Insurance Marketplace." Working Paper 27695. National Bureau of Economic Research. https://doi.org/10.3386/w27695.
- America's Health Insurance Plans, American Hospital Association, Blue Cross Blue Shield Association, and Premera Blue Cross. 2008. "Consumers and Employers Paying Almost \$90 Billion Due to Under- Payments to Hospitals and Physicians by Medicare and Medicaid." https://www.aha.org/system/files/content/00-10/081209jointpr-costshft.pdf.
- Anderson, Julie. 2017. "Two Years after Months-Long Dispute Ended, CHI Health, Blue Cross Blue Shield Sign New 3-Year Contract." *Omaha World-Herald*, June 29, 2017. https://www.omaha.com/livewellnebraska/two-years-after-months-long-dispute-ended-chihealth-blue/article\_d65e9f44-5cfb-11e7-8232-0f29d33e2f49.html.
- Antos, Joseph, and James C. Capretta. 2019. "The Heavy Hand of the Public Option." *Real Clear Politics*, June 18, 2019.

https://www.realclearpolicy.com/articles/2019/06/18/the\_heavy\_hand\_of\_the\_public\_opt ion\_111222.html.

- Atwood, Alicia, and Anthony T. Lo Sasso. 2016. "The Effect of Narrow Provider Networks on Health Care Use." *Journal of Health Economics* 50 (December): 86–98. https://doi.org/10.1016/j.jhealeco.2016.09.007.
- Baca, Marie C. 2018. "Heart Institute Ends Contract with Presbyterian Network." *Albuquerque Journal*, April 19, 2018. https://www.abqjournal.com/1161235/heart-institute-ends-contract-with-presbyterian-network.html.

- Bai, Ge, and Gerard F. Anderson. 2017. "Variation in the Ratio of Physician Charges to Medicare Payments by Specialty and Region." *JAMA* 317 (3): 315–18. https://doi.org/10.1001/jama.2016.16230.
- Baker, Laurence C., M. Kate Bundorf, Aileen M. Devlin, and Daniel P. Kessler. 2016. "Medicare Advantage Plans Pay Hospitals Less than Traditional Medicare Pays." *Health Affairs* 35 (8): 1444–51. https://doi.org/10.1377/hlthaff.2015.1553.
- Barbos, Andrei, and Yi Deng. 2015. "The Impact of a Public Option in the U.S. Health Insurance Market." *Economic Inquiry* 53 (1): 508–21. https://doi.org/10.1111/ecin.12132.
- Barnett, Michael L., Andrew Wilcock, J. Michael McWilliams, Arnold M. Epstein, Karen E. Joynt Maddox, E. John Orav, David C. Grabowski, and Ateev Mehrotra. 2019. "Two-Year Evaluation of Mandatory Bundled Payments for Joint Replacement." *New England Journal of Medicine* 380 (3): 252–62. https://doi.org/10.1056/NEJMsa1809010.
- Berenson, Robert A., Jonathan H. Sunshine, David Helms, and Emily Lawton. 2015. "Why Medicare Advantage Plans Pay Hospitals Traditional Medicare Prices." *Health Affairs* 34 (8): 1289–95. https://doi.org/10.1377/hlthaff.2014.1427.
- Bhutta, Neil, and Lisa Dettling. 2018. "Money in the Bank? Assessing Families' Liquid Savings Using the Survey of Consumer Finances." FEDS Note. Federal Reserve Board. https://www.federalreserve.gov/econres/notes/feds-notes/assessing-families-liquidsavings-using-the-survey-of-consumer-finances-20181119.htm.
- Blumberg, Linda J., John Holahan, Matthew Buettgens, and Stephen Zuckerman. 2019. "The Healthy America Program, an Update and Additional Options." Urban Institute. https://www.urban.org/research/publication/healthy-america-program-update-andadditional-options.
- Blumberg, Linda J., John Holahan, Stacey McMorrow, and Michael Simpson. 2020. "Estimates of the Implications of Public Option and Capped Provider Payment Rate Reforms." Urban Institute. https://www.urban.org/research/publication/estimates-implications-publicoption-and-capped-provider-payment-rate-reforms.
- Brown, Jason, Mark Duggan, Ilyana Kuziemko, and William Woolston. 2014. "How Does Risk Selection Respond to Risk Adjustment? New Evidence from the Medicare Advantage Program." *American Economic Review* 104 (10): 3335–64. https://doi.org/10.1257/aer.104.10.3335.
- Cabral, Marika, Michael Geruso, and Neale Mahoney. 2018. "Do Larger Health Insurance Subsidies Benefit Patients or Producers? Evidence from Medicare Advantage." *American Economic Review* 108 (8): 2048–87. https://doi.org/10.1257/aer.20151362.
- Cebul, Randall D., James B. Rebitzer, Lowell J. Taylor, and Mark E. Votruba. 2011. "Unhealthy Insurance Markets: Search Frictions and the Cost and Quality of Health Insurance." *American Economic Review* 101 (5): 1842–71. https://doi.org/10.1257/aer.101.5.1842.
- Centers for Medicare and Medicaid Services. 2016. "Chapter 4 Benefits and Beneficiary Protections." In *Medicare Managed Care Manual*. https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/mc86c04.pdf.
- Chan, David, and Jonathan Gruber. 2010. "How Sensitive Are Low Income Families to Health Plan Prices?" *American Economic Review* 100 (2): 292–96. https://doi.org/10.1257/aer.100.2.292.
- Chernew, Michael E., Leemore S. Dafny, and Maximilian J. Pany. 2020. "A Proposal to Cap Provider Prices and Price Growth in the Commercial Health-Care Market." Brookings Institution. https://www.hamiltonproject.org/papers/a\_proposal\_to\_cap\_provider\_prices\_and\_price\_ growth\_in\_the\_commercial\_health\_care\_market.
- Chernew, Michael E., Andrew L. Hicks, and Shivani A. Shah. 2020. "Wide State-Level Variation In Commercial Health Care Prices Suggests Uneven Impact Of Price Regulation." *Health Affairs* 39 (5): 791–99. https://doi.org/10.1377/hlthaff.2019.01377.
- Chernew, Michael E., Maximilian J. Pany, and Richard G. Frank. 2019. "The Case for Market-Based Price Caps." *Health Affairs Blog* (blog). September 3, 2019. https://www.healthaffairs.org/do/10.1377/hblog20190826.369708/full/.

- Church, Tom, Daniel L. Heil, and Lanhee J. Chen. 2020. "The Fiscal Effects of the Public Option." https://americashealthcarefuture.org/wp-content/uploads/2020/01/Final-The-Fiscal-Effects-Of-The-Public-Option-1.24.20.pdf.
- Clemens, Jeffrey, and Joshua D. Gottlieb. 2016. "In the Shadow of a Giant: Medicare's Influence on Private Physician Payments." *Journal of Political Economy* 125 (1): 1–39. https://doi.org/10.1086/689772.
- Clemens, Jeffrey, and Benedic Ippolito. 2019. "Uncompensated Care and the Collapse of Hospital Payment Regulation: An Illustration of the Tinbergen Rule." *Public Finance Review* 47 (6): 1002–41. https://doi.org/10.1177/1091142119871333.
- Coe, Erica, Jessica Lamb, and Suzanne Rivera. 2017. "Hospital Networks: Perspective from Four Years of the Individual Market Exchanges." McKinsey and Company. https://www.mckinsey.com/industries/healthcare-systems-and-services/ourinsights/hospital-networks-perspective-from-four-years-of-the-individual-marketexchanges.
- Coe, Erica, Alex Luterek, and Jim Oatman. 2018. "Insights into the 2019 Individual Exchange Market." McKinsey and Company. https://healthcare.mckinsey.com/insights-2019individual-exchange-market.
- Collard-Wexler, Allan, Gautam Gowrisankaran, and Robin S. Lee. 2019. "'Nash-in-Nash' Bargaining: A Microfoundation for Applied Work." *Journal of Political Economy* 127 (1): 163–95. https://doi.org/10.1086/700729.
- Commonwealth Fund, New York Times, and Harvard T.H. Chan School of Public Health. 2019. "Americans' Values and Beliefs about National Health Insurance Reform." https://cdn1.sph.harvard.edu/wp-content/uploads/sites/94/2019/10/CMWF-NYT-Harvard\_Final-Report\_Oct2019.pdf.
- Congressional Budget Office (CBO). 2020. "An Update to the Economic Outlook: 2020 to 2030." Congressional Budget Office. https://www.cbo.gov/publication/56442.
- Cooper, Zack, Stuart V. Craig, Martin Gaynor, and John Van Reenen. 2019. "The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured." *The Quarterly Journal of Economics* 134 (1): 51–107. https://doi.org/10.1093/qje/qjy020.
- Cooper, Zack, Hao Nguyen, Nathan Shekita, and Fiona Scott Morton. 2020. "Out-of-Network Billing and Negotiated Payments for Hospital-Based Physicians." *Health Affairs* 39 (1): 24–32. https://doi.org/10.1377/hlthaff.2019.00507.
- Cooper, Zack, Fiona Scott Morton, and Nathan Shekita. 2020. "Surprise! Out-of-Network Billing for Emergency Care in the United States." *Journal of Political Economy* 128 (9): 3626–3677. https://doi.org/10.1086/708819.
- Curto, Vilsa, Liran Einav, Amy Finkelstein, Jonathan Levin, and Jay Bhattacharya. 2019. "Health Care Spending and Utilization in Public and Private Medicare." *American Economic Journal: Applied Economics* 11 (2): 302–32. https://doi.org/10.1257/app.20170295.
- Dafny, Leemore S., Mark Duggan, and Subramaniam Ramanarayanan. 2012. "Paying a Premium on Your Premium? Consolidation in the US Health Insurance Industry." *American Economic Review* 102 (2): 1161–85. https://doi.org/10.1257/aer.102.2.1161.
- Dafny, Leemore S., Jonathan Gruber, and Christopher Ody. 2015. "More Insurers Lower Premiums: Evidence from Initial Pricing in the Health Insurance Marketplaces." *American Journal of Health Economics* 1 (1): 53–81. https://doi.org/10.1162/AJHE\_a\_00003.
- Dafny, Leemore S., Igal Hendel, Victoria Marone, and Christopher Ody. 2017. "Narrow Networks On The Health Insurance Marketplaces: Prevalence, Pricing, And The Cost Of Network Breadth." *Health Affairs* 36 (9): 1606–14. https://doi.org/10.1377/hlthaff.2016.1669.
- Damodaran, Aswath. 2019. "Equity Risk Premiums (ERP): Determinants, Estimation and Implications – The 2019 Edition." SSRN Scholarly Paper ID 3378246. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=3378246.
- Domurat, Richard. 2018. "Essays on the Economics of Health Insurance Markets." UCLA. https://escholarship.org/uc/item/5xv5x7z8.

- Drake, Coleman. 2019. "What Are Consumers Willing to Pay for a Broad Network Health Plan?: Evidence from Covered California." *Journal of Health Economics* 65 (May): 63–77. https://doi.org/10.1016/j.jhealeco.2018.12.003.
- Duffy, Erin L., Bich Ly, Loren Adler, and Erin Trish. 2020. "Policies to Address Surprise Billing Can Affect Health Insurance Premiums." *American Journal of Managed Care* 26 (9): 401–4. https://doi.org/10.37765/ajmc.2020.88491.
- Duggan, Mark, Jonathan Gruber, and Boris Vabson. 2018. "The Consequences of Health Care Privatization: Evidence from Medicare Advantage Exits." *American Economic Journal: Economic Policy* 10 (1): 153–86. https://doi.org/10.1257/pol.20160068.
- Duggan, Mark, Amanda Starc, and Boris Vabson. 2016. "Who Benefits When the Government Pays More? Pass-through in the Medicare Advantage Program." *Journal of Public Economics* 141 (September): 50–67. https://doi.org/10.1016/j.jpubeco.2016.07.003.
- Dunn, Abe, and Adam Hale Shapiro. 2014. "Do Physicians Possess Market Power?" *The Journal of Law and Economics* 57 (1): 159–93. https://doi.org/10.1086/674407.
- Eibner, Christine, Raffaele Vardavas, Sarah A. Nowak, Jodi L. Liu, and Preethi Rao. 2019. "Medicare for 50-to-64-Year-Olds: Assessing the Effects of Allowing Older Adults to Buy Into the Medicare Program." RAND Corporation. https://www.rand.org/pubs/research\_reports/RR4246.html.
- Einav, Liran, Amy Finkelstein, and Mark R. Cullen. 2010. "Estimating Welfare in Insurance Markets Using Variation in Prices." *The Quarterly Journal of Economics* 125 (3): 877–921. https://doi.org/10.1162/qjec.2010.125.3.877.
- Ericson, Keith Marzilli, and Amanda Starc. 2015a. "Pricing Regulation and Imperfect Competition on the Massachusetts Health Insurance Exchange." *The Review of Economics and Statistics* 97 (3): 667–82. https://doi.org/10.1162/REST\_a\_00514.
- Feyman, Yevgeniy, José F. Figueroa, Daniel E. Polsky, Michael Adelberg, and Austin Frakt. 2019. "Primary Care Physician Networks In Medicare Advantage." *Health Affairs* 38 (4): 537–44. https://doi.org/10.1377/hlthaff.2018.05501.
- Fiedler, Matthew. 2017. "Taking Stock of Insurer Financial Performance in the Individual Health Insurance Market through 2017." Brookings Institution. https://www.brookings.edu/wpcontent/uploads/2017/10/individualmarketprofitability.pdf.
- Fiedler, Matthew, Tim Gronniger, Paul B. Ginsburg, Loren Adler, Kavita Patel, and Margaret Darling. 2018. "Congress Should Replace Medicare's Merit-Based Incentive Payment System." *Health Affairs Blog* (blog). February 26, 2018. https://www.healthaffairs.org/do/10.1377/hblog20180222.35120/full/.
- Froeb, Luke M., Vlad Mares, and Steven Tschantz. 2019. "Nash-in-Shapley: Bilateral Bargaining with Recursive Threat Points." SSRN Scholarly Paper ID 3304179. Rochester, NY: Social Science Research Network. https://doi.org/10.2139/ssrn.3304179.
- FTI Consulting. 2019. "Assessing the Impact of a Public Option on Market Stability and Consumer Choice." https://americashealthcarefuture.org/wp-content/uploads/2019/11/FTI-Public-Option-Issue-Brief-FINAL.pdf.
- Fulton, Brent D. 2017. "Health Care Market Concentration Trends In The United States: Evidence And Policy Responses." *Health Affairs* 36 (9): 1530–38. https://doi.org/10.1377/hlthaff.2017.0556.
- Garmon, Christopher, and Benjamin Chartock. 2017. "One In Five Inpatient Emergency Department Cases May Lead To Surprise Bills." *Health Affairs* 36 (1): 177–81. https://doi.org/10.1377/hlthaff.2016.0970.
- Garthwaite, Craig, Christopher Ody, and Amanda Starc. 2020. "Endogenous Quality Investments in the U.S. Hospital Market." Working Paper. National Bureau of Economic Research. https://doi.org/10.3386/w27440.
- Gaynor, Martin. 2020. "What to Do about Health-Care Markets? Policies to Make Health-Care Markets Work." Brookings Institution.

https://www.hamiltonproject.org/papers/what\_to\_do\_about\_health\_care\_markets\_policie s\_to\_make\_health\_care\_markets\_work.

- Gaynor, Martin, Farzad Mostashari, and Paul B. Ginsburg. 2017. "Making Health Care Markets Work: Competition Policy for Health Care." Brookings Institution.
- https://www.brookings.edu/wp-content/uploads/2017/04/gaynor-et-al-final-report-v11.pdf. Gaynor, Martin, and Robert J. Town. 2011. "Competition in Health Care Markets." In *Handbook of Health Economics*, edited by Mark Pauly, Thomas G. Mcguire, and Pedro P. Barros, 2:499– 637. Handbook of Health Economics. Elsevier. https://doi.org/10.1016/B978-0-444-53592-4.00009-8.
- Geruso, Michael, and Timothy Layton. 2020. "Upcoding: Evidence from Medicare on Squishy Risk Adjustment." *Journal of Political Economy* 128 (3): 984–1026. https://doi.org/10.1086/704756.
- Geruso, Michael, Timothy J Layton, and Jacob Wallace. 2020. "Are All Managed Care Plans Created Equal? Evidence from Random Plan Assignment in Medicaid." Working Paper 27762. National Bureau of Economic Research. https://doi.org/10.3386/w27762.
- Geruso, Michael, Timothy Layton, and Daniel Prinz. 2019. "Screening in Contract Design: Evidence from the ACA Health Insurance Exchanges." *American Economic Journal: Economic Policy* 11 (2): 64–107. https://doi.org/10.1257/pol.20170014.
- Ginsburg, Paul B. 2010. "Wide Variation in Hospital and Physician Payment Rates Evidence of Provider Market Power." Center for Studying Health System Change. http://www.hschange.org/CONTENT/1162/#ib2.
- Glied, Sherry A. 2000. "Managed Care." In *Handbook of Health Economics*, edited by Anthony J. Culyer and Joseph P. Newhouse, 1:707–53. Handbook of Health Economics. Elsevier. https://doi.org/10.1016/S1574-0064(00)80172-9.
- Glied, Sherry A., and Stuart H. Altman. 2017. "Beyond Antitrust: Health Care and Health Insurance Market Trends and the Future of Competition." *Health Affairs* 36 (9): 1572–77. https://doi.org/10.1377/hlthaff.2017.0555.
- Gough, Paul J. 2018. "Feds Looking into Highmark-UPMC Battle over Medicare Advantage Reimbursements." *Pittsburgh Business Times*, October 12, 2018. https://www.bizjournals.com/pittsburgh/news/2018/10/12/feds-looking-into-highmarkupmc-battle-over.html.
- Government Accountability Office. 2015. "Medicare Administrative Contractors: CMS Should Consider Whether Alternative Approaches Could Enhance Contractor Performance." United States Government Accountability Office. https://www.gao.gov/products/GAO-15-372.
- Gowrisankaran, Gautam, Aviv Nevo, and Robert Town. 2015. "Mergers When Prices Are Negotiated: Evidence from the Hospital Industry." *American Economic Review* 105 (1): 172–203. https://doi.org/10.1257/aer.20130223.
- Gruber, Jonathan, and Robin McKnight. 2016. "Controlling Health Care Costs through Limited Network Insurance Plans: Evidence from Massachusetts State Employees." *American Economic Journal: Economic Policy* 8 (2): 219–50. https://doi.org/10.1257/pol.20140335.
- Health Care Cost Institute (HCCI). 2019. "2017 Health Care Cost and Utilization Report." Health Care Cost Institute. https://healthcostinstitute.org/research/annual-reports/entry/2017health-care-cost-and-utilization-report.
- ———. 2020. "2018 Health Care Cost and Utilization Report." Health Care Cost Institute. https://healthcostinstitute.org/images/pdfs/HCCI\_2018\_Health\_Care\_Cost\_and\_Utilizati on\_Report.pdf.
- Health Care Payment Learning & Action Network (HCP-LAN). 2019. "Measuring Progress: Adoption of Alternative Payment Models in Commercial, Medicaid, Medicare Advantage, and Traditional Medicare Programs." Health Care Payment Learning & Action Network. http://hcp-lan.org/workproducts/apm-methodology-2019.pdf.
- Hempstead, Katherine. 2018. "Marketplace Pulse: Percent of Plans with out of Network Benefits." Robert Wood Johnson Foundation.

https://www.rwjf.org/en/library/research/2018/10/percent-of-plans-with-out-of-network-benefits.html.

- Ho, Kate, and Robin S. Lee. 2017. "Insurer Competition in Health Care Markets." *Econometrica* 85 (2): 379–417. https://doi.org/10.3982/ECTA13570.
- ----. 2019. "Equilibrium Provider Networks: Bargaining and Exclusion in Health Care Markets." *American Economic Review* 109 (2): 473–522. https://doi.org/10.1257/aer.20171288.
- Holahan, John, Linda J. Blumberg, Erik Wengle, and Caroline Elmendorf. 2019. "What's behind 2018 and 2019 Marketplace Insurer Participation and Pricing Decisions?" Urban Institute. https://www.urban.org/research/publication/whats-behind-2018-and-2019-marketplaceinsurer-participation-and-pricing-decisions.
- Itkowitz, Colby. 2017. "One Medical Says It Will Drop CareFirst BlueCross BlueShield Insurance, Catching Many by Surprise." *Washington Post*, October 6, 2017, sec. Local. https://www.washingtonpost.com/local/one-medical-says-it-will-drop-carefirst-insurancecatching-many-by-surprise/2017/10/06/79ad0504-aa0a-11e7-850e-2bdd1236be5d\_story.html.
- Jacobson, Gretchen, and Tricia Neuman. 2018. "Prior Authorization in Medicare Advantage Plans: How Often Is It Used?" Kaiser Family Foundation. https://www.kff.org/medicare/issuebrief/prior-authorization-in-medicare-advantage-plans-how-often-is-it-used/.
- Jacobson, Gretchen, Matthew Rae, Tricia Neuman, Kendal Orgera, and Cristina Boccuti. 2017. "Medicare Advantage: How Robust Are Plans' Physician Networks?" Kaiser Family Foundation. https://www.kff.org/medicare/report/medicare-advantage-how-robust-areplans-physician-networks/.
- Jacobson, Gretchen, Ariel Trilling, Tricia Neuman, Anthony Damico, and Marsha Gold. 2016. "Medicare Advantage Hospital Networks: How Much Do They Vary?" Kaiser Family Foundation. https://www.kff.org/medicare/report/medicare-advantage-hospital-networkshow-much-do-they-vary/.
- Jaffe, Sonia, and Mark Shepard. 2020. "Price-Linked Subsidies and Imperfect Competition in Health Insurance." *American Economic Journal: Economic Policy* 12 (3): 279–311. https://doi.org/10.1257/pol.20180198.
- Kaiser Family Foundation (KFF). 2019. "Medicare Advantage." Kaiser Family Foundation. https://www.kff.org/medicare/fact-sheet/medicare-advantage/.
- ———. 2020b. "2020 Employer Health Benefits Survey." Kaiser Family Foundation. https://www.kff.org/health-costs/report/2020-employer-health-benefits-survey/.
- Kaiser Family Foundation (KFF), and Health Research and Educational Trust (HRET). 2006. "2005 Employer Health Benefits Survey." Kaiser Family Foundation. https://www.kff.org/wpcontent/uploads/2012/09/2005ehbs.pdf.
- Kirzinger, Ashley, Audrey Kearney, and Mollyann Brodie. 2020. "KFF Health Tracking Poll February 2020: Health Care in the 2020 Election." Kaiser Family Foundation. https://www.kff.org/health-reform/poll-finding/kff-health-tracking-poll-february-2020/.
- Koch, Thomas, and Shawn W. Ulrick. 2017. "Price Effects of a Merger: Evidence from a Physicians' Market." Federal Trade Commission Working Paper. Social Science Research Network. https://papers.ssrn.com/abstract=3026344.
- Koenig, Lane, Asha Saavos, Samuel Soltoff, Berna Demiralp, and Jing Xu. 2019. "The Impact of Medicare-X Choice on Coverage Healthcare Use, and Hospitals." KNG Consulting, LLC. https://www.aha.org/system/files/2019-03/the-impact-of-medicare-X-choice-final-report-2019.pdf.
- Kuziemko, Ilyana, Katherine Meckel, and Maya Rossin-Slater. 2018. "Does Managed Care Widen Infant Health Disparities? Evidence from Texas Medicaid." *American Economic Journal: Economic Policy* 10 (3): 255–83. https://doi.org/10.1257/pol.20150262.

- Lavetti, Kurt, and Kosali Simon. 2018. "Strategic Formulary Design in Medicare Part D Plans." *American Economic Journal: Economic Policy* 10 (3): 154–92. https://doi.org/10.1257/pol.20160248.
- LeCuyer, Nick, and Shubham Singhal. 2007. "Overhauling the US Healthcare Payment System." McKinsey and Company. https://healthcare.mckinsey.com/overhauling-us-healthcarepayment-system.
- Lerman, Amy E., Meredith L. Sadin, and Samuel Trachtman. 2017. "Policy Uptake as Political Behavior: Evidence from the Affordable Care Act." *American Political Science Review* 111 (4): 755–70. https://doi.org/10.1017/S0003055417000272.
- Liesse, Julie. 2016. "Healthcare Marketing." Advertising Age. https://cdn2.hubspot.net/hubfs/2247255/KM/PDF/Kantar%20Media%20Forms/KantarMe dia\_AdAge\_HCwhitepaper\_102016.pdf.
- Linke Young, Christen. 2019. "Three Ways to Make Health Insurance Auto-Enrollment Work." Brookings Institution. https://www.brookings.edu/wpcontent/uploads/2019/06/Yonu Autoenrollment 6.19.19.pdf.
- Linke Young, Christen, and Matthew Fiedler. 2019. "What Would the 2020 Candidates' Proposals Mean for Health Care Coverage?" *Brookings* (blog). October 15, 2019. https://www.brookings.edu/policy2020/votervital/what-would-the-2020-candidatesproposals-mean-for-health-care-coverage/.
- Linke Young, Christen, Jason Levitis, and Matthew Fiedler. 2018. "Evaluating the Administration's Health Reimbursement Arrangement Proposal." Brookings Institution. https://www.brookings.edu/research/evaluating-the-administrations-healthreimbursement-arrangement-proposal/.
- Litow, Mark E. 2006. "Medicare versus Private Health Insurance: The Cost of Administration." Milliman.

https://www.cahi.org/cahi\_contents/resources/pdf/CAHIMedicareTechnicalPaper.pdf.

- Liu, Jodi L., Asa Wilks, Sarah A. Nowak, Preethi Rao, and Christine Eibner. 2020. "Public Options for Individual Health Insurance: Assessing the Effects of Four Public Option Alternatives." RAND Corporation. https://www.rand.org/pubs/research\_reports/RR3153.html.
- Maeda, Jared Lane K., and Lyle Nelson. 2018. "How Do the Hospital Prices Paid by Medicare Advantage Plans and Commercial Plans Compare with Medicare Fee-for-Service Prices?" *INQUIRY: The Journal of Health Care Organization, Provision, and Financing* 55 (January): 1–8. https://doi.org/10.1177/0046958018779654.
- Mahoney, Neale. 2015. "Bankruptcy as Implicit Health Insurance." *American Economic Review* 105 (2): 710–46. https://doi.org/10.1257/aer.20131408.
- Mayo Clinic. 2019. "More about Medicare." December 31, 2019. https://www.mayoclinic.org/patient-visitor-guide/billing-insurance/insurance/accepted-insurance/medicare/more-on-medicare.
- McDonough, John E. 1997. "Tracking The Demise Of State Hospital Rate Setting." *Health Affairs* 16 (1): 142–49. https://doi.org/10.1377/hlthaff.16.1.142.
- McGuire, Thomas G. 2000. "Physician Agency." In *Handbook of Health Economics*, edited by Anthony J. Culyer and Joseph P. Newhouse, 1:461–536. Handbook of Health Economics. Elsevier. https://doi.org/10.1016/S1574-0064(00)80168-7.
- McKinsey and Company. 2020. "Insights into the 2020 Individual Market--Increased Consumer Choice and Decreased Premiums." McKinsey and Company. https://www.mckinsey.com/industries/healthcare-systems-and-services/ourinsights/insights-into-the-2020-individual-market.
- McWilliams, J. Michael, Laura A. Hatfield, Bruce E. Landon, Pasha Hamed, and Michael E. Chernew. 2018. "Medicare Spending after 3 Years of the Medicare Shared Savings Program." *New England Journal of Medicine* 379 (12): 1139–49. https://doi.org/10.1056/NEJMsa1803388.
- Medicaid and CHIP Payment and Access Commission (MACPAC). 2017. "Medicaid Hospital Payment - A Comparison across States and to Medicare." Medicaid and CHIP Payment and

Access Commission. https://www.macpac.gov/wp-content/uploads/2017/04/Medicaid-Hospital-Payment-A-Comparison-across-States-and-to-Medicare.pdf.

- ----. n.d. "Provider Payment under Fee for Service." Accessed August 5, 2020. https://www.macpac.gov/subtopic/provider-payment/.
- Medicare Payment Advisory Commission (MedPAC). 2012. "Medicare and the Health Care Delivery System." Medicare Payment Advisory Commission. http://medpac.gov/docs/defaultsource/reports/jun12\_entirereport.pdf?sfvrsn=0.
- ———. 2016. "Medicare Payment Policy." Medicare Payment Advisory Commission. http://www.medpac.gov/docs/default-source/reports/march-2016-report-to-the-congressmedicare-payment-policy.pdf.

source/reports/mar18\_medpac\_entirereport\_sec\_rev\_0518.pdf?sfvrsn=0.

- ———. 2019b. "Durable Medical Equipment Payment System." Payment Basics. Medicare Payment Advisory Commission. http://www.medpac.gov/docs/default-source/paymentbasics/medpac\_payment\_basics\_19\_dme\_final\_sec.pdf?sfvrsn=0.

----. 2020a. "Medicare Payment Policy." Medicare Payment Advisory Commission. http://www.medpac.gov/docs/defaultsource/reports/mar20\_entirereport\_sec.pdf?sfvrsn=0.

- ———. 2020b. "Payment Basics." Payment Basics. August 2020. http://www.medpac.gov/documents-/payment-basics.
- Mehrotra, Ateev, Sonya Grier, and R. Adams Dudley. 2006. "The Relationship Between Health Plan Advertising And Market Incentives: Evidence Of Risk-Selective Behavior." *Health Affairs* 25 (3): 759–65. https://doi.org/10.1377/hlthaff.25.3.759.
- Melnick, Glenn, and Katya Fonkych. 2020a. "An Empirical Analysis of Hospital ED Pricing Power." *AJMC* 26 (3). https://www.ajmc.com/journals/issue/2020/2020-vol26-n3/an-empiricalanalysis-of-hospital-ed-pricing-power.
- ———. 2020b. "Regulating Out-Of-Network Hospital Emergency Prices: Problem And Potential Benchmarks." *Health Affairs Blog* (blog). March 23, 2020. https://www.healthaffairs.org/do/10.1377/hblog20200320.866552/full/.
- Miller, Daniel P., and Jungwon Yeo. 2019. "The Consequences of a Public Health Insurance Option: Evidence from Medicare Part D." *American Journal of Health Economics* 5 (2): 191–226. https://doi.org/10.1162/ajhe\_a\_00119.
- Murray, Robert. 2013. "Hospital Charges and the Need for a Maximum Price Obligation Rule for Emergency Department & Out-of-Network Care." *Health Affairs Blog* (blog). May 16, 2013. https://www.healthaffairs.org/do/10.1377/hblog20130516.031255/full/.
- Murray, Robert, and Robert A Berenson. 2015. "Hospital Rate Setting Revisited: Dumb Price Fixing or a Smart Solution to Provider Pricing Power and Delivery System Reform?" Urban Institute. https://www.urban.org/sites/default/files/publication/73841/2000516-Hospital-Rate-Setting-Revisited.pdf.
- Nash, John. 1953. "Two-Person Cooperative Games." *Econometrica* 21 (1): 128–40. https://doi.org/10.2307/1906951.
- Neuman, Patricia, and Gretchen A. Jacobson. 2018. "Medicare Advantage Checkup." *New England Journal of Medicine* 379 (22): 2163–72. https://doi.org/10.1056/NEJMhpr1804089.
- Neuman, Tricia, Karen Pollitz, Jennifer Tolbert, Robin Rudowitz, and Wyatt Koma. 2019. "10 Key Questions on Public Option Proposals." Kaiser Family Foundation. https://www.kff.org/health-reform/issue-brief/10-key-questions-on-public-optionproposals/.

- Newhouse, Joseph P., Mary Price, John Hsu, J. Michael McWilliams, and Thomas G. McGuire. 2015. "How Much Favorable Selection Is Left in Medicare Advantage?" *American Journal of Health Economics* 1 (1): 1–26. https://doi.org/10.1162/AJHE\_a\_00001.
- Osborne, Martin J., and Ariel Rubinstein. 1994. *A Course in Game Theory*. Twelfth edition. Cambridge, Mass: The MIT Press.
- Pauly, Mark, and Robert Town. 2012. "Maryland Exceptionalism? All-Payers Regulation and Health Care System Efficiency." *Journal of Health Politics, Policy and Law* 37 (4): 697–707. https://doi.org/10.1215/03616878-1597502.
- Pelech, Daria M. 2018. "An Analysis of Private-Sector Prices for Physicians' Services." Working Paper. Congressional Budget Office. https://www.cbo.gov/publication/53441.
- Pelech, Daria M., and Tamara Hayford. 2019. "Medicare Advantage and Commercial Prices for Mental Health Services." *Health Affairs* 38 (2): 262–67. https://doi.org/10.1377/hlthaff.2018.05226.
- Polsky, Daniel, Zuleyha Cidav, and Ashley Swanson. 2016. "Marketplace Plans With Narrow Physician Networks Feature Lower Monthly Premiums Than Plans With Larger Networks." *Health Affairs* 35 (10): 1842–48. https://doi.org/10.1377/hlthaff.2016.0693.
- Pope, Chris. 2019. "End Hospitals' Right to a Blank Check for Emergency Care." *Economics21* (blog). May 3, 2019. https://economics21.org/end-hospital-emergency-medical-billing-blank-check.
- Pope, Devin G. 2009. "Reacting to Rankings: Evidence from 'America's Best Hospitals." *Journal of Health Economics* 28 (6): 1154–65. https://doi.org/10.1016/j.jhealeco.2009.08.006.
- Prager, Elena, and Nicholas Tilipman. 2020. "Regulating Out-of-Network Hospital Payments: Disagreement Payoffs, Negotiated Prices, and Access." https://sites.google.com/view/eprager/research.
- Rice, Sabriya. 2017. "Tenet Healthcare Hospitals Will Be Back In-Network for Humana by October." *Dallas Morning News*, May 2, 2017. https://www.dallasnews.com/business/healthcare/2017/05/02/tenet-healthcare-hospitals-will-be-back-in-network-for-humana-byoctober/.
- Roy, Avik. 2019. "Improving Hospital Competition: A Key to Affordable Health Care." Foundation for Research on Equal Opportunity. https://freopp.org/improving-hospital-competition-a-key-to-affordable-medicine-343e9b5c70f.
- Rubinstein, Ariel. 1982. "Perfect Equilibrium in a Bargaining Model." *Econometrica* 50 (1): 97–109. https://doi.org/10.2307/1912531.
- Saltzman, Evan. 2019. "Demand for Health Insurance: Evidence from the California and Washington ACA Exchanges." *Journal of Health Economics* 63 (January): 197–222. https://doi.org/10.1016/j.jhealeco.2018.11.004.
- Sances, Michael W., and Joshua D. Clinton. 2019. "Who Participated in the ACA? Gains in Insurance Coverage by Political Partisanship." *Journal of Health Politics, Policy and Law* 44 (3): 349– 79. https://doi.org/10.1215/03616878-7366988.
- Schaefer, Nina Owcharenko, and Robert E. Moffit. 2020. "The Public Option: Single Payer on the Installment Plan." Heritage Foundation. https://www.heritage.org/sites/default/files/2020-02/BG3462\_0.pdf.
- Shapiro, Bradley T. 2020. "Advertising in Health Insurance Markets." *Marketing Science* 39 (3): 587–611. https://doi.org/10.1287/mksc.2018.1086.
- Shepard, Mark. 2016. "Hospital Network Competition and Adverse Selection: Evidence from the Massachusetts Health Insurance Exchange." Working Paper. Cambridge, MA: National Bureau of Economic Research. https://doi.org/10.3386/w22600.
- Skinner, Jonathan, Elliott Fisher, and James Weinstein. 2014. "The 125 Percent Solution: Fixing Variations in Health Care Prices." *Health Affairs Blog* (blog). August 26, 2014. https://www.healthaffairs.org/do/10.1377/hblog20140826.041002/full/.

Skopec, Laura, Robert A. Berenson, and Judith Feder. 2018. "Why Do Medicare Advantage Plans Have Narrow Networks?" Urban Institute. https://www.urban.org/sites/default/files/publication/99414/why\_do\_medicare\_advantag e\_plans\_have\_narrow\_networks.pdf.

Song, Zirui. 2017. "Using Medicare Prices – Toward Equity and Affordability in the ACA Marketplace." *New England Journal of Medicine* 377 (24): 2309–11. https://doi.org/10.1056/NEJMp1710020.

Song, Zirui, Yunan Ji, Dana G. Safran, and Michael E. Chernew. 2019. "Health Care Spending, Utilization, and Quality 8 Years into Global Payment." *New England Journal of Medicine* 381 (3): 252–63. https://doi.org/10.1056/NEJMsa1813621.

Song, Zirui, William Johnson, Kevin Kennedy, Jean Fuglesten Biniek, and Jacob Wallace. 2020. "Out-Of-Network Spending Mostly Declined In Privately Insured Populations With A Few Notable Exceptions From 2008 To 2016." *Health Affairs* 39 (6): 1032–41. https://doi.org/10.1377/hlthaff.2019.01776.

Tebaldi, Pietro. 2017. "Estimating Equilibrium in Health Insurance Exchanges: Price Competition and Subsidy Design under the ACA." SSRN Scholarly Paper ID 3020103. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=3020103.

Tirole, Jean. 1988. The Theory of Industrial Organization. The MIT Press.

Trish, Erin, Paul Ginsburg, Laura Gascue, and Geoffrey Joyce. 2017. "Physician Reimbursement in Medicare Advantage Compared with Traditional Medicare and Commercial Health Insurance." *JAMA Internal Medicine* 177 (9): 1287–95. https://doi.org/10.1001/jamainternmed.2017.2679.

Twedt, Steve. 2019. "Feds May Be Taking Another Look at UPMC Pre-Payment Policy." *Pittsburgh Post-Gazette*, June 4, 2019. https://www.post-gazette.com/business/healthcare-business/2019/06/04/UPMC-Highmark-Health-and-Human-Services-Azar-Casey-prepayment-network-Medicare-Advantage/stories/201906040142.

University of Pittsburgh Medical Center (UPMC). 2019. "Frequently Asked Questions for Highmark Medicare Advantage Enrolles Who Wish to Access UPMC Services on an Out-of-Network Basis after June 30, 2019." https://www.upmc.com/-/media/upmc/patientsfamilies/choice-is-vital/medicareadvancepay.pdf.

Wallace, Jacob, and Zirui Song. 2016. "Traditional Medicare versus Private Insurance: How Spending, Volume, and Price Change at Age Sixty-Five." *Health Affairs* 35 (5): 864–72. https://doi.org/10.1377/hlthaff.2015.1195.

Whaley, Christopher M., Brian Briscombe, Rose Kerber, Brenna O'Neill, and Aaron Kofner. 2020. "Nationwide Evaluation of Health Care Prices Paid by Private Health Plans: Findings from Round 3 of an Employer-Led Transparency Initiative." RAND Corporation. https://www.rand.org/pubs/research\_reports/RR4394.html.

White, Chapin. 2013. "Contrary To Cost-Shift Theory, Lower Medicare Hospital Payment Rates For Inpatient Care Lead To Lower Private Payment Rates." *Health Affairs* 32 (5): 935–43. https://doi.org/10.1377/hlthaff.2012.0332.

White, Chapin, and Christopher M. Whaley. 2019. "Prices Paid to Hospitals by Private Health Plans Are High Relative to Medicare and Vary Widely: Findings from an Employer-Led Transparency Initiative." RAND Corporation. https://www.rand.org/pubs/research\_reports/RR3033.html.

Yu, Xiaowei, and Keith Waehrer. 2018. "Recursive Nash-in-Nash Bargaining Solution." SSRN Scholarly Paper ID 3319517. Rochester, NY: Social Science Research Network. https://doi.org/10.2139/ssrn.3319517.

Zuckerman, Stephen, Laura Skopec, and Marni Epstein. 2017. "Medicaid Physician Fees after the ACA Primary Care Fee Bump." Urban Institute. https://www.urban.org/sites/default/files/publication/88836/2001180-medicaid-

physician-fees-after-the-aca-primary-care-fee-bump\_0.pdf.

Zycher, Benjamin. 2007. "Comparing Public and Private Health Insurance: Would a Single-Payer System Save Enough to Cover the Uninsured?" Manhattan Institute. https://www.manhattan-institute.org/html/comparing-public-and-private-health-insurance-would-single-payer-system-save-enough-cover.

# Appendix A Model of Capping Provider Prices

This appendix presents a model of provider-insurer bargaining that formalizes most of the discussion of price cap policies that was presented in the main text. The model examines a setting in which a single insurer bargains with a single provider over whether the provider will see the insurer's patients and, if so, what price the insurer will pay and what coverage the insurer will offer for the provider's services. The outcome of provider-insurer negotiations is determined by Nash bargaining, following considerable recent literature on provider-insurer bargaining (e.g., Gowrisankaran, Nevo, and Town 2015; Clemens and Gottlieb 2016; Ho and Lee 2017; Cooper, Scott Morton, and Shekita 2020).

Many of the price cap policies considered here affect negotiated prices primarily or entirely by changing what happens if the provider and insurer fail to reach a network agreement. Some other recent work on provider-insurer bargaining in commercial insurance markets has also emphasized the importance of disagreement outcomes (e.g., Cooper, Scott Morton, and Shekita 2020; Prager and Tilipman 2020), and research examining the prices private insurers negotiate in Medicare Advantage has emphasized similar themes (Berenson et al. 2015; Baker et al. 2016; Trish et al. 2017; Maeda and Nelson 2018; Pelech 2020). To that end, I examine two approaches to modeling disagreement outcomes: in the first, I assume that reputational considerations allow the parties to credibly commit to disagreement outcomes, while in the second I assume that commitment is not possible.

The remainder of this appendix proceeds as follows. I first specify the model primitives, the Nash bargaining framework, and the two approaches I use to model disagreement outcomes. I then analyze, in turn, an out-of-network cap, an out-of-network "cap and floor" policy, a comprehensive price cap, and a default contract policy. The final section describes how the figures in the main text were produced. Proofs and other technical details related to this appendix are in Appendix D.

### A.I Model Setup

This section establishes the modeling framework for the rest of this appendix. I specify, in turn, the model primitives, the Nash bargaining framework that governs provider-insurer negotiations, and the process that determines outcomes in the absence of an agreement. I then briefly characterize the solution to the Nash bargaining problem when negotiated prices are unconstrained, as well as equilibrium outcomes under the status quo without any form of price cap.

### A.I.I Model Primitives

I consider a setting in which a single insurer bargains with a single provider.<sup>89</sup> The provider sets the price  $p \in \mathbb{R}$  it charges for its services and the fraction  $a \in [0,1]$  of the insurer's patients it accepts. The insurer determines the terms under which it will cover care the provider delivers to its enrollees, which I represent by some coverage level  $l \in [0,1]$ . Setting l = 1 should be understood to correspond to providing complete coverage, while l = 0 corresponds to providing no coverage at all. The coverage level l may be understood to encompass all relevant aspects of plan design, including cost-sharing requirements, prior authorization requirements, and referral requirements.

I do not explicitly model the insurance market. Rather, following the approach of Gowrisankaran, Nevo, and Town (2015), I assume that each insurer's enrollment is exogenously fixed (and normalized to one) and assume that longer-term competitive pressures ensure that insurers act as good agents for their enrollees. This assumption allows me to focus the analysis on the bargaining process between the insurer and provider and likely has little effect on the main conclusions that emerge from the model.

<sup>&</sup>lt;sup>89</sup> My main conclusions would likely generalize to a model with multiple insurers bargaining with multiple providers, but doing so would add considerable complexity, likely in exchange for little additional insight.

The insurer therefore seeks to maximize the value its enrollees realize from receiving health care net of the cost of that care, which enrollees bear as premiums. That is, the insurer's objective function is:

$$W(p, l, a) = a [V(Q(p, l)) - pQ(p, l)],$$

where Q(p, l) is per enrollee consumption of health care services, determined as a function of the insurer's coverage decision *l* and the provider's price *p* (if the provider serves the insurer's patients), and V(Q) is the value the insurer's enrollees derive from a given volume of the provider's services.

The provider's objective function is simply its profits:

$$\pi(p,l,a) = aQ(p,l) [p-c],$$

where *c* is the provider's marginal cost of delivering an additional service.

To facilitate the analysis that follows, I make the following assumptions:

- Assumption A1 (Demand): The function Q is twice continuously differentiable, with  $Q_l(p,l) > 0$ , and  $Q_{pl}(p,l) \ge 0$  for all  $p \in \mathbb{R}$  and  $l \in [0,1]$ . For all  $p \in \mathbb{R}$ ,  $Q_p(p,l) < 0$  if l < 1 and  $Q_p(p,1) = 0$ .
- Assumption A2 (Value of services): The function *V* is twice continuously differentiable, with V'(Q) > 0 and V''(Q) < 0. Additionally, V'(0) > c, and *V* is normalized so V(0) = 0.
- Assumption A3 (Importance of coverage): The insurer's ability to affect demand for the provider's service is sufficiently strong that V'(Q(p, 1)) < c < V'(Q(p, 0)) for all  $p \in \mathbb{R}$ .
- Assumption A4 (Technical conditions): For all values of  $p \in \mathbb{R}$ ,

$$\frac{d}{dp} \left[ V'(Q(p,l)) \right] \equiv V''(Q(p,l))Q_p(p,l) \le 1,$$

with the inequality strict for l > 0. Additionally, for any l < 1, there exists some  $\epsilon > 0$ , such that

$$\frac{d}{dp} \left[ -\frac{Q(p,l)}{Q_p(p,l)} \right] \equiv -1 + Q_{pp}(p,l) \frac{Q(p,l)}{Q_p(p,l)^2} < 1 - V''(Q(p,l))Q_p(p,l) - \epsilon$$

for all  $p \in \mathbb{R}$ .

The assumptions are largely intuitive, but a few comments are warranted. The requirement in Assumption A2 that V'(0) > c ensures that it is optimal for the provider to deliver some care to the insurer's enrollees. Assumption A3 ensures that it is always possible to reach the "efficient" utilization level, which simplifies the analysis, but could be relaxed while preserving the main conclusions.

Assumption A4 ensures that the parties' payoff functions are reasonably well-behaved. The first part requires that the value enrollees place on the marginal service rises no more than one-for-one with the price. In essence, this assumption imposes a limited degree of consistency between enrollees' demand behavior (captured in Q) and their underlying valuation of services (captured in V).

The second part of the assumption limits how quickly the magnitude of the inverse semi-elasticity of demand rises as prices rise. Equivalently, it limits how quickly the sensitivity of enrollees' demand for

care to the provider's price falls off as the price rises. This ensures that the provider faces a meaningful demand constraint and does not wish to set an infinite price absent a negotiated agreement.

Notably, the second part of assumption A4 rules out the possibility that some enrollees' decisions are completely insensitive to prices, so this assumption may be unrealistic in emergency situations or in settings where "surprise billing" is common. But adapting the model to these cases would likely be straightforward. Even in these cases, prices are still constrained by other factors, including challenges in collecting from enrollees (or insurers) and fears that setting too high a price will trigger social disapproval. If Assumption A4 were relaxed and these types of factors were incorporated, the analysis that follows would likely proceed with minimal changes to the qualitative conclusions.

#### A. I.2 Nash Bargaining Framework

I assume that providers and insurers bargain over network agreements (p, l, a), which specify the fraction of the insurer's patients that will have access to the provider's services (a), the price the insurer will pay for those services (p), and the coverage the insurer will offer for those services (l). I assume that negotiated outcomes are determined by Nash bargaining, which, as discussed earlier in the main text, has become a workhorse approach to modeling provider-insurer network negotiations.

Under Nash bargaining, the negotiated network agreement solves the maximization problem:

$$(p^*, l^*, a^*) = \underset{\substack{p \in \mathcal{P} \\ l \in [0,1] \\ a \in [0,1]}}{\operatorname{argmax}} \left[ W(p, l, a) - \widetilde{W} \right]^{\theta} \times [\pi(p, l, a) - \widetilde{\pi}]^{1-\theta},$$
(A1)

where  $\widetilde{W}$  and  $\widetilde{\pi}$  are, respectively, the insurer and provider's payoffs if they fail to reach agreement, the set  $\mathcal{P} \subset \mathbb{R}$  is a closed set of permissible negotiated prices (which depends on the policy scenario under consideration), and  $\theta \in (0,1)$  is the insurer's bargaining weight. A higher value of  $\theta$  leads to better outcomes for the insurer, while a lower value of  $\theta$  leads to better outcomes for the provider. The parameter  $\theta$  is commonly interpreted as reflecting the parties' bargaining "skill" or relative patience.

As I demonstrate below, the Nash bargaining problem (A1) has a unique solution in all of the scenarios considered in this appendix. Thus, for future reference, I let  $p^*(\tilde{W}, \tilde{\pi}, \mathcal{P})$ ,  $l^*(\tilde{W}, \tilde{\pi}, \mathcal{P})$ , and  $a^*(\tilde{W}, \tilde{\pi}, \mathcal{P})$  denote the solution to (A1) for disagreement payoffs  $\tilde{W}$  and  $\tilde{\pi}$  and a set of permissible prices  $\mathcal{P}$ .

The characteristics of this solution depend in important ways on the form of the set  $\mathcal{P}$ , so I defer a full characterization of the solution until later in this appendix. However, it is immediately apparent that the disagreement payoffs  $\tilde{W}$  and  $\tilde{\pi}$  will play a major role in determining the negotiated outcome. In particular, it is easy to see that increasing  $\tilde{W}$  will, all else equal, weakly increase  $W(p^*, l^*, a^*)$  and weakly reduce  $\pi(p^*, l^*, a^*)$ . An increase in  $\tilde{\pi}$  has the opposite effect. Given the importance of the disagreement payoffs in determining negotiated outcomes, I now discuss how they are determined.

#### A.1.3 Modeling the Disagreement Payoffs

I assume that the disagreement payoffs reflect the actions the parties expect to be taken in the absence of a network agreement. Formally, the provider's disagreement actions consist of selecting a fraction  $\tilde{a}$  of the insurer's patients to accept that lies in some closed set  $\tilde{\mathcal{A}} \subset [0,1]$ , and a price  $\tilde{p}$  in some closed set  $\tilde{\mathcal{P}} \subset \mathbb{R}$ , which I call the provider's "charge."<sup>90</sup> The insurer's disagreement action is to select out-of-

<sup>&</sup>lt;sup>90</sup> As discussed in the main text and above, providers are typically not able to collect their full charges for out-of-network care. I abstract from that fact in this appendix but, as noted above, incorporating this feature of the real world would not change the model's qualitative conclusions.
network coverage terms  $\tilde{l}$  in some closed set  $\tilde{\mathcal{L}} \subset [0,1]$ . The sets  $\tilde{\mathcal{A}}, \tilde{\mathcal{P}}$ , and  $\tilde{\mathcal{L}}$  vary in what follows depending on the policies in place and whether providers can feasibly reject patients.

Given these disagreement actions, the parties' disagreement payoffs are then  $\widetilde{W} = W(\widetilde{p}, \widetilde{l}, \widetilde{a})$  and  $\widetilde{\pi} = \pi(\widetilde{p}, \widetilde{l}, \widetilde{a})$ . As long as  $\widetilde{\mathcal{P}} \subset \mathcal{P}$ , as will always be the case here, this model for the disagreement payoffs ensures that the Nash bargaining problem (A1) always has at least one solution.<sup>91</sup>

I model determination of the disagreement actions  $(\tilde{p}, \tilde{l}, \tilde{a})$  in two ways. Under the first approach, the parties can credibly commit to the actions they will take if negotiations break down. Under the second approach, commitment is not possible. As will become clear, these two approaches have markedly different implications for how the price cap policies will affect negotiated prices.

With commitment. Under this approach, the parties simultaneously announce their disagreement actions prior to bargaining. Because commitment is possible, the parties expect those actions to be implemented if negotiations do in fact break down. The parties thus choose disagreement actions to maximize their respective bargained payoffs,  $W(p^*, l^*, a^*)$  and  $\pi(p^*, l^*, a^*)$ . I seek a pure strategy Nash equilibrium of the resulting game, and I show later that all such equilibria lead to the same disagreement payoffs. This is the "Nash bargaining with variable threats" model of Nash (1953).

It is important to note that, consistent with the discussion following equation (A1), each party will generally benefit not only from improving its own disagreement payoff, but also from worsening the other party's disagreement payoff. Indeed, a party will often choose disagreement actions that would harm its own interests if implemented, provided that those actions would harm the other party even more. This implies that the parties will often threaten to take actions that they would wish to renege on if given the opportunity to do so. Thus, the parties' ability to commit actually matters.

True binding commitments are not possible in practice. However, insurers and providers do interact repeatedly, and it will generally be to each party's advantage to develop a reputation for following through on its threats. Indeed, Abreu and Pearce (2007; 2015) argue that these types of reputational effects make the Nash bargaining with variable threats outcome the most plausible outcome in a broad class of bargaining games with repeated interactions. Moreover, as discussed in the main text, providers and insurers routinely make (and follow through on) similar threats under the status quo, suggesting that the assumption that the parties can commit is empirically reasonable.

**Without commitment.** Nevertheless, I also consider a second approach in which commitment is not possible. Under this approach, I assume that each party will simultaneously announce disagreement actions if negotiations do in fact break down and, correspondingly, that each party will select actions that maximize its disagreement payoff (*not* its bargained payoff). As in the case with commitment, I seek a pure strategy Nash equilibrium of this game. I show later that, in cases where there are multiple equilibria, all generate the same disagreement payoffs.

#### A.1.4 Bargained Agreements When Negotiated Prices are Unregulated

I now characterize the solution to the bargaining problem (A1) when negotiated prices are unregulated; that is, when  $\mathcal{P} = \mathbb{R}$ . This case encompasses not just scenarios without a price cap, but also scenarios with an out-of-network cap, a "cap and floor" out-of-network policy, and a default contract policy, so

<sup>&</sup>lt;sup>91</sup> In particular, consider the set  $\Omega$  of payoff tuples  $(W', \pi')$  that satisfy  $W' \ge \widetilde{W}$  and  $\pi' \ge \widetilde{\pi}$ , as well as W' = W(p, l, a) and  $\pi' = \pi(p, l, a)$  for some permissible network agreement (p, l, a). The fact that  $\widetilde{W} = W(\widetilde{p}, \widetilde{l}, \widetilde{a})$  and  $\widetilde{\pi} = \pi(\widetilde{p}, \widetilde{l}, \widetilde{a})$  ensures that  $\Omega$  is non-empty. It is also easily seen that  $\Omega$  is compact. The continuity of the maximand in (A1) then implies that (A1) has at least one solution. I return to uniqueness later.

results for this case will be relevant throughout most of this appendix. I address the case of a comprehensive price cap, which does directly constrain negotiated prices, in section A.5.

As shown formally in Appendix D, the unique bargained outcome has  $a^* = 1$  and  $p^*$  and  $l^*$  satisfying

$$V'(Q) = c \tag{A2}$$

$$p^*Q = cQ + (1-\theta)[V(Q) - cQ] + \theta\tilde{\pi} - (1-\theta)\tilde{W},$$
(A3)

where the dependence of Q on  $p^*$  and  $l^*$  is suppressed to streamline notation.

These conditions have intuitive interpretations. The combination of  $a^* = 1$  and equation (A2) shows that the provider and insurer strike an "efficient" bargain in the sense that the provider delivers all services for which the marginal benefit to the enrollee (weakly) exceeds the provider's marginal cost.<sup>92</sup> Notably, the parties are predicted to agree on this outcome regardless of the disagreement outcomes. This is intuitive: the parties are always best served by maximizing their joint surplus and then setting a price that allocates that surplus between them in accordance with the strength of their bargaining positions. Note that because *V* is strictly concave, there is a unique quantity  $Q^*$  such that  $V'(Q^*) = c$ .

Equation (A3) shows that the provider's revenue is the sum of three things: the provider's costs; a share  $1 - \theta$  of the surplus generated by the care delivered under an agreement; and, crucially, a term  $\theta \tilde{\pi} - (1 - \theta) \tilde{W}$  that depends on the payoffs each party would achieve if negotiations broke down. The form of this final term shows that the provider can secure a more favorable agreement by *either* increasing its disagreement profits *or* reducing the insurer's disagreement payoff; the reverse is true for the insurer. This fact will prove important in the discussion that follows.

Because the quantity of services delivered under a negotiated agreement is independent of the disagreement payoffs *and* the disagreement payoffs enter (A<sub>3</sub>) in a simple linear way when negotiated prices are unregulated, it is possible to nest the two models for determining disagreement actions inside a single unified model of the "disagreement game." This nested form will be convenient below. In particular, the disagreement actions ( $\tilde{p}, \tilde{l}, \tilde{a}$ ) can be taken to be the Nash equilibrium outcomes from a simultaneous move game in which the provider's and the insurer's respective payoffs are given by:

$$d^{P}(\tilde{p},\tilde{l},\tilde{a}) \equiv [1 - \gamma(1 - \theta)]\pi(\tilde{p},\tilde{l},\tilde{a}) - \gamma(1 - \theta)W(\tilde{p},\tilde{l},\tilde{a})$$
(A4)

$$d^{I}(\tilde{p},\tilde{l},\tilde{a}) \equiv -\gamma \theta \pi(\tilde{p},\tilde{l},\tilde{a}) + [1-\gamma \theta] W(\tilde{p},\tilde{l},\tilde{a})$$
(A5)

where  $\gamma \in \{0,1\}$ . It is easy to verify that, when  $\gamma = 1$ , this game will generate the same disagreement actions as the approach with commitment outlined above. Similarly, when  $\gamma = 0$ , it will generate the same disagreement actions as the approach without commitment outlined above.

#### A.1.5 Equilibrium Outcomes in the Absence of a Price Cap

To provide a baseline for the remainder of the analysis, I now characterize outcomes in the absence of any form of price cap (in formal terms, when  $\mathcal{P} = \tilde{\mathcal{P}} = \mathbb{R}$  and  $\tilde{\mathcal{L}} = [0,1]$ ). I consider outcomes both when the provider is barred from rejecting patients absent an agreement (in formal terms, when  $\tilde{\mathcal{A}} = \{1\}$ ) and when the provider can reject patients (in formal terms, when  $\tilde{\mathcal{A}} = [0,1]$ ).

<sup>&</sup>lt;sup>92</sup> The provider and insurer are able to strike an efficient bargain because the insurer's payoff depends on its choice of coverage terms *l* solely through its effect on the utilization *Q*. In reality, changing cost-sharing, prior authorization, and other requirements could have direct effects on enrollees' well-being. A model capturing this possibility would be harder to analyze but would likely lead to qualitatively similar conclusions.

Proposition A1 characterizes these outcomes. The proof is in Appendix D, but I discuss the intuition behind the proposition below. For future reference, I let  $\tilde{p}_{nocap}$  and  $\tilde{l}_{nocap}$  denote the equilibrium disagreement charge and coverage terms, respectively, (which the proposition shows do not depend on whether the provider can reject patients), and let  $p_{nocap}^*$  denote the corresponding negotiated price.

**Proposition A1.** The game without a price cap has a unique pure strategy equilibrium, and the equilibrium does not depend on whether the provider can reject patients absent an agreement. In that equilibrium, the provider always accepts out-of-network patients (that is,  $\tilde{a} = 1$ ),  $Q(\tilde{p}_{nocap}, \tilde{l}_{nocap}) < Q^*$ , and  $p_{nocap}^* < \tilde{p}_{nocap}$ . When the parties can commit to their disagreement actions,  $\tilde{l}_{nocap} = 0$ .

One important conclusion is that, without a price cap, the provider never wishes to reject patients absent an agreement. When the provider cannot commit to disagreement actions, this follows from the fact that the provider chooses its disagreement actions to maximize its short-run profit. The provider's best response obviously must have  $\tilde{p} > c$ , which in turn implies that its best response cannot have  $\tilde{a} < 1$  since the alternative of  $\tilde{a} = 1$  would generate strictly higher profits.

When the provider can commit to its disagreement actions, it chooses disagreement actions to maximize  $d^{P}(\tilde{p}, \tilde{l}, \tilde{a})$ , which depends positively on its profits and negatively on the insurer's payoff. Setting a sufficiently high charge  $\tilde{p}$  ensures that  $d^{P}(\tilde{p}, \tilde{l}, 1)$  is strictly positive, which implies that the provider's best response must result in  $d^{P}(\tilde{p}, \tilde{l}, \tilde{a})$  being positive. This implies that playing  $\tilde{a} = 0$  cannot be a best response. Similarly, the provider cannot play  $\tilde{a} < 1$  since the alternative of  $\tilde{a} = 1$  would generate a strictly larger payoff. Note, however, that the unattractiveness of turning away the insurer's patients hinges on the provider's ability to set a high enough price absent an agreement. Indeed, as shown below, the provider's preferred action can change if its charge is capped.

Another notable finding is that  $Q(\tilde{p}_{nocap}, \tilde{l}_{nocap}) < Q^*$ . That is, absent an agreement between the insurer and the provider, the quantity of care is constrained below its efficient level. To see why this is the case, it is useful to examine the parties' incentives in choosing disagreement actions  $\tilde{p}$  and  $\tilde{l}$ . Differentiating the functions  $d^P$  and  $d^I$  defined in (A4) and (A5) yields:

$$\frac{d}{d\tilde{p}}d^{p}(\tilde{p},\tilde{l},1) = \tilde{Q} + \tilde{Q}_{p}\left[\tilde{p} - c - \gamma(1-\theta)\{V'(\tilde{Q}) - c\}\right]$$
(A6)

$$\frac{d}{d\tilde{l}}d^{l}(\tilde{p},\tilde{l},1) = -\tilde{Q}_{l}[\tilde{p} + \gamma\theta\{V'(\tilde{Q}) - c\} - V'(\tilde{Q})],$$
(A7)

where I have defined  $\tilde{Q} \equiv Q(\tilde{p}, \tilde{l}), \tilde{Q}_p \equiv Q_p(\tilde{p}, \tilde{l})$ , and  $\tilde{Q}_l \equiv Q_l(\tilde{p}, \tilde{l})$  to simplify notation.

When considering the disagreement game without commitment (that is, the case where  $\gamma = 0$ ), the provider's first-order condition is the standard first-order condition for a monopolist, and the provider correspondingly sets a disagreement price above its marginal cost. The insurers sets its out-of-network coverage terms to equate the charge  $\tilde{p}$  and the marginal value of care  $V'(\tilde{Q})$ , so the provider's high price leads the insurer to set coverage terms that cause its enrollees to underconsume the provider's care.

These dynamics are much stronger with commitment (that is, the case where  $\gamma = 1$ ). Examining (A6) shows that the provider acts as if its marginal cost is  $c + (1 - \theta)\{V'(\tilde{Q}) - c\}$ , rather than just *c*. This additional term is positive in equilibrium, so the provider sets a charge  $\tilde{p}$  above the ordinary profitmaximizing charge. Intuitively, this additional term arises because the provider can increase the negotiated price either by increasing its disagreement payoff or by *reducing* the insurer's disagreement payoff. Increasing its charge beyond the ordinary profit maximizing level has no first-order effect on its profits, but does harm the insurer, so it improves the provider's bargaining position overall.

Similarly, examining (A7) shows that the insurer acts as if is charged a price  $\tilde{p} + \theta \{V'(\tilde{Q}) - c\}$ , rather than just  $\tilde{p}$ . Thus, it sets stingier out-of-network coverage terms than it otherwise would. Paralleling the logic for the provider, the insurer is willing to do this because reducing coverage slightly below the level that would ordinarily maximize its enrollees' well-being has no first-order effect on the insurer's payoff, but does reduce the provider's profits and thus improves the insurer's bargaining position overall. The proposition demonstrates that, in the case with commitment, the feedback between the provider's desire to set a high price and the insurer's desire to set stingy coverage terms is so strong that the insurer ends up setting  $\tilde{l}_{nocap} = 0$  in equilibrium. That is, in equilibrium, the insurer provides no out-of-network coverage for the provider's services.

### A.2 Effects of an Out-of-Network Cap

With the basic modeling framework established, I now consider how introducing an out-of-network cap would affect the outcome of provider-insurer negotiations. For these purposes, I model an out-of-network price cap as an upper limit  $\overline{p} \ge c$  on the charge  $\tilde{p}$  the provider can set in the absence of a network agreement. The set of charges the provider can choose from in the absence of a network agreement is thus  $\tilde{\mathcal{P}} = [0, \bar{p}]$ . Importantly, this policy leaves negotiated prices unrestricted, so the set of permissible negotiated prices is  $\mathcal{P} = \mathbb{R}$ . Similarly, an out-of-network cap policy does not regulate the level of coverage insurers offer for out-of-network services, so  $\tilde{\mathcal{L}} = [0, 1]$ .

The rest of this section considers how an out-of-network cap affects negotiated outcomes in scenarios where providers either can or cannot reject out-of-network patients. In brief, I show that an out-of-network cap can have large effects on negotiated prices when providers cannot reject out-of-network patients but may have considerably smaller effects when providers can reject patients.

#### A.2.1 Outcomes When Providers Cannot Reject Patients

I begin by considering how an out-of-network cap would affect negotiated prices when the provider cannot reject patients absent an agreement (that is, when  $\tilde{\mathcal{A}} = \{1\}$ ). Proposition A2 characterizes outcomes in this case. Again, I defer the proof to Appendix D but discuss the intuition here.

For reference here and later in the appendix, I let  $\tilde{p}_{out}(\bar{p})$  and  $\tilde{l}_{out}(\bar{p})$  denote the equilibrium disagreement charge and coverage terms for an out-of-network cap  $\bar{p}$ , respectively, and let  $p_{out}^*(\bar{p})$  denote the corresponding negotiated price. In Proposition A2 and the ensuing discussion, I largely (though not entirely) suppress the dependence of these amounts on  $\bar{p}$  in order to streamline notation.

**Proposition A2.** The game with an out-of-network cap  $\bar{p} \ge c$  in which the provider cannot reject patients has a unique pure strategy Nash equilibrium. The equilibrium has the following properties:

- (i) The provider's disagreement charge  $\tilde{p}_{out}$  has  $\tilde{p}_{out} = \bar{p}$  for  $\bar{p} \in [c, \tilde{p}_{nocap})$  and  $\tilde{p}_{out} = \tilde{p}_{nocap}$  for  $\bar{p} \ge \tilde{p}_{nocap}$ . The insurer's disagreement coverage terms  $\tilde{l}_{out}$  satisfy  $\tilde{l}_{out} \ge \tilde{l}_{nocap}$ , with strict inequality for sufficiently small values of  $\bar{p}$  and equality for  $\bar{p} \ge \tilde{p}_{nocap}$ . Further,  $Q(\tilde{p}_{out}, \tilde{l}_{out}) > Q(\tilde{p}_{nocap}, \tilde{l}_{nocap})$  for  $\bar{p} < \tilde{p}_{nocap}$  and  $Q(\tilde{p}_{out}, \tilde{l}_{out}) = Q^*$  for  $\bar{p} = c$ .
- (ii) The negotiated price  $p_{out}^*$  satisfies  $p_{out}^* \leq \bar{p}$  for all  $\bar{p}$ , with equality only for  $\bar{p} = c$ , and  $p_{out}^* = p_{nocap}^*$  for  $\bar{p} \geq \tilde{p}_{nocap}$ . Further,  $p_{out}^*$  is a continuous function of  $\bar{p}$ , and  $p_{out}^*$  is differentiable as a function of  $\bar{p}$  except possibly at one or two values of  $\bar{p}$ , with  $(p_{out}^*)'(\bar{p}) \leq Q(\tilde{p}_{out}, \tilde{l}_{out}) / Q^* \leq 1$  and the second inequality strict unless  $\bar{p} = c$ . Additionally:
  - a. When the parties cannot commit to disagreement actions, there exists some  $\tilde{p}' > p_{\text{nocap}}^*$  such that the negotiated price  $p_{\text{out}}^*$  satisfies  $p_{\text{out}}^* < p_{\text{nocap}}^*$  if  $\bar{p} < \tilde{p}'$ .

b. When the parties can commit to disagreement actions, the negotiated price  $p_{out}^*$  is strictly increasing in  $\bar{p}$  and satisfies  $p_{out}^* < p_{nocap}^*$  for all  $\bar{p} < \tilde{p}_{nocap}$ . Further,  $(p_{out}^*)'(\tilde{p}_{nocap}) = 0$ .

The introduction of an out-of-network cap makes failing to reach agreement with the provider far more attractive for the insurer. As described in part (i) of Proposition A2, once the out-of-network cap  $\bar{p}$  falls below  $\tilde{p}_{nocap}$ , the provider is constrained to instead set a charge  $\tilde{p}_{out} = \bar{p}$ . For a sufficiently low out-of-network cap, the constrained charge makes it attractive for the insurer to increase the generosity of its out-of-network coverage (that is, to set  $\tilde{l}_{out} > \tilde{l}_{nocap}$ ), giving its enrollees a level of access to the provider's services closer to what they would have under a network agreement. Indeed, for an out-of-network cap equal to the provider's marginal cost, the insurer sets coverage terms that lead to the insurer's enrollees receiving the efficient volume of services  $Q^*$  even without an agreement.

Part (ii) of Proposition A2 shows that, as a result of the above, the insurer can now negotiate a price  $p_{out}^*$  no higher than the out-of-network cap  $\bar{p}$ . Notably, this implies that a stringent enough out-of-network cap can achieve any negotiated price weakly above the provider's marginal cost.

Importantly, the introduction of an out-of-network cap can exert some downward pressure on negotiated prices even if set above the pre-policy negotiated price  $p_{nocap}^*$ . Indeed, when commitment is possible, any out-of-network cap below  $\tilde{p}_{nocap}$  reduces negotiated prices. When commitment is not possible, introducing an out-of-network cap set only slightly below  $\tilde{p}_{nocap}$  can theoretically increase negotiated prices, but an out-of-network cap close enough to  $p_{nocap}^*$  still reduces negotiated prices.<sup>93</sup>

Intuitively, even a relatively loose out-of-network cap can have some effect because its presence makes failing to reach a network agreement marginally more attractive for the insurer and, thus, marginally increases the insurer's willingness to hold out for a better deal. The effect of a loose cap will generally, however, be relatively small. Indeed, part (ii).b of Proposition A2 shows that, when the parties can commit to disagreement actions,  $(p_{out}^*)'(\tilde{p}_{nocap}) = 0$ , which indicates that imposing a cap slightly below the provider's pre-policy charge will reduce negotiated prices by a negligible amount. This reflects the fact that the provider chose  $\tilde{p}_{nocap}$  to maximize its bargaining leverage, so forcing the provider to set a slightly lower charge has no first-order effect on its bargaining position. More generally, the bound  $(p_{out}^*)'(\bar{p}) \leq Q(\tilde{p}_{out}, \tilde{l}_{out}) / Q^*$  demonstrates that tightening the cap will only have a meaningful effect on negotiated prices if the cap is set at a level that induces the insurer to set coverage terms that result in a significant volume of services being delivered in the absence of a network agreement.

#### A.2.2 Outcomes When Providers Can Reject Patients

I now examine how the effects of an out-of-network cap change when providers can reject out-ofnetwork patients (that is, when  $\tilde{A} = [0,1]$ ). The effect of an out-of-network cap now depends on whether a provider can commit to its disagreement actions and, thus, credibly threaten to turn away

<sup>&</sup>lt;sup>93</sup> The reason an out-of-network cap slightly below  $\tilde{p}_{nocap}$  can increase negotiated prices when commitment is not possible is somewhat subtle. The cap effectively allows the provider to commit to setting a charge  $\tilde{p}_{out}$  below its unilateral profitmaximizing charge. That commitment induces the insurer to offer more generous out-of-network coverage. The resulting increase in volume generates a first-order increase in the provider's disagreement payoff more than sufficient to offset the second-order reduction in its payoff from the lower price. Under some circumstances, the increase in the provider's disagreement payoff can be large enough to offset the corresponding improvement in the insurer's disagreement payoff and thus strengthen the provider's bargaining position on net. The expressions for  $(p_{out}^*)'$  that are derived in the proof of Proposition A2 show that this is most likely to be the case when  $\theta$  is very close to one.

the insurer's patients absent a network agreement. Proposition A3 characterizes the outcomes in this case. I defer the proof to Appendix D but discuss the intuition behind the proposition below.<sup>94</sup>

**Proposition A3.** The game with an out-of-network cap  $\bar{p} > c$  in which the provider can reject patients has a pure strategy Nash equilibrium, and all pure strategy Nash equilibria result in the same negotiated price. The equilibrium disagreement actions and negotiated prices satisfy the following:

- (i) If the parties cannot commit to disagreement actions, then there is a unique equilibrium. In that equilibrium, the provider accepts all patients absent an agreement (that is,  $\tilde{a} = 1$ ), the disagreement price and coverage terms are  $\tilde{p}_{out}(\bar{p})$  and  $\tilde{l}_{out}(\bar{p})$ , respectively, and the negotiated price is  $p_{out}^*(\bar{p})$ .
- (ii) If the parties can commit to disagreement actions, then there exists a critical level of the out-of-network cap  $\bar{p}_{reject} > p^*(0,0,\mathbb{R})$  that satisfies  $p^*_{out}(\bar{p}_{reject}) = p^*(0,0,\mathbb{R})$  for which:
  - a. If  $\bar{p} \ge \bar{p}_{\text{reject}}$ , the negotiated price is  $p_{\text{out}}^*(\bar{p})$ . Furthermore, for  $\bar{p} > \bar{p}_{\text{reject}}$ , the provider accepts all patients absent an agreement (that is,  $\tilde{a} = 1$ ), and the equilibrium disagreement price and coverage terms are  $\tilde{p}_{\text{out}}(\bar{p})$  and  $\tilde{l}_{\text{out}}(\bar{p})$ , respectively.
  - b. If  $\bar{p} < \bar{p}_{reject}$ , the provider rejects all patients absent an agreement (that is,  $\tilde{a} = 0$ ), and the negotiated price is  $p^*(0,0,\mathbb{R})$ . Furthermore,

$$p_{\text{nocap}}^* - p^*(0,0,\mathbb{R}) < \frac{\widetilde{Q}_{\text{nocap}} / Q^*}{1 - \widetilde{Q}_{\text{nocap}} / Q^*} [\widetilde{p}_{\text{nocap}} - p_{\text{nocap}}^*],$$

where 
$$\tilde{Q}_{nocap} \equiv Q(\tilde{p}_{nocap}, \tilde{l}_{nocap}) / Q^*$$
.

The proposition demonstrates that, when providers can turn away patients absent an agreement, the effects of an out-of-network cap depend crucially on whether the parties can commit to their disagreement actions. If commitment is not possible, then an out-of-network cap can substantially reduce negotiated prices in the model. The intuition is straightforward: if negotiations break down, the provider can always earn positive profits by accepting the insurer's patients and setting some charge  $\tilde{p} \in (c, \bar{p}]$ , which is better than rejecting the insurer's patients and earning a profit of zero. Thus, without commitment, the provider will never reject the insurer's patients, and the introduction of an out-of-network cap will shift the bargaining landscape sharply in the insurer's favor. Indeed, without commitment, outcomes are identical regardless of whether the provider can reject patients.

But if commitment is possible, then the scope for an out-of-network cap to reduce negotiated prices may be relatively modest when the provider can turn away out-of-network patients. By threatening to turn away the provider's patients, the provider can create a disagreement outcome in which the provider delivers no care to the insurer's enrollees and both parties earn disagreement payoffs of zero. Thus, the provider can guarantee itself a price no lower than  $p^*(0,0,\mathbb{R})$ .

Rejecting patients will not be attractive for an out-of-network cap set modestly below  $\tilde{p}_{nocap}$ . Indeed, whereas  $d^{P}(\tilde{p}, \tilde{l}, 0) = 0$  for all  $\tilde{p}$  and  $\tilde{l}$ , Proposition A1 shows that  $d^{P}(\tilde{p}_{nocap}, \tilde{l}_{nocap}, 1) > 0$ , reflecting the fact that the profits the provider earns by accepting patients and charging  $\tilde{p}_{nocap}$  outweighs the value

<sup>&</sup>lt;sup>94</sup> In stating Proposition A3, I exclude the edge case where  $\bar{p} = c$ , which gives rise to additional equilibria when commitment is not possible. In this case, the provider's profit in the disagreement game is zero whether or not it accepts the insurer's patients. As a result, there is an equilibrium with  $\tilde{a} = 1$ , which has the properties described, as well as a continuum of equilibria with  $\tilde{a} < 1$  that generate a continuum of negotiated prices.

the insurer derives from its enrollees having some access to the provider's services. But as the cap falls, the provider's out-of-network profits fall relative to the insurer's out-of-network payoff, and the provider is ultimately best served by turning away patients absent an agreement.

The maximum potential reduction in the negotiated price that is achievable with an out-of-network cap,  $p_{nocap}^* - p^*(0,0,\mathbb{R})$ , depends on how attractive it was to be out-of-network under the status quo. Part (ii)b of Proposition A3 shows that the maximum potential price reduction is higher the more volume the provider could retain absent an agreement under the status quo (that is, the larger is  $\tilde{Q}_{nocap} / Q^*$ ) and the higher the price the provider an collect absent an agreement under the status quo (that is, the larger is  $\tilde{p}_{nocap} - p_{nocap}^*$ ). The calibration presented in the main text suggests that this amount is likely to be small in most instances, although evidence on this point is imperfect.

## A.3 Effects of a "Cap and Floor" Out-of-Network Policy

I now consider a variant on the out-of-network cap policy that would both place an upper limit  $\bar{p}$  on the price that the provider can charge for out of-network care (that is, impose  $\tilde{\mathcal{P}} = (-\infty, \bar{p}]$ ) and a lower limit  $\underline{l}$  on the out-of-network coverage the provider can offer (that is, impose  $\tilde{\mathcal{L}} = [\underline{l}, 1]$ ). The latter portion of this policy can be understood as a lower limit on what the insurer must pay for the enrollee's care, hence the "cap and floor" label. In keeping with the fact that the aim of these types of policies is typically to make being out-of-network invisible to enrollees, I consider policies with  $Q(\bar{p}, \underline{l}) = Q^*$ . In this section, I formally describe outcomes under this policy in Proposition A4 and then discuss the intuition behind them. The proof of the proposition is in Appendix D.

**Proposition A4.** The provider-insurer bargaining game with an out-of-network cap  $\bar{p} > c$  and coverage standard  $\underline{l}$  such that  $Q(\bar{p}, \underline{l}) = Q^*$  has a pure strategy Nash equilibrium, and all pure strategy Nash equilibria result in the same negotiated price. The following properties hold:

- (i) If the provider cannot reject patients or the parties cannot commit to disagreement actions, there is a unique equilibrium. In equilibrium, the provider accepts all patients absent an agreement (that is,  $\tilde{a} = 1$ ), and the insurer sets disagreement coverage terms  $\underline{l}$ . If  $\overline{p} \leq \tilde{p}_{\text{nocap}}$ , the provider sets a charge  $\overline{p}$ , and the negotiated price is  $\overline{p}$ . If  $\overline{p} > \tilde{p}_{\text{nocap}}$ , the provider sets a charge  $\bar{p}_{\text{nocap}}$ , and the negotiated price is weakly greater than  $\overline{p}$ .
- (ii) If the provider can reject patients and the parties can commit to disagreement actions, then:
  - a. If  $\bar{p} \ge p^*(0,0,\mathbb{R})$ , the negotiated price is identical to the negotiated price in (i) above. For  $\bar{p} > p^*(0,0,\mathbb{R})$ , the provider accepts all patients absent an agreement (that is,  $\tilde{a} = 1$ ), and the parties' disagreement actions are also the same as in (i).
  - b. If  $\bar{p} < p^*(0,0,\mathbb{R})$ , the provider rejects all patients absent an agreement (that is,  $\tilde{a} = 0$ ), and the negotiated price is  $p^*(0,0,\mathbb{R})$ .

Part (i) of the proposition shows that when the provider cannot reject patients or cannot credibly commit to doing so, the "cap and floor" policy will generally lead to a negotiated price equal to the payment standard  $\bar{p}$ . This result is intuitive. In the absence of a network agreement, the provider will have to deliver its services at a price equal to the payment standard, but the insurer will have to offer an in-network level of coverage for those services, causing the provider to deliver a volume of services  $Q^*$  even absent a network agreement. The provider thus has nothing to gain from a network agreement

at a price below the payment standard, while the insurer has nothing to gain from a network agreement at a higher price, so the equilibrium negotiated price exactly equals the payment standard.<sup>95</sup>

Part (ii) shows that when the provider can turn away patients and can commit to disagreement actions, a "cap and floor" policy will lead to a negotiated price equal to the payment standard if the payment standard is set relatively high, but not if the payment standard is set relatively low. In particular, for a stringent enough payment standard, it will always be in the provider's interest to threaten to turn away patients absent an agreement, resulting in a price  $p^*(0,0,\mathbb{R})$ , just like under an out-of-network cap.

Comparing the results to Propositions A2 and A3 indicates that a "cap and floor" policy will generally result in higher prices than an out-of-network cap set at an equivalent level. Importantly, the "cap and floor" policy actually has the potential to *increase* prices when the payment standard  $\bar{p}$  is set above the status quo level of negotiated prices, whereas an out-of-network cap always reduces prices. Even in circumstances where a "cap and floor" policy does reduce prices, it is likely to reduce prices by less than a cap alone. It is also similarly limited in its ability to reduce the negotiated price when the provider can credibly threaten to reject the insurer's patients absent a network agreement.

## A.4 Effects of a Comprehensive Price Cap

I now consider the effects of a comprehensive price cap, which I model here as an upper limit  $\bar{p} > c$  on *both* the charge the provider can set in the absence of a network agreement *and* the negotiated price. That is, I model a comprehensive price cap as the case with  $\mathcal{P} = \tilde{\mathcal{P}} = (-\infty, \bar{p}]$ . (For convenience, I will use  $\bar{\mathcal{P}}$  as a shorthand for the set  $(-\infty, \bar{p}]$  in this section and in Appendix D.) This policy does not restrict the level of out-of-network coverage insurers can offer; that is,  $\tilde{\mathcal{L}} = [0,1]$ .

To analyze this case, I first characterize the solution to the Nash bargaining problem (A1) when negotiated prices are capped (that is, when  $\mathcal{P} = \overline{\mathcal{P}}$ ). Based on that analysis, I then characterize the equilibrium disagreement actions and resulting contract terms. In brief, I show that a comprehensive price cap functions similarly to an out-of-network cap when providers either are not allowed to turn away out-of-network patients or cannot credibly threaten to do so. By contrast, when providers can credibly threaten to turn way out-of-network patients, a comprehensive price cap has much greater potential to reduce prices, but also has the potential to increase utilization.

## A.4.1 Bargaining When Negotiated Prices are Capped

The solution of the Nash bargaining problem (A1) when negotiated prices are capped is more complicated than the solution when negotiated prices are uncapped. I characterize outcomes informally here and present full mathematical details of the solution in Appendix D.

When the disagreement payoffs place the provider in a bargaining position weak enough that  $p^*(\tilde{W}, \tilde{\pi}, \mathbb{R}) \leq \bar{p}$ , the cap on negotiated prices does not bind at this stage of play. Thus, the provider and insurer reach the same negotiated agreement as when negotiated prices were uncapped. In particular, the negotiated price is still  $p^*(\tilde{W}, \tilde{\pi}, \mathbb{R})$ , the provider accepts all of the insurer's enrollees, and the negotiated coverage terms are set so the provider delivers the efficient quantity of services  $Q^*$ .

When the provider's bargaining position is stronger and  $p^*(\tilde{W}, \tilde{\pi}, \mathbb{R}) > \bar{p}$ , the cap on the negotiated price binds and the solution to (A1) changes accordingly. Most intuitively, the negotiated price now

<sup>&</sup>lt;sup>95</sup> There is an exception to this logic for a payment standard set above the pre-policy level of charges  $\tilde{p}_{nocap}$ . For a payment standard far enough above  $\tilde{p}_{nocap}$ , the provider may wish to set its charge *below*  $\bar{p}$ . In this case, the insurer will still be required to provide a coverage level  $\underline{l}$ , resulting in a disagreement quantity above the efficient quantity  $Q^*$ . This creates the scope for an unorthodox network agreement between the provider and insurer in which the provider agrees to a *reduction* in volume in exchange for raising the price above  $\bar{p}$ .

equals the cap; that is,  $p^*(\tilde{W}, \tilde{\pi}, \bar{P}) = \bar{p}$ . However, the quantity of services delivered changes too. In particular, the parties negotiate coverage terms such that this quantity strictly exceeds the efficient quantity  $Q^*$ . Intuitively, the provider can no longer use its bargaining leverage to extract a higher price, so it instead uses that leverage to extract higher volume (which is profitable since  $\bar{p} > c$ ). The one thing that does not change is that the negotiated agreement still has  $a^*(\tilde{W}, \tilde{\pi}, \bar{P}) = 1$ .

#### A.4.2 Equilibrium Outcomes Under a Comprehensive Price Cap

Building on the preceding discussion, I now characterize the equilibrium disagreement actions and negotiated contract terms under a comprehensive price cap. Proposition A5 characterizes outcomes in the case. I defer the proof to Appendix D but discuss the intuition behind the proposition below. For convenience, I let  $Q_{\text{comp}}(\bar{p})$  denote the equilibrium quantity of services for a cap of  $\bar{p}$ .

In stating and proving the portion of Proposition A5 that pertains to cases where the parties can commit to disagreement actions and the provider can reject patients, I assume that a provider that chooses to reject some patients in the absence of an agreement must reject all of them (that is, I assume  $\tilde{A} = \{0,1\}$ ). This differs from what I assume in the rest of this appendix, but it simplifies the proof of Proposition A5 and does not affect the main qualitative conclusions.<sup>96</sup>

**Proposition A5.** The provider-insurer bargaining game with a comprehensive price cap  $\bar{p} > c$  has a pure strategy Nash equilibrium, and all pure strategy Nash equilibria result in the same negotiated price. The equilibrium disagreement actions and negotiated contract terms satisfy the following:

- (i) If the provider cannot reject patients absent an agreement or the parties cannot commit to disagreement actions, there is a unique equilibrium. In equilibrium, the provider accepts all patients (that is,  $\tilde{a} = 1$ ), the disagreement price and coverage terms are  $\tilde{p}_{out}(\bar{p})$  and  $\tilde{l}_{out}(\bar{p})$ , respectively, the negotiated price is  $p_{out}^*(\bar{p})$ , and  $Q_{comp}(\bar{p}) = Q^*$ .
- (ii) If the parties can commit to disagreement actions and the provider must either accept all patients or reject all patients absent an agreement, then there exists a critical value  $\bar{p}_{reject} > p^*(0,0,\mathbb{R})$  that satisfies  $p^*_{out}(\bar{p}_{reject}) = p^*(0,0,\mathbb{R})$  for which:
  - a. If  $\bar{p} \ge \bar{p}_{\text{reject}}$ , the negotiated price is  $p_{\text{out}}^*(\bar{p})$  and  $Q_{\text{comp}}(\bar{p}) = Q^*$ . For  $\bar{p} > \bar{p}_{\text{reject}}$ , the provider accepts all patients absent an agreement (that is,  $\tilde{a} = 1$ ), and the equilibrium disagreement price and coverage terms are  $\tilde{p}_{\text{out}}(\bar{p})$  and  $\tilde{l}_{\text{out}}(\bar{p})$ .
  - b. If  $\bar{p}_{reject} > \bar{p} \ge p^*(0,0,\mathbb{R})$ , the provider rejects all patients absent an agreement (that is,  $\tilde{a} = 0$ ). The negotiated price is  $p^*(0,0,\mathbb{R})$  and  $Q_{comp}(\bar{p}) = Q^*$ .
  - c. If  $\bar{p} < p^*(0,0,\mathbb{R})$ , the provider rejects all patients absent an agreement (that is,  $\tilde{a} = 0$ ). The negotiated price is  $\bar{p}$ . Additionally,  $Q_{\text{comp}}(\bar{p}) > Q^*$  with  $Q_{\text{comp}}(\bar{p}) \to Q^*$  as  $\bar{p} \to p^*(0,0,\mathbb{R})$ , and  $Q_{\text{comp}}$  is strictly decreasing in  $\bar{p}$  if  $l^*(0,0,\bar{P}) < 1$ .

<sup>&</sup>lt;sup>96</sup> In particular, I have been unable to rule out the possibility that the provider might wish to reject some patients and accept others in this scenario. Even if this can occur, the qualitative message of Proposition A5 would not change. Any equilibrium in which the provider accepts some patients must be weakly better for the provider than a scenario in which it rejects all of the insurer's patients, so the provider must be at least as successful in protecting its bargaining position in these equilibria as in the equilibrium described in Proposition A5. It follows that a cap with  $\bar{p} < p^*(0,0, \mathbb{R})$  would still result in a negotiated price of  $\bar{p}$ . However, it might lead to a higher quantity than when the provider must make an "all or nothing" choice.

Part (i) of the proposition demonstrates that in the circumstances in which an out-of-network cap could be effective in reducing prices—situations where the provider either is not allowed to turn away patients or cannot credibly commit to doing so—a comprehensive price cap would function identically.

This outcome is intuitive. As shown in Propositions A2 and A3, an out-of-network price of  $\bar{p}$  results in a negotiated price strictly below  $\bar{p}$  in these cases. As a result, the portion of the comprehensive price cap that applies to negotiated prices does not bind. Thus, consistent with the analysis of the Nash bargaining problem (A1) above, neither disagreement actions nor negotiated outcomes change.

But part (ii) of the proposition shows that, when the provider can credibly threaten to turn away patients, a comprehensive price cap has much greater scope to reduce negotiated prices than an out-of-network cap. As discussed above, a provider can limit the damage an out-of-network cap does to its bargaining position by threatening to turn away out-of-network patients, thereby ensuring itself a negotiated price no lower than  $p^*(0,0,\mathbb{R})$ . But because a comprehensive price cap directly constrains negotiated prices, it can push prices below  $p^*(0,0,\mathbb{R})$ . Indeed, part (ii)c of the proposition shows that a comprehensive price cap can push negotiated prices as low as a regulator wishes.

However, the proposition also shows that setting a price cap  $\bar{p} < p^*(0,0,\mathbb{R})$  causes the parties to negotiate coverage terms that increase utilization above the efficient quantity  $Q^*$ . The magnitude of the increase in utilization rises as  $\bar{p}$  falls until  $l^*(0,0,\mathcal{P})$  reaches one. The intuition behind this result was discussed in the preceding section. When the provider is barred from using its bargaining leverage to secure a higher price, it instead uses that leverage to extract more volume.

## A.5 Effects of a Default Contract Policy

I now consider the effects of a default contract policy. As described in the main text, a default contract policy would allow the insurer to demand a contract with the provider in the absence of a negotiated agreement. That contract, the "default contract," would specify some maximum price and some minimum level of access to the provider's services that the provider must maintain.

I model this as a policy that: (1) places an upper limit  $\bar{p}$  on the price the provider can charge in the absence of an agreement (that is, imposes  $\tilde{\mathcal{P}} = (-\infty, \bar{p}]$ ); and (2) places a lower limit  $\underline{a}$  on the fraction of the insurer's enrollees the provider must accept absent an agreement (that is, imposes  $\tilde{\mathcal{A}} = [\underline{a}, 1]$ ) when providers could otherwise reject patients. Proposition A6 formally characterizes outcomes under this policy. I defer the proof to Appendix D but discuss the intuition below.

**Proposition A6.** The provider-insurer bargaining game with a default contract policy that specifies a contract price  $\bar{p} > c$  and an access standard  $\underline{a} > 0$  has a pure strategy Nash equilibrium, and all pure strategy Nash equilibria result in the same negotiated price. The following properties hold:

- (i) If the provider cannot reject patients or the parties cannot commit to disagreement actions, there is a unique equilibrium. The equilibrium disagreement price and coverage terms are  $\tilde{p}_{out}(\bar{p})$  and  $\tilde{l}_{out}(\bar{p})$ , respectively, and the negotiated price is  $p_{out}^*(\bar{p})$ .
- (ii) If the provider can reject patients absent an agreement, subject to the access standard under the default contract, and the parties can commit to disagreement actions, then there exists a critical value  $\bar{p}_{reject} > p^*(0,0,\mathbb{R})$  that satisfies  $p^*_{out}(\bar{p}_{reject}) = p^*(0,0,\mathbb{R})$  for which:
  - a. If  $\bar{p} > \bar{p}_{\text{reject}}$ , the provider accepts all patients absent an agreement (that is,  $\tilde{a} = 1$ ), the equilibrium disagreement price and coverage terms are  $\tilde{p}_{\text{out}}(\bar{p})$  and  $\tilde{l}_{\text{out}}(\bar{p})$ , respectively, and the negotiated price is  $p_{\text{out}}^*(\bar{p})$ .

b. If  $\bar{p} < \bar{p}_{\text{reject}}$ , the provider rejects as many patients as permitted absent an agreement (that is,  $\tilde{a} = \underline{a}$ ). The equilibrium disagreement price and coverage terms are  $\tilde{p}_{\text{out}}(\bar{p})$  and  $\tilde{l}_{\text{out}}(\bar{p})$ , respectively, and the negotiated price is  $\underline{a}p_{\text{out}}^*(\bar{p}) + (1 - \underline{a})p^*(0,0,\mathbb{R})$ .

Part (i) of the proposition demonstrates that when the provider either cannot turn away patients or cannot credibly commit to doing so, a default contract policy functions identically to an out-of-network cap. This is intuitive. The only difference between an out-of-network cap and the default contract policy is the access standards imposed by the default contract policy. But, in the cases considered in part (i) of the proposition, the provider either cannot or does not wish to turn away the insurer's patients absent a network agreement, so the default contract's access standards are superfluous.

But part (ii) of the proposition shows that a default contract policy has much more scope than an outof-network cap to reduce prices in circumstances where the provider can credibly threaten to turn away patients. In particular, as discussed in connection with Proposition A3, a provider can limit how much an out-of-network cap worsens its bargaining position by threatening to turn away the insurers' patients in the absence of a network agreement. The access standards in the default contract directly limit the provider's ability to take that approach and, thus, allow policymakers to achieve much larger reductions in negotiated prices than are possible under an out-of-network cap.

Naturally, the magnitude of the price reductions achievable with a default contract policy depends on the stringency of the access standard. If the access standard requires the provider to accept all of the insurer's patients absent an agreement (that is,  $\underline{a} = 1$ ), then the default contract policy drives prices all the way to  $p_{out}^*(\bar{p})$ , the negotiated price generated by an out-of-network cap when providers are unable to turn away patients absent an agreement. By contrast, if  $\underline{a} < 1$ , then prices end up somewhere between  $p_{out}^*(\bar{p})$  and  $p^*(0,0,\mathbb{R})$ , the price that would arise if the provider could turn away patients.

Notably, unlike a comprehensive price cap, the default contract policy's greater scope to reduce negotiated prices is not accompanied by higher utilization. Indeed, because negotiated prices are unconstrained, the negotiated outcomes still lead the provider to deliver a quantity  $Q^*$  in equilibrium. Intuitively, the difference relative to a comprehensive price cap is that the default contract policy reduces prices by weakening the provider's underlying bargaining position rather than by blocking the provider from translating a strong bargaining position into a high negotiated price. Thus, the provider is not left with "leftover" leverage to use to extract contract terms that encourage higher utilization.

## A.6 Functional Forms Used to Create Figures

Several figures in sections 4 and 5 in the main text use a calibrated version of the model presented in this appendix to illustrate the negotiated prices that would emerge under various price cap policies. This subsection briefly specifies the particular functional forms used in creating the figures.

Specifically, I normalize the provider's marginal cost so that c = 1, use a Nash bargaining parameter  $\theta = 0.5$ , and consider a scenario where the negotiating parties can commit to disagreement actions. I assume that demand for the provider's services is given by  $Q(p, l) = \exp[-0.7(1-l)p]$ , while the insurer's value of the provider's services is  $V(Q) = 5.8Q - 3.0Q^2$ . I solve the model numerically.<sup>97</sup> When examining the default contract policy, I examine a scenario with  $\underline{a} = 1$ , which corresponds to a stringent access standard with perfect enforcement, and a scenario with  $\underline{a} = 0.5$ , corresponding to a weaker access standard or an access standard that is imperfectly enforced.

 $<sup>^{97}</sup>$  When both *p* and *l* are very low, these primitives do not satisfy Assumption A4. Because setting a price this low is never in the provider's interest, this fact is irrelevant for this analysis.

The parameter values above were chosen so that, in a scenario without a price cap, provider charges, negotiated prices, and provider marginal cost bear roughly the same relationship to one another as is observed in the hospital sector today. In any case, as the rest of this appendix makes clear, the main qualitative relationships highlighted in the figures displayed in the main text would be the same under a relatively broad range of alternative functional form assumptions.

# Appendix B Model of a Public Option

This appendix presents a model of health insurance markets in the presence of a public option that formalizes much of the discussion of the effects of introducing a public option in the main text. The model examines a setting in which a single private insurer competes with a public option. In the model, the public option pays providers prices that are fixed in law and sets its premium to cover its average costs. By contrast, the private insurer negotiates prices (specifically, a "two-part tariff") with each provider via a "Nash-in-Nash" bargaining protocol that is common in work on provider-insurer bargaining (e.g., Gowrisankaran, Nevo, and Town 2015; Ho and Lee 2017). Based on the outcome of those negotiations, the insurer sets a premium that maximizes its profits. Enrollees then decide between the public option and the private plan based on the two plans' premiums and networks.

Importantly, my goal here is to understand how competition *between* the private plan and the public option would shape market outcomes. That objective, together with the tractability of a model with a single private plan, drives my decision to focus on a model with a single private plan. However, this modeling choice means that the model cannot capture the consequences of competition *among* private plans. This is likely of relatively limited importance in cases where the public option is much more attractive to consumers than existing private plans, but it does mean that this model is not suitable for examining market outcomes without a public option or with a public option that is a weak competitor for private plans. I discuss these limitations in much greater detail below.

The remainder of this appendix proceeds as follows. I first specify the model primitives and the model's timing assumptions. To build intuition, I then analyze outcomes in a simplified model with a single provider before analyzing the full model with multiple providers. I then extend the model to incorporate risk selection and risk adjustment before describing how I use the model to produce the simulation results presented in the main text. Finally, I discuss how the conclusions of the model might change if it included more than one private insurer or if providers were not required to participate in the public option. Proofs of the propositions stated in this appendix are provided in Appendix E.

## B.I Model Setup

I begin by specifying the model primitives and the model's timing assumptions.

## B.I.I Model Primitives

I consider a model with two plans: a private plan offered by an insurer and a public option operated by the government. The subscript *i* indexes plans, with i = pri referring to the private plan and i = pub referring to the public option. I define  $\mathcal{I} \equiv \{\text{pri}, \text{pub}\}$  and use -i to refer to the plan other than plan *i*.

Both insurers negotiate with a common set of providers  $\mathcal{H}$ , indexed by h. The set of providers that accepts patients enrolled in plan i, which I refer to as the network of plan i, is denoted  $\mathcal{A}_i$ . The list of both plans' networks is denoted  $\mathcal{A} \equiv \{\mathcal{A}_i\}_{i\in\mathcal{I}}$ . I use  $\mathcal{A}^{\setminus B}$  to denote the network  $\mathcal{A}$  with the set of providers  $\mathcal{B} \subset \mathcal{A}$  removed and  $\mathcal{A}^{\setminus i,\mathcal{B}}$  to denote the network list  $\mathcal{A}$  with the set of providers  $\mathcal{B}$  removed from network  $\mathcal{A}_i$ . Frequently, it will be useful to deal with sets  $\mathcal{B}$  that consists of a single element h, in which case I will abuse this notation by using  $\mathcal{A}^{\setminus h}$  to denote the network  $\mathcal{A}$  with provider h removed and using  $\mathcal{A}^{\setminus i,h}$  to denote the network list  $\mathcal{A}$  with provider h removed from network  $\mathcal{A}_i$ .

The quantity of services that provider *h* delivers to enrollees of plan *i* is given by a function  $Q_i^h(\mathcal{A}_i)$ , which depends solely on the insurer's network. No out-of-network services are delivered, so  $Q_i^h(\mathcal{A}_i) = 0$  if  $h \notin \mathcal{A}_i$ . Allowing utilization to depend on the plan type *i* allows public and private plans to differ in ways that may induce different levels of utilization. However, because utilization does not depend on the characteristics of plan enrollees, this formulation rules out the possibility that the public and private plan may attract enrollees with different health status, a point I return to in section B.4.

The public option's operations are specified in law. Specifically, the public option pays any provider h a price  $\bar{p}_h \ge c_h$  per service, where  $c_h$  is the marginal cost provider h incurs to deliver an additional service. For most of this appendix, I assume that all providers are required to join the public option's network, so  $\mathcal{A}_{pub} = \mathcal{H}$ , although at the end of this appendix I briefly consider the case where provider participation is voluntary. The public option also incurs non-claims costs of  $f_{pub}$  for each person it enrolls, and it is required to set a premium  $r_{pub}$  that exactly covers its costs. That is,

$$r_{\text{pub}}^{*}(\mathcal{A}_{\text{pub}}) = f_{\text{pub}} + \sum_{h \in \mathcal{A}_{\text{pub}}} \bar{p}_{h} Q_{\text{pub}}^{h}(\mathcal{A}_{\text{pub}})$$

For its part, the insurer chooses the private plan's network  $\mathcal{A}_{pri}$  and negotiates contract terms  $(p_h, t_h)$  with each provider  $h \in \mathcal{A}_{pri}$ , where  $p_h$  is the amount the private plan pays per service delivered by provider h and  $t_h$  is a lump-sum transfer from the insurer to provider h. For convenience, I use  $p \equiv \{p_h\}_{h \in \mathcal{H}}$  to denote the vector of per service prices and  $\mathbf{t} \equiv \{t_h\}_{h \in \mathcal{H}}$  to denote the corresponding vector of lump-sum transfers, where I adopt the convention that entries for providers  $h \notin \mathcal{A}_{pri}$  are taken to be zero.<sup>98</sup> The private plan incurs non-claims costs  $f_{pri}$  and sets a premium  $r_{pri}$ . The process for determining the private plan's network, provider prices, and premium is described in the next section.

Each provider *h* aims to maximize its profits, which depend on enrollment in both the private and public option and the prices paid for services delivered under the two plans:

$$\pi_h^P(\boldsymbol{r},\boldsymbol{\mathcal{A}},\boldsymbol{p},\boldsymbol{t}) = D_{\mathrm{pri}}(\boldsymbol{r},\boldsymbol{\mathcal{A}})Q_{\mathrm{pri}}^h(\boldsymbol{\mathcal{A}}_{\mathrm{pri}})[p_h - c_h] + D_{\mathrm{pub}}(\boldsymbol{r},\boldsymbol{\mathcal{A}})Q_{\mathrm{pub}}^h(\boldsymbol{\mathcal{A}}_{\mathrm{pub}})[\bar{p}_h - c_h] + t_h.$$

The insurer similarly aims to maximize its profits, which are given by

$$\pi^{I}(\boldsymbol{r},\boldsymbol{\mathcal{A}},\boldsymbol{p},\boldsymbol{t}) = D_{\mathrm{pri}}(\boldsymbol{r},\boldsymbol{\mathcal{A}}) \left[ r_{\mathrm{pri}} - f_{\mathrm{pri}} - \sum_{h \in \mathcal{A}_{\mathrm{pri}}} p_{h} Q_{\mathrm{pri}}^{h} (\mathcal{A}_{\mathrm{pri}}) \right] - \sum_{h \in \mathcal{A}_{\mathrm{pri}}} t_{h}.$$

I also define both entities' "gross profit" functions, that is, profits before considering lump-sum transfers, which are given, respectively, by  $\tilde{\pi}_h^p(\mathbf{r}, \mathbf{A}, \mathbf{p}) \equiv \pi_h^p(\mathbf{r}, \mathbf{A}, \mathbf{p}, \mathbf{0})$  and  $\tilde{\pi}^I(\mathbf{r}, \mathbf{A}, \mathbf{p}) \equiv \pi^I(\mathbf{r}, \mathbf{A}, \mathbf{p}, \mathbf{0})$ .

#### B.1.2 Structure of Participation Decisions, Price Negotiations, and Enrollment

I assume that networks, provider prices, premiums, and plan enrollment are determined as follows:

- (1) If providers are permitted to choose whether to participate in the public option, each provider h decides whether it wants to be included in the public option's network  $\mathcal{A}_{pub}$ .
- (2) The government sets the public option premium  $r_{pub}$ .

<sup>&</sup>lt;sup>98</sup> This convention streamlines notation in practice since it will often be useful to refer to the prices negotiated under a network  $\mathcal{A}_{pri}$  in the context of a private plan that is actually offering some narrower network  $\mathcal{B}_{pri} \subset \mathcal{A}_{pri}$ .

- (3) The insurer decides whether to seek to offer a plan with an exogenously specified network  $\mathcal{A}_{pri}$ .
- (4) The insurer negotiates contract terms  $(p_h, t_h)$  with each provider  $h \in \mathcal{A}_{pri}$  via simultaneous Nash bargaining.
- (5) The insurer sets the private plan premium  $r_{pri}$ .
- (6) Enrollees select plans based on the premium vector  $\mathbf{r} \equiv \{r_i\}_{i \in \mathcal{I}}$  and network list  $\mathcal{A} \equiv \{\mathcal{A}_i\}_{i \in \mathcal{I}}$ , with enrollment in each plan  $i \in \mathcal{I}$  given by a demand function  $D_i(\mathbf{r}, \mathcal{A})$ .

I make two notes on this protocol before proceeding. First, I follow much of the existing literature on provider-insurer bargaining in assuming that the private plan's network  $\mathcal{A}_{pri}$  is exogenous. The private plan's choice is likely to be a relatively complex one, requiring insurers to consider both what would maximize the insurer's leverage vis-à-vis providers (e.g., Ho and Lee 2019) and, in markets where risk selection is relevant, whether different networks would attract different enrollee mixes (e.g., Shepard 2016). Endogenizing that choice would be a useful direction for future work. Section 7 in the main text offers a qualitative discussion of how introducing a public option might change insurers' network choices and concludes that the effect of a public option on network breadth is ambiguous *a priori*.

Second, the simultaneous Nash bargaining process envisioned in stage 4 involves each bilateral provider-insurer negotiation being resolved by Nash bargaining, taking the outcome of the insurer's negotiations with other providers as given. This "Nash equilibrium in Nash bargains" or "Nash-in-Nash" approach has become the workhorse of the literature on provider-insurer bargaining (e.g., Gowrisankaran, Nevo, and Town 2015; Ho and Lee 2017).<sup>99</sup> I note that while insurer threats to exclude a provider from its network are central to the bargaining process in a Nash-in-Nash framework, the standard Nash-in-Nash framework does not allow the insurer to threaten to exclude one provider *and* replace it with another provider, which can allow insurers to extract lower prices under narrow network plans (Ho and Lee 2019). The prices that emerge from this model may therefore be somewhat too high, although the importance of this factor may be less important in the presence of a public option than under the status quo because the scope to secure lower prices may be modest.

#### **B.I.3** Assumptions Regarding Model Primitives

I assume that the primitives defined above have several relatively straightforward properties, which I will assume hold throughout the rest of the analysis.

**Assumption B1 (Demand increases in network breadth).** For each  $i \in \mathcal{I}$ , any network lists  $\mathcal{A}$  and  $\mathcal{B}$  with  $\mathcal{A}_i \subset \mathcal{B}_i$ ,  $\mathcal{A}_i \neq \mathcal{B}_i$ , and  $\mathcal{A}_{-i} = \mathcal{B}_{-i}$ , and any premium vector  $\mathbf{r}$ , the function  $D_i$  satisfies  $D_i(\mathbf{r}, \mathcal{B}) > D_i(\mathbf{r}, \mathcal{A})$ . Furthermore,  $D_i(\mathbf{r}, \mathcal{A}) = 0$  if  $\mathcal{A}_i = \emptyset$ .

**Assumption B2 (Demand declines in premium).** The function  $D_i(r, \mathcal{A})$  is continuously differentiable in r for each  $i \in \mathcal{I}$  and any network list  $\mathcal{A}$ . Furthermore, whenever  $\mathcal{A}_j \neq \emptyset$  for each  $j \in \mathcal{I}$ ,  $D_i$  is strictly decreasing in  $r_i$  and strictly increasing in  $r_{-i}$ , and there is a unique  $r_i$  that maximizes  $D_i(\{r_i, r_{-i}\}, \mathcal{A})[r_i - c]$  for any premium  $r_{-i}$  and constant  $c \ge 0$ .

**Assumption B3 (Fixed insurance market size).** For any premium vector r and network list  $\mathcal{A}$  such that  $\mathcal{A}_i \neq \emptyset$  for at least one  $i \in \mathcal{I}$ ,  $D_{\text{pub}}(r, \mathcal{A}) + D_{\text{pri}}(r, \mathcal{A}) = 1$ .

<sup>&</sup>lt;sup>99</sup> Collard-Wexler, Gowrinsankaran, and Lee (2019) show that the Nash-in-Nash outcomes can be understood as the equilibrium outcome of an extension of the Rubinstein (1982) alternating offers bargaining game.

These assumptions are generally straightforward and intuitive, but a few comments are warranted. First, Assumptions B1 and B2 imply that any plan with a non-empty network attracts at least some enrollees. This assumption is mostly made for convenience to eliminate various tedious complexities created by zero-enrollment plans and could be relaxed without affecting the main results. Second, the assumption of fixed overall insurance enrollment (Assumption B3) greatly simplifies the analysis but is inessential to the main qualitative conclusions of this analysis.

#### B.2 Model with a Single Provider

To build intuition, it is useful to begin with the case with a single provider (and where that provider must participate in the public option's network). I work backwards through the stages of play described in section B.1.2. The final stage of play—enrollee plan selection—is determined entirely by the demand function, so I begin with insurer premium setting, then characterize the prices negotiated between the provider and the insurer, and finally verify that it is in fact in the insurer's interest to offer a plan. Throughout, I assume that the private plan's network includes the single provider.

#### B.2.1 Insurer Premium Setting

The insurer sets premiums to maximize its profits given the payment terms it negotiates with the provider. The first-order condition for the insurer's profit maximization problem implicitly defines the insurer's profit-maximizing premium  $r_{pri}^{*}(p)$ :<sup>100</sup>

$$r_{\rm pri}^*(p) = f_{\rm pri} + pQ_{\rm pri} + \frac{D_{\rm pri}\left(r_{\rm pri}^*(p)\right)}{-\frac{\partial D_{\rm pri}}{\partial r_{\rm pri}}\left(r_{\rm pri}^*(p)\right)},\tag{B1}$$

where, in order to streamline notation, I have suppressed the plan networks and public option premium where they appear as function arguments, as well as the h indices. I will continue to suppress these function arguments and subscripts throughout the analysis of the single-provider case.

Equation (B1) has a standard and intuitive form. The first two terms on the right-hand side are the marginal cost the insurer incurs by attracting an additional enrollee. The third term is a standard markup term equal to the (negative of the) inverse semi-elasticity of demand for the private plan. As shown in the next section, the degree of pricing power held by the insurer has major implications for provider-insurer negotiations. Importantly,  $r_{pri}^*$  does *not* depend on the lump-sum transfer *t*.

#### B.2.2 Provider-Insurer Price Negotiations

I now analyze provider-insurer negotiations over the per service price p and the lump-sum transfer t. I first characterize the set of contracts that maximize the parties' joint profits since many bargaining protocols, including the Nash bargaining protocol examined here, will lead to contracts of this form. I then characterize the particular joint-profit-maximizing contract that emerges from Nash bargaining, which determines how the resulting profits are shared between the two parties.

**Contract terms that maximize joint profits**. The parties' joint profits for a contract (*p*, *t*) are:

$$\pi^{I}(r_{\rm pri}^{*}(p), p, t) + \pi^{P}(r_{\rm pri}^{*}(p), p, t) = D_{\rm pri}(r_{\rm pri}^{*}(p)) \left[r_{\rm pri}^{*}(p) - f_{\rm pri} - cQ_{\rm pri}\right] + D_{\rm pub}(r_{\rm pri}^{*}(p)) \left[\bar{p} - c\right]Q_{\rm pub}.$$

Notably, the contract terms (p, t) influence the parties' joint profits solely through their effect on the insurer's optimal premium  $r_{pri}^*(p)$ , so whether any particular contract terms maximize joint profits depends solely on whether the per service price p induces the insurer to set the "right" premium.

<sup>&</sup>lt;sup>100</sup> Assumption B2 ensures that the insurer's first-order condition has a unique solution.

Differentiating joint profits with respect to p, substituting in for  $r_{pri}^*(p)$  using the premium setting condition (B1), and setting the result equal to zero implies that the per service price that maximizes the parties' joint profits, which I denote by  $p^J$ , satisfies the following condition:

$$p^{J}Q_{\rm pri} = cQ_{\rm pri} + [\bar{p} - c]Q_{\rm pub}.$$
(B2)

This price leads the insurer to set a premium that maximizes joint profits because it ensures that the insurer's marginal claims cost exactly equals the cost that higher enrollment in the private plan imposes on the provider. The two terms on the right-hand-side of equation (B2) correspond to the two components of that cost: (1) the cost of delivering services to the marginal enrollee,  $cQ_{pri}$ ; and (2) the profits that the marginal enrollee would have generated if covered by the public option,  $[\bar{p} - c]Q_{pub}$ .

Equation (B2) has implications for the outcomes under *any* bargaining protocol that leads the parties to maximize their joint profits. Notably, the price the insurer pays for the marginal service—and thus the premium the insurer sets—is an increasing function of the public option's payment rate  $\bar{p}$ . Furthermore, this price will often be similar to the public option's payment rate. If the public option and the private plan have identical utilization profiles, then equation (B2) implies that  $p^{J} = \bar{p}$ . If the private plan has lower utilization, then  $p^{J}$  will actually be higher than  $\bar{p}$  (because the compensation the provider requires for the profits it loses under the public option must now be spread over fewer services). Conversely, if the private plan has higher utilization, then  $p^{J}$  will be below  $\bar{p}$ .

**Outcome of Nash bargaining.** I now characterize the contract terms that emerge from Nash bargaining. Under Nash bargaining, the parties split the total gain from trade generated by a network agreement. The insurer attracts no enrollment without a network agreement, so its gains from an agreement with terms (p, t) are simply its profits with an agreement:  $\pi^{I}(p, t)$ . The provider, on the other hand, can count on the full population enrolling in the public option absent a network agreement, so its gains from reaching from an agreement with terms  $(p, t) - Q_{\text{pub}}[\bar{p} - c]$ .

The Nash bargained contract terms  $p^*$  and  $t^*$  thus solve the following maximization problem:

$$(p^*, t^*) = \underset{p,t}{\operatorname{argmax}} [\pi^I(p, t)]^{\theta} [\pi^P(p, t) - Q_{\operatorname{pub}}[\bar{p} - c]]^{1-\theta},$$

where  $\theta \in (0,1)$  is the insurer's bargaining weight. It is easy to see that the negotiated per service price satisfies  $p^* = p^J$ ; if it did not, switching to  $p^J$  and making a suitable adjustment to the lump-sum transfers *t* could increase both parties' profits and thus increase the objective function. The lump-sum transfer  $t^*$  then splits those profits in accordance with the parties' respective bargaining weights.

The first-order condition of the Nash bargaining problem with respect to t can be used to show that the insurer's total per enrollee payment to the provider, including the lump-sum transfer, is given by

$$p^{*}Q_{\text{pri}} + \frac{t^{*}}{D_{\text{pri}}\left(r_{\text{pri}}^{*}(p^{*})\right)} = \theta \underbrace{\left[p^{J}Q_{\text{pri}}\right]}_{\substack{\text{minimum amount provider}\\\text{can profitably accept}}} + (1-\theta) \underbrace{\left[p^{J}Q_{\text{pri}} + \frac{\tilde{\pi}^{I}(r_{\text{pri}}^{*}(p^{J}), p^{J})}{D_{\text{pri}}\left(r_{\text{pri}}^{*}(p^{J})\right)}\right]}_{\substack{\text{maximum amount insurer}\\\text{can profitably pay}}}.$$
 (B3)

г

ъ

The per enrollee payment from the insurer to the provider is the weighted average of the two labeled amounts, each of which has an intuitive interpretation. The first is the minimum payment required to compensate the provider for its costs of delivering care and the profits it loses when enrollment shifts out of the public option into the private plan. The second is the maximum payment at which forming a network agreement with the provider remains profitable for the insurer. Equation (B3) implies that the private plan's average per enrollee claims spending is unlikely to be substantially below the public option's spending and will be substantially above it only if the private plan holds substantial pricing power. The lower bound follows because the first labeled term in equation (B3),  $p^{J}Q_{pri}$ , is likely to be similar to  $\bar{p}Q_{pub}$ , consistent with the discussion above. The upper bound follows because the second labeled term in equation (B3) will only be substantially larger than  $p^{J}Q_{pri}$  if the insurer's gross profits are large. Inspecting the insurer's premium-setting condition, equation (B1), shows that this will only be the case if the price elasticity of demand for the private plan is small and the insurer can command a substantial markup. The upper bound also implies that it will be profitable for the insurer to offer a plan even in the presence of a public option.

**Importance of the availability of a two-part tariff.** The ability of the insurer and provider to negotiate a two-part tariff allows them to set a per service price that maximizes their joint profits and then use the lump-sum transfer to allocate those profits between them. If the insurer and provider were instead required to negotiate a simple linear contract, this would create a classic double marginalization problem, which would lead the private plan to set a higher premium and result in commensurately lower enrollment in the private plan.<sup>101</sup> On the other hand, a two-part-tariff is not the only contract structure that could avoid double marginalization. For example, allowing the insurer to commit to steering a certain level of volume to the provider would produce equivalent outcomes.

#### B.2.3 Insurer Plan Offer Decision

Equation (B3) makes clear that, if the insurer offers a plan, it will always earn positive profits. Since the insurer earns zero profits if it does not offer a plan, it will always offer a plan.

## B.3 Model with Multiple Providers

I now consider the case with multiple providers. I proceed under the assumption that  $\mathcal{A}_{pub}$  is nonempty, consistent with my general focus on the case where all providers are required to participate in the public option, so  $\mathcal{A}_{pub} = \mathcal{H}$ . As before, I proceed through the stages of play in reverse order. The final stage of play—enrollee plan selection—is determined entirely by the demand function, so I begin with private insurer premium setting, then discuss provider-insurer price negotiations, and then discuss the private insurer's decision about whether to offer a plan.

#### B.3.1 Insurer Premium Setting

As before, the insurer sets premiums to maximize profits given the payment terms negotiated with providers in the preceding stage. The first-order condition for the insurer's profit maximization problem implicitly defines the insurer's profit-maximizing premium  $r_{pri}^*$  as a function of the public option premium  $r_{pub}$ , the network lists  $\mathcal{A}$ , and the negotiated per service price vector  $\mathbf{p}$ :<sup>102</sup>

$$r_{\text{pri}}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}) = f_{\text{pri}} + \sum_{h \in \mathcal{A}_{\text{pri}}} p_{h} Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}}) + \frac{D_{\text{pri}}(\{r_{\text{pri}}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}), r_{\text{pub}}\},\boldsymbol{\mathcal{A}})}{-\frac{\partial D_{\text{pri}}}{\partial r_{\text{pri}}}(\{r_{\text{pri}}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}), r_{\text{pub}}\},\boldsymbol{\mathcal{A}})}.$$
(B4)

Equation (B4) is essentially identical to equation (B1) derived in the single-provider case, except that the insurer's marginal claims costs are now captured by a summation over all providers  $h \in A_{pri}$ . As before, under the maintained Assumptions B1-B3, it is easy to show that  $r_{pri}^*$  is increasing in each  $p_h$ . Once again, the plan's optimal premium is not a function of the lump-sum transfer vector t.

<sup>&</sup>lt;sup>101</sup> Tirole (1988) provides a textbook discussion of double marginalization and contract structures that avoid it.

<sup>&</sup>lt;sup>102</sup> Assumption B2 ensures that the insurer's first-order condition has a unique solution.

#### B.3.2 Provider-Insurer Price Negotiations

I now analyze provider-insurer negotiations over the per service prices p and the lump-sum transfers t. As in the single-provider case, I first characterize the set of contracts that maximize the bilateral profits earned by any given provider-insurer pair since many bargaining protocols, including the Nash bargaining protocol examined here, will lead to contracts of this form. I then characterize the particular contracts that emerge from Nash bargaining, which determine how profits are shared.

**Contract terms that maximize joint profits.** If the insurer negotiates contract terms p and t with the providers in  $\mathcal{A}_{pri}$ , then the joint profits earned by the insurer and a provider  $h \in \mathcal{A}_{pri}$  are:

$$\pi^{I}(\boldsymbol{r}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}),\boldsymbol{\mathcal{A}},\boldsymbol{p},\boldsymbol{t}) + \pi^{P}_{h}(\boldsymbol{r}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}),\boldsymbol{\mathcal{A}},\boldsymbol{p},\boldsymbol{t})$$

$$= D_{\text{pri}}(\boldsymbol{r}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}),\boldsymbol{\mathcal{A}})[r_{\text{pri}}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}) - f_{\text{pri}} - c_{h}Q_{\text{pri}}^{h}(\boldsymbol{\mathcal{A}}_{\text{pri}})] - \sum_{l \in \mathcal{A}_{\text{pri}}^{h}} t_{l}$$

$$+ D_{\text{pub}}(\boldsymbol{r}^{*}(r_{\text{pub}},\boldsymbol{\mathcal{A}},\boldsymbol{p}),\boldsymbol{\mathcal{A}})[\bar{p}_{h} - c_{h}]Q_{\text{pub}}^{h}(\boldsymbol{\mathcal{A}}_{\text{pub}}),$$

where I have defined  $r^*(r_{\text{pub}}, \mathcal{A}, \mathbf{p}) \equiv \{r_{\text{pri}}^*(r_{\text{pub}}, \mathcal{A}, \mathbf{p}), r_{\text{pub}}\}$  to streamline notation. Observe that, as in the single-provider case, the parties' joint profits depend on the contract terms negotiated by the insurer and provider *h* solely through the effect that  $p_h$  has on the insurer's premium  $r_{\text{pri}}^*$ .

Now, let  $p_h^J$  denote the per service price that maximizes the joint profits of the insurer and provider h, holding the prices the insurer negotiates with other providers constant. Differentiating with respect to  $p_h$ , substituting in for  $r_{\text{pri}}^*(r_{\text{pub}}, \mathcal{A}, p)$  using the premium setting condition (B4), and setting the result equal to zero implies that  $p_h^J$  depends only on the network list  $\mathcal{A}$  and satisfies:

$$p_h^J(\mathcal{A})Q_{\rm pri}^h(\mathcal{A}_{\rm pri}) = c_h Q_{\rm pri}^h(\mathcal{A}_{\rm pri}) + [\bar{p}_h - c_h]Q_{\rm pub}^h(\mathcal{A}_{\rm pub}).$$
(B5)

Paralleling the single-provider case, a per service price of  $p_h^J(\mathcal{A})$  leads the insurer to set a premium that maximizes joint profits because it ensures that the insurer's marginal claims cost exactly equals the cost that higher enrollment in the private plan imposes on the provider, including both its direct costs of serving the private plan's enrollees and any lost profits under the public option.<sup>103</sup>

Equation (B5) has important implications for the outcomes under any bargaining protocol that leads each insurer-provider pair to maximize its joint profits, conclusions that also parallel the singleprovider case. As before, the price the insurer pays for the marginal service—and thus the premium it sets—is an increasing function of the public option's payment rate  $\bar{p}_h$ . Furthermore,  $p_h^J(\mathcal{A})$  will often be similar to the public option's payment rate. In particular, if the public option and the private plan have identical utilization profiles, then  $p_h^J = \bar{p}_h$ . If the private plan has higher (lower) utilization with respect to a particular provider, then  $p_h^J$  will be lower (higher) than the public option's price  $\bar{p}_h$ .

In the case with multiple providers, one important reason public option and private plan enrollees may use different amounts of a particular provider's services is differences in networks. If the private plan's network is narrower than the public option's, then much of the additional private plan volume a provider receives when an enrollee switches out of the public option will come from providers that are in the public option's network but not the private plan's. Thus, it will often be the case that  $Q_{pri}^h(\mathcal{A}_{pri}) >$ 

<sup>&</sup>lt;sup>103</sup> Notably, if every provider-insurer pair sets a per service price  $p_h^J(\mathcal{A})$ , then the insurer will actually set a premium that maximizes the joint profits of the insurer and *all* of the providers  $h \in \mathcal{A}_{pri}$  taken as a group.

 $Q_{\text{pub}}^{h}(\mathcal{A}_{\text{pub}})$  for each  $h \in \mathcal{A}_{\text{pri}}$ . Consistent with the analysis above, this will tend to push  $p_{h}^{J}$  below  $\bar{p}_{h}$  and downward toward the provider's marginal cost  $c_{h}$ . The opposite will occur in the (perhaps less relevant) case where the public option's network is narrower than the private plan's network.

Before characterizing the Nash-in-Nash contract terms, I pause to state a property of a network  $\mathcal{A}_{pri}$  that ensures that, for each provider in  $\mathcal{A}_{pri}$ , the insurer and provider earn higher joint profits by striking a network agreement than by declining to strike a network agreement, as demonstrated formally in Lemma E1 in Appendix E. This ensures, in turn, that Nash-in-Nash contract terms exists.

**Definition.** A private plan network  $\mathcal{A}_{pri}$  is **viable** with respect to a public option premium  $r_{pub}$  and network  $\mathcal{A}_{pub}$  if for each provider  $h \in \mathcal{A}_{pri}$ 

$$D_{\text{pri}}(\{r^{-h}+\delta_h,r_{\text{pub}}\},\mathcal{A}) \geq D_{\text{pri}}(\{r^{-h},r_{\text{pub}}\},\mathcal{A}^{\text{pri},h}),$$

where  $\mathcal{A} \equiv \{\mathcal{A}_{\text{pri}}, \mathcal{A}_{\text{pub}}\}, r^{-h} \equiv r_{\text{pri}}^*(r_{\text{pub}}, \mathcal{A}^{\text{pri},h}, p^J(\mathcal{A})), \text{ and }$ 

$$\delta_{h} \equiv p_{h}^{J}(\mathcal{A})Q_{\mathrm{pri}}^{h}(\mathcal{A}_{\mathrm{pri}}) - \sum_{l \in \mathcal{A}_{\mathrm{pri}}^{\backslash h}} p_{l}^{J}(\mathcal{A}) \Big[ Q_{\mathrm{pri}}^{l}(\mathcal{A}_{\mathrm{pri}}^{\backslash h}) - Q_{\mathrm{pri}}^{l}(\mathcal{A}_{\mathrm{pri}}) \Big].$$

In essence, a network is viable if the marginal private plan enrollee is willing to pay an additional premium of at least  $\delta_h$  to gain access to each provider  $h \in \mathcal{A}_{pri}$ , where  $\delta_h$  is the insurer's incremental claims spending from adding provider h to its network if the insurer paid all providers prices  $p^J(\mathcal{A})$ .

In practice, the class of viable networks is likely to be relatively large. A consumer's only alternative path to accessing a given provider's services is to enroll in the public option (and even this path only exists when the provider is included in the public option's network). But the public option's premium reflects prices  $\bar{p}$  that, as discussed above, will generally be similar to the prices  $p^{J}(\mathcal{A})$ . This suggests that the amount  $\delta_{h}$  will often not be prohibitive, particularly for consumers with an idiosyncratic preference for the private plan. Nevertheless, some networks, such as networks including providers that deliver services that generate little value for enrollees, may not be viable. Indeed, excluding such providers may be one way a private plan could add value relative to the public option.

**Nash-in-Nash contract terms.** I now characterize the contract terms that emerge from a Nash-in-Nash bargaining process. To do so, it is useful to define the amounts that the insurer and provider h gain from forming a network agreement, holding the terms the insurer has reached with the other providers constant. Specifically, the *gross* gains from trade for the insurer and the provider (that is, the gains to each party before considering lump-sum transfers) are given by, for each  $h \in A_{pri}$ ,

$$GFT_{h}^{I}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}) \equiv \tilde{\pi}^{I}(\boldsymbol{r}^{*}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}), \mathcal{A}, \boldsymbol{p}) - \tilde{\pi}^{I}(\boldsymbol{r}^{*}(r_{\text{pub}}, \mathcal{A}^{\text{pri}, h}, \boldsymbol{p}), \mathcal{A}^{\text{pri}, h}, \boldsymbol{p})$$
$$GFT_{h}^{P}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}) \equiv \tilde{\pi}_{h}^{P}(\boldsymbol{r}^{*}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}), \mathcal{A}, \boldsymbol{p}) - \tilde{\pi}_{h}^{P}(\boldsymbol{r}^{*}(r_{\text{pub}}, \mathcal{A}^{\text{pri}, h}, \boldsymbol{p}), \mathcal{A}^{\text{pri}, h}, \boldsymbol{p}).$$

The net gains from trade for the insurer and provider (that is, the gains after incorporating the lumpsum transfers) are  $GFT_h^I(r_{pub}, \mathcal{A}, \mathbf{p}) - t_h$  and  $GFT_h^P(r_{pub}, \mathcal{A}, \mathbf{p}) + t_h$ , respectively.

The Nash-in-Nash per service prices  $p^*$  and lump-sum transfers  $t^*$  maximize each bilateral Nash product, taking contract terms with other providers as given. That is, for all  $h \in A_{pri}$ ,

$$(p_h^*, t_h^*) = \operatorname*{argmax}_{p_h, t_h} \left[ GFT_h^I (r_{\text{pub}}, \mathcal{A}, \{p_h, \boldsymbol{p}_{-h}^*\}) - t_h \right]^{\theta} \left[ GFT_h^P (r_{\text{pub}}, \mathcal{A}, \{p_h, \boldsymbol{p}_{-h}^*\}) + t_h \right]^{1-\theta}, \quad (B6)$$

where  $p_{-h}^*$  denotes the vector  $p^*$  with the entry for provider h removed and  $\theta \in (0,1)$  denotes the insurer's bargaining weight. I have suppressed the dependence of  $p^*$  and  $t^*$  on the public option's premium  $r_{\text{pub}}$  and the network list  $\mathcal{A}$  in order to streamline notation.

Proposition E1 in Appendix E derives the unique solution of the system (B6) for any network  $\mathcal{A}_{pri}$  that is viable with respect to the public option's premium  $r_{pub}$  and network  $\mathcal{A}_{pub}$ . The bargained per service price with provider *h* depends only on the network list  $\mathcal{A}$  and satisfies  $p_h^*(\mathcal{A}) = p_h^J(\mathcal{A})$ , paralleling the single-provider case. This is intuitive, as if the per service price did not maximize the parties' bilateral profits, both parties could strictly increase their gains from trade by instead adopting a per service price  $p_h^J(\mathcal{A})$  and adjusting the lump-sum transfer appropriately. As in the single-provider case, the lump-sum transfers  $t_h^*(r_{pub}, \mathcal{A})$  depend on both the network list  $\mathcal{A}$  and the premium  $r_{pub}$ , and it splits the bilateral surplus under the parties' agreement in accordance with their bargaining weights.

Using the first-order condition for  $t_h$ , it is straightforward to show that the insurer's total per enrollee payment to provider h, including the lump-sum transfer, is

$$p_{h}^{*}(\mathcal{A})Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}}) + \frac{t_{h}^{*}(r_{\text{pub}}, \mathcal{A})}{D_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A})}$$

$$= \theta \underbrace{\left[p_{h}^{J}(\mathcal{A})Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}}) - [\bar{p}_{h} - c_{h}]Q_{\text{pub}}^{h}(\mathcal{A}_{\text{pub}})\frac{D_{\text{pri}}^{-h}(r_{\text{pub}}, \mathcal{A})}{D_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A})}\right]}_{\text{minimum payment provider can profitably accept}}$$

$$+ (1 - \theta) \underbrace{\left[p_{h}^{J}(\mathcal{A})Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}}) + \frac{GFT_{h}^{J}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}^{J}(\mathcal{A}))}{D_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A})}\right]}_{\text{maximum amount insurer can profitably pay}}, \quad (B7)$$

where I have made the following definitions to streamline notation:

$$D_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A}) \equiv D_{\text{pri}}\left(\boldsymbol{r}^{*}\left(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}^{J}(\mathcal{A})\right), \mathcal{A}\right)$$
$$D_{\text{pri}}^{-h}(r_{\text{pub}}, \mathcal{A}) \equiv D_{\text{pri}}\left(\boldsymbol{r}^{*}\left(r_{\text{pub}}, \mathcal{A}^{\text{pri},h}, \boldsymbol{p}^{J}(\mathcal{A})\right), \mathcal{A}^{\text{pri},h}\right) \forall h \in \mathcal{A}_{\text{pri}}.$$

Paralleling the single-provider case, equation (B7) implies that the per enrollee payment from the insurer to provider h is a weighted average of the two labeled amounts: the minimum payment required to compensate the provider for its costs of delivering care plus the profits it loses when enrollment shifts out of the public option into the private plan; and the maximum payment at which forming a network agreement with the provider remains profitable for the insurer.

Equation (B7) implies that the presence of the public option constrains the private plan's average per enrollee claims spending from both above and below, as it did in the single-provider case. However, the fact that the private plan will now attract some enrollment even if a particular provider declines to join its network changes both the lower and upper bounds in important ways.

The lower bound on the per enrollee payment, which corresponds to the first labeled amount in equation (B7), is now looser than the corresponding bound in equation (B3). Relative to equation (B3), this term is now reduced by an amount  $[\bar{p}_h - c_h]Q_{pub}^h(\mathcal{A}_{pub}) D_{pri}^{-h}(r_{pub}, \mathcal{A}) / D_{pri}^*(r_{pub}, \mathcal{A})$ , reflecting the fact that enrollees who switch from the public option into the private plan when provider *h* joins the insurer's network are now only a subset of the private plan's enrollees. Correspondingly, the lower

bound now falls somewhere between the provider's direct  $\cot c_h Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})$  and the marginal per enrollee payment  $p_h^J(\mathcal{A})Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})$ . It follows that the lower bound on the insurer's per enrollee payments to the provider may now be well below the public option's per enrollee payments to the provider. Indeed, if the provider's presence in the insurer's network has little effect on private plan enrollment, the lower bound will simply be the provider's  $\cot c_h Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})$ .

The upper bound, which arises from the second bracketed term in equation (B7), also changes. This bound now depends on the *change* in the insurer's gross profits when provider *h* joins the plan's network,  $GFT_h^I(r_{pub}, \mathcal{A}, p^*(\mathcal{A}))$ . By contrast, the insurer's full profit appeared in equation (B3) since the insurer earned zero profits without an agreement.

This change in the upper bound makes it harder to analyze. To make progress, I make the following assumption about consumer demand, which roughly parallels the diminishing marginal contribution assumption of Collard-Wexler, Gowrinsankaran, and Lee (2019):

Assumption B4 (Diminishing returns to network breadth). For any network lists  $\mathcal{A} = \{\mathcal{A}_{pri}, \mathcal{C}\}$  and  $\mathcal{B} = \{\mathcal{B}_{pri}, \mathcal{C}\}$  with  $\mathcal{B}_{pri} \subset \mathcal{A}_{pri}, \mathcal{B}_{pri} \neq \emptyset$ , and  $\mathcal{C} \neq \emptyset$  and for any  $h \in \mathcal{B}_{pri}$ :

$$D_{\mathrm{pri}}^*(r_{\mathrm{pub}}, \boldsymbol{\mathcal{B}})p_h^J(\boldsymbol{\mathcal{B}})Q_{\mathrm{pri}}^h(\boldsymbol{\mathcal{B}}_{\mathrm{pri}}) + GFT_h^J(r_{\mathrm{pub}}, \boldsymbol{\mathcal{B}}, \boldsymbol{p^J}(\boldsymbol{\mathcal{B}}))$$

insurer's incremental revenue from adding provider h to achieve network  $\mathcal{B}_{pri}$ , net of non-claims costs and payments to other providers

$$\geq D_{\text{pri}}^*(r_{\text{pub}}, \mathcal{A})p_h^J(\mathcal{A})Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}}) + GFT_h^J(r_{\text{pub}}, \mathcal{A}, p^J(\mathcal{A}))$$

$$-\underbrace{p_{h}^{J}(\boldsymbol{\mathcal{A}})\left[D_{\mathrm{pri}}^{*}(r_{\mathrm{pub}},\boldsymbol{\mathcal{A}})Q_{\mathrm{pri}}^{h}(\boldsymbol{\mathcal{A}}_{\mathrm{pri}})-D_{\mathrm{pri}}^{*}(r_{\mathrm{pub}},\boldsymbol{\mathcal{B}})Q_{\mathrm{pri}}^{h}(\boldsymbol{\mathcal{B}}_{\mathrm{pri}})\right]}_{\mathrm{volume change term}}$$

Assumption B4 says that if the insurer shifts from a narrower network  $\mathcal{B}_{pri}$  to a broader network  $\mathcal{A}_{pri}$ , then the incremental revenue the insurer can extract from enrollees when it adds provider *h* to its network, net of what it pays other providers and its non-claims spending, either shrinks sufficiently or does not increase too much (depending on the sign of the "volume change term"). This assumption is likely to be satisfied if enrollees view competing providers as substitutes, in which case enrollees' willingness to pay for any particular provider is likely to fall as the insurer's network broadens.

Proposition E2 in Appendix E demonstrates that, if Assumption B4 holds, then

$$\sum_{h \in \mathcal{A}_{\text{pri}}} GFT_h^I \left( r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}^{\boldsymbol{j}}(\mathcal{A}) \right) \leq \tilde{\pi}_*^I \left( r_{\text{pub}}, \mathcal{A} \right)$$
(B8)

where  $\tilde{\pi}_*^l(r_{\text{pub}}, \mathcal{A}) \equiv \pi^l(\mathbf{r}^*(r_{\text{pub}}, \mathcal{A}, \mathbf{p}^J(\mathcal{A})), \mathcal{A}, \mathbf{p}^J(\mathcal{A}))$  is the insurer's gross profit when the public option charges a premium  $r_{\text{pub}}$ , the network list is  $\mathcal{A}$ , and the insurer pays per service prices  $\mathbf{p}^J(\mathcal{A})$ . Thus, if Assumption B4 holds, then the insurer's total payments to all providers can be substantially larger than the sum of the per enrollee payments  $\sum_h p_h^J(\mathcal{A})Q_{\text{pri}}(\mathcal{A}_{\text{pri}})$  only if the insurer's gross profits are large, which equation (B4) implies will be the case only if the insurer faces a low elasticity of demand. If equation (B8) holds, it also follows that it will be profitable for the insurer to offer a plan.

While Assumption B4 has intuitive appeal, it is unlikely to hold exactly in practice. In particular, while it is plausible that enrollees generally view competing providers as substitutes, they may view providers of different types (e.g., physicians versus hospitals) as complements. Network adequacy

insurer's incremental revenue from adding provider h to achieve network  $\mathcal{A}_{pri}$ , net of non-claims costs and payments to other providers

requirements that require insurers to have at least one provider of each type in their networks could also, in effect, make different providers complements, at least in very narrow networks.

With substantial complementarities, Assumption B4 could fail and the bound stated in equation (B8) might no longer hold. Consider, for example, the case of an insurer in a geographic area with two "must have" providers without which it cannot attract any enrollment. In this case, the insurer's gains from trade from adding each individual provider to its network would be its *full* gross profit, so the sum of the gains from trade terms on the left-hand-side of equation (B8) would be *twice* the insurer's gross profit. In such cases, the insurer's payments to providers could exceed its revenues, making it unwilling to offer a plan. Of course, complementarities would need to be large for this to occur in practice. Indeed, equation (B7) illustrates that, if the insurer's bargaining weight  $\theta$  is substantially greater than zero, then the bound in equation (B8) would need to be violated by a substantial margin in order for the negotiated lump-sum transfer to cause the insurer to incur losses.

For essentially the reasons discussed above, Collard-Wexler, Gowrinsankaran, and Lee (2019) suggest that the Nash-in-Nash bargaining solution might not be reasonable in contexts where there are substantial complementarities on at least one side of the market. Some recent work has examined modifications of the Nash-in-Nash bargaining solution that might produce more reasonable predictions in such settings (Yu and Waehrer 2018; Froeb, Mares, and Tschantz 2019). Applied to the present setting, these alternative bargaining solutions have the appealing (and intuitive) feature that they would always result in the insurer realizing positive profits. Exploring alternative bargaining solutions is a useful direction for future work.<sup>104</sup>

Importantly, however, the quantitative simulations presented in the main text depend only on the premium the private plan sets. Thus, those results will be the same under *any* bargaining protocol that leads each insurer-provider pair to strike agreements that maximize their bilateral profits, a category that includes the alternative bargaining solutions referenced above and many others as well.

**Importance of the availability of a two-part tariff.** As in the single-provider case, the ability of each insurer-provider pair to negotiate a two-part tariff is what allows them to maximize bilateral profits and then split those profits between them however they wish. If they were restricted to use simple linear contracts, a double marginalization problem would again arise.

But the consequences of double marginalization are less clear cut with multiple providers. In the single-provider case, equations (B2) and (B3) show that the insurer's total per enrollee payment always exceeds its marginal per enrollee payment, implying that restricting the parties to a simple linear contract would increase the insurer's premium and reduce enrollment in the private plan. But with multiple providers, equations (B5) and (B7) show that the insurer's total per enrollee payment to the provider may actually be less than or equal to its marginal per enrollee payment, particularly if the insurer's bargaining weight is high. Thus, with multiple providers, restricting the parties to linear contracts could either increase the private plan's premium (and correspondingly reduce enrollment).

#### B.3.3 Insurer Plan Offer Decision

The discussion in the preceding section showed that, under Assumption B4, the insurer earns positive net profits for any non-empty network  $A_{pri}$ , so it is always in the insurer's interest to offer a plan.

<sup>&</sup>lt;sup>104</sup> One shortcoming of these specific alternative bargaining solutions is that it is not immediately clear whether they are well-defined in this setting. In particular, the monotonicity condition that Yu and Waehrer (2018) use to ensure existence of their bargaining solution may not be plausible here.

#### B.4 Incorporating Risk Selection and Risk Adjustment

The discussion so far implicitly assumes that all potential enrollees have similar health status and, thus, similar demand for health care services. Formally, this is reflected in the assumption that the utilization amounts  $Q_i^h(\mathcal{A}_i)$  depend only on each plan's network  $\mathcal{A}_i$ . Correspondingly, the preceding discussion also does not consider the potential effects of a risk adjustment program designed to transfer funds from plans that attracted healthier enrollees to plans that attracted sicker enrollees.

However, as discussed in the main text, experience from the Medicare program suggests that a public option offered in the individual or small group markets would attract sicker enrollees than competing private plans. Furthermore, that experience suggests that these differences would not be completely neutralized by the risk adjustment programs that operate in those markets, both because some dimensions of health status would not be captured by risk adjustment and because private plans would code their diagnoses more aggressively than the public option, making their enrollees appear sicker.

In this subsection, therefore, I extend the model analyzed above to incorporate risk adjustment and risk selection, albeit in a stylized way in order to preserve tractability:

• **Risk adjustment and coding intensity.** I assume that policymakers operate a risk adjustment program that collects data on the characteristics of enrollees in each plan and transfers funds from the plan whose enrollees appear healthier to the plan whose appear sicker. In detail, I assume that each plan reports an average risk score  $s_i$  based on some set of observable enrollee characteristics. Each plan *i* receives a per enrollee risk adjustment transfer  $s_i - s^0$ , where  $s^0$  is an exogenous target risk score.<sup>105</sup> When simulating the model, I assume that the government sets  $s^0$  so that risk adjustment is budget neutral in equilibrium.<sup>106</sup> That is,  $s_{pri}D_{pri}^* + s_{pub}D_{pub}^* = s^0$ , where  $D_{pri}^*$  and  $D_{pub}^*$  denote equilibrium enrollment in the two plans.

Following the model in Geruso and Layton (2020), I assume that the risk adjustment system eliminates plans' incentives to select on the enrollee characteristics captured in risk adjustment, so there is no sorting on these characteristics in equilibrium, regardless of what premiums or networks the plans offer.<sup>107</sup> However, because the private plan is more aggressive in coding diagnoses, it is nevertheless the case that  $s_{pri} > s_{pub}$ . I assume that the private plan and public option view the risk scores  $s_{pri}$  and  $s_{pub}$  as exogenous.

• **Residual risk selection.** While I assume that there is no sorting across plans on the enrollee characteristics captured in risk adjustment, I do allow for sorting on other dimensions of health status. To model this selection, I proceed in the spirit of Einav, Finkelstein, and Cullen (2010). I assume that each individual in the population of potential enrollees has a type *v* uniformly distributed on [0,1] that characterizes the person's propensity to enroll in the private plan. In particular, for any premium vector *r* and network list *A*, people with  $v \leq D_{\text{pri}}(r, A)$  enroll in the private plan and people with  $v > D_{\text{pri}}(r, A)$  enroll in the public option.

<sup>&</sup>lt;sup>105</sup> I assume that risk scores are measured in dollars to avoid introducing a superfluous conversion factor.

<sup>&</sup>lt;sup>106</sup> In reality, risk adjustment programs in the individual and small group markets set *s*<sup>0</sup> *after the end of the year* to match the actual average risk score reported by participating plans. This design ensures that risk adjustment is always budget neutral in practice. Incorporating this feature of reality would complicate the analysis since plans and providers would need to account for how their decisions would change the target risk score. It is doubtful, however, that this simplification has much effect on the results.

<sup>&</sup>lt;sup>107</sup> Curto et al. (2019) report that there is some sorting on characteristics included in risk adjustment in Medicare Advantage, but find that it is modest in size, suggesting that this is a reasonable assumption.

I assume that a person of type v has a relative utilization factor m(v), which is normalized so that  $\int_0^1 m(v) dv = 1$  and which satisfies  $m'(v) \ge 0$ , consistent with the expectation that the public option experiences adverse selection. A person of type v who is enrolled in plan i with a network  $\mathcal{A}_i$  uses a quantity of services  $Q_i^h(\mathcal{A}_i)m(v)$  from provider h, where the quantity  $Q_i^h(\mathcal{A}_i)$  now corresponds to the average per enrollee utilization of services delivered by provider h if the entire population were enrolled in plan i under network  $\mathcal{A}_i$ .

For convenience, I also define

$$M_{\rm pri}(v) = \frac{1}{v} \int_0^v m(u) du$$
 and  $M_{\rm pub}(v) = \frac{1}{1-v} \int_v^1 m(u) du$ ,

which are the average relative utilization factors for the private plan and public option, respectively, when a fraction v of the population enrolls in the private plan. It follows that per enrollee utilization of provider h's services by enrollees of plan i when that plan has a network  $A_i$  and enrollment in the private plan is v is then given by  $Q_i^h(A_i)M_i(v)$ .

Given these definitions, the provider and insurer's profit functions now take the form:

$$\pi_h^P(\boldsymbol{r},\boldsymbol{\mathcal{A}},\boldsymbol{p},\boldsymbol{t}) = D_{\text{pri}}Q_{\text{pri}}^h(\boldsymbol{\mathcal{A}}_{\text{pri}})M_{\text{pri}}(D_{\text{pri}})[p_h - c_h] + D_{\text{pub}}Q_{\text{pub}}^h(\boldsymbol{\mathcal{A}}_{\text{pub}})M_{\text{pub}}(D_{\text{pri}})[\bar{p}_h - c_h] + t_h$$
$$\pi^I(\boldsymbol{r},\boldsymbol{\mathcal{A}},\boldsymbol{p},\boldsymbol{t}) = D_{\text{pri}}\left[r_{\text{pri}} - f_{\text{pri}} + (s_{\text{pri}} - s^0) - \sum_{h \in \mathcal{A}_{\text{pri}}} p_h Q_{\text{pri}}^h(\boldsymbol{\mathcal{A}}_{\text{pri}})M_{\text{pri}}(D_{\text{pri}})\right] - \sum_{h \in \mathcal{A}_{\text{pri}}} t_h,$$

where I have suppressed the arguments of  $D_{pri}$  and  $D_{pub}$  to streamline notation.

Similarly, the first-order condition of the insurer's profit maximization problem becomes

$$r_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}) = f_{\text{pri}} - [s_{\text{pri}} - s^{0}] + m \left( D_{\text{pri}}(\{r_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}), r_{\text{pub}}\}, \mathcal{A}) \right) \sum_{h \in \mathcal{A}_{\text{pri}}} p_{h} Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}}) + \frac{D_{\text{pri}}(\{r_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}), r_{\text{pub}}\}, \mathcal{A})}{-\frac{\partial D_{\text{pri}}}{\partial r_{\text{pri}}}(\{r_{\text{pri}}^{*}(r_{\text{pub}}, \mathcal{A}, \boldsymbol{p}), r_{\text{pub}}\}, \mathcal{A})}.$$
(B9)

This equation differs from the corresponding condition without risk selection and risk adjustment (equation (B4)) in two important ways. First, the provider's marginal cost now incorporates the risk adjustment transfer  $s_{pri} - s^0$  it receives on the marginal enrollee. Second, due to the presence of the term  $m(D_{pri}(\{r_{pub}^*, \mathcal{A}, \boldsymbol{p}\}, r_{pub}\}, \mathcal{A}))$ , the private plan's marginal cost now depends on what type of enrollee is on the margin between the private plan and the public option.

For private plan networks that meet a suitably modified version of the definition of "viable" given above, reasoning parallel to that used to derive equations (B5) and (B6) can be used to show that the per service prices are unchanged, while the insurer's total per enrollee payment to provider h, including the lump-sum transfer, now takes the slightly modified form:

$$p_{h}^{*}(\mathcal{A})Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}})M_{\text{pri}}\left(D_{\text{pri}}^{*}(r_{\text{pub}},\mathcal{A})\right) + \frac{t_{h}^{*}(r_{\text{pub}},\mathcal{A})}{D_{\text{pri}}^{*}(r_{\text{pub}},\mathcal{A})}$$

$$= \theta \underbrace{\left[p_{h}^{J}(\mathcal{A})Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}})M_{\text{pri}}\left(D_{\text{pri}}^{*}(r_{\text{pub}},\mathcal{A})\right) - [\bar{p}_{h} - c_{h}]Q_{\text{pub}}^{h}(\mathcal{A}_{\text{pub}})M_{\text{pri}}\left(D_{\text{pri}}^{-h}(r_{\text{pub}},\mathcal{A})\right) \frac{D_{\text{pri}}^{-h}(r_{\text{pub}},\mathcal{A})}{D_{\text{pri}}^{*}(r_{\text{pub}},\mathcal{A})}\right]}_{\text{minimum payment provider can profitably accept}}$$

$$+ (1 - \theta) \underbrace{\left[p_{h}^{J}(\mathcal{A})Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}})M_{\text{pri}}\left(D_{\text{pri}}^{*}(r_{\text{pub}},\mathcal{A})\right) + \frac{GFT_{h}^{J}(r_{\text{pub}},\mathcal{A},p^{J}(\mathcal{A}))}{D_{\text{pri}}^{*}(r_{\text{pub}},\mathcal{A})}\right]}_{\text{maximum amount insurer can profitably pay}}.$$
(B10)

For its part, the public option still must set a premium that covers its average costs. It is easily shown that the public option thus sets a premium  $r_{pub}^*(\mathcal{A}_{pub})$  that satisfies the following condition:

$$r_{\text{pub}}^{*}(\mathcal{A}_{\text{pub}}) = f_{\text{pub}} - (s_{\text{pub}} - s^{0}) + M_{\text{pub}} \left( D_{\text{pri}}^{*}(r_{\text{pub}}^{*}(\mathcal{A}_{\text{pub}}), \{\mathcal{A}_{\text{pri}}^{*}(r_{\text{pub}}^{*}(\mathcal{A}_{\text{pub}}), \mathcal{A}_{\text{pub}}), \mathcal{A}_{\text{pub}}\}) \right) \sum_{h \in \mathcal{A}_{\text{pub}}} \bar{p}_{h} Q_{\text{pub}}^{h}, (B11)$$

where I have omitted the network arguments of the utilization functions to streamline notation. It is easy to see that  $r_{\text{pub}}^*(\mathcal{A}_{\text{pub}})$  is higher than the premium the public option would have set in the absence of selection or upcoding by the private plan. How much higher depends on the degree of selection.

#### B.5 Simulating Outcomes When Provider Participation is Mandatory

This section calibrates the model developed above and uses the calibrated model to simulate insurance market outcomes and provider payment rates in the presence of a public option. For the purposes of these simulations, I assume that providers are required to join the public option's network, so  $\mathcal{A}_{pub} = \mathcal{H}$ . The results of these simulations are reported in section 6.3.2 in the main text.

This section proceeds as follows. I first establish some useful notation and state two assumptions useful for calibration. I then show how the model can be solved numerically given these assumptions and a set of relevant parameters. Next, I explain how I map the assumptions stated in section 6.3.1 and summarized in Table 6.3 to the parameters needed for calibration. The final part of the section explains how I compare results from the calibrated model to the premiums of existing private plans.

#### B.5.1 Notation

It is useful to work with versions of the plan premiums that are normalized by the public option's per enrollee claims cost of covering the full population when it uses a set of base payment rates  $\bar{p}^0 \equiv \{\bar{p}_h^0\}_{h\in\mathcal{H}}$ , taken here to be traditional Medicare's payment rates. To that end, I define for each plan *i*:

$$\hat{r}_i \equiv \frac{r_i}{\sum_{h \in \mathcal{H}} \bar{p}_h^0 Q_{\text{pub}}^h(\mathcal{H})}.$$

I also use normalized versions of each plan's administrative spending and risk scores, which I denote by  $\hat{f}_i$  and  $\hat{s}_i$ , respectively, for each plan *i*, as well as a normalized version of the target risk score,  $\hat{s}^0$ .

Demand for the private plan given the normalized premiums and private plan network  $A_{pri}$  is

$$\widehat{D}_{\text{pri}}(\widehat{r}_{\text{pri}}, \widehat{r}_{\text{pub}}, \mathcal{A}_{\text{pri}}) \equiv D_{\text{pri}}\left(\left\{\widehat{r}_{\text{pri}} \cdot \left[\sum_{h \in \mathcal{H}} \overline{p}_{h}^{0} Q_{\text{pub}}^{h}(\mathcal{H})\right], \widehat{r}_{\text{pub}} \cdot \left[\sum_{h \in \mathcal{H}} \overline{p}_{h}^{0} Q_{\text{pub}}^{h}(\mathcal{H})\right]\right\}, \{\mathcal{A}_{\text{pri}}, \mathcal{H}\}\right).$$

Similarly, the private plan's demand elasticity as a function of the normalized premiums is denoted  $\hat{\epsilon}(\hat{r}_{\text{pri}}, \hat{r}_{\text{pub}})$ . For convenience, I additionally make the definition  $\hat{D}_{\text{pub}}(\hat{r}_{\text{pri}}, \hat{r}_{\text{pub}}) \equiv 1 - \hat{D}_{\text{pri}}(\hat{r}_{\text{pri}}, \hat{r}_{\text{pub}})$ .

For future reference, it is also useful to define the following two quantities:

$$\hat{Q}_{\text{pri}} \equiv \frac{\sum_{h \in \mathcal{A}_{\text{pri}}} \bar{p}_h^0 Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})}{\sum_{h \in \mathcal{H}} \bar{p}_h^0 Q_{\text{pub}}^h(\mathcal{H})} \quad \text{and} \quad \hat{a}_{\text{pri}} \equiv \frac{\sum_{h \in \mathcal{A}_{\text{pri}}} \bar{p}_h^0 Q_{\text{pub}}^h(\mathcal{H})}{\sum_{h \in \mathcal{H}} \bar{p}_h^0 Q_{\text{pub}}^h(\mathcal{H})}.$$

The first quantity,  $\hat{Q}_{\rm pri}$ , is private plan utilization expressed as a fraction of public option utilization (weighing different providers' utilization using the base payment rates). If the plans have identical utilization, then  $\hat{Q}_{\rm pri}$  will equal one, while if the private plan manages utilization more aggressively, then  $\hat{Q}_{\rm pri}$  will be less than one. The second quantity,  $\hat{a}_{\rm pri}$ , is the share of the public option's utilization that occurs at providers included in the private plan's network (weighting different providers' utilization using the base payment rates) and is essentially a measure of the private plan's network breadth. If  $\mathcal{A}_{\rm pri} = \mathcal{H}$ , then  $\hat{a}_{\rm pri}$  will be one, while in practice it will generally be less than one.

#### B.5.2 Calibration Assumptions

For calibration purposes, I assume that the weighted average gap between providers' marginal cost of delivering services and the base set of payment rates for those services is the same under both plans' utilization profiles. That is, I assume there exists an amount  $\hat{c}$  that satisfies the following condition:

$$\hat{c} = \frac{\sum_{h \in \mathcal{H}} c_h Q_{\text{pub}}^h(\mathcal{H})}{\sum_{h \in \mathcal{H}} \bar{p}_h^0 Q_{\text{pub}}^h(\mathcal{H})} = \frac{\sum_{h \in \mathcal{A}_{\text{pri}}} c_h Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})}{\sum_{h \in \mathcal{A}_{\text{pri}}} \bar{p}_h^0 Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})}.$$

Note that a sufficient (but not necessary) condition for a suitable  $\hat{c}$  to exist is for the base payment rate vector  $\overline{p}^0$  to be a scalar multiple of the cost vector c.

Similarly, I assume that the weighted average gap between the public option's payment rates  $\bar{p}$  and the base payment rates  $\bar{p}^0$  is the same for both profiles. That is, there exists an amount  $\hat{p}$  such that

$$\hat{p} = \frac{\sum_{h \in \mathcal{H}} \bar{p}_h Q_{\text{pub}}^h(\mathcal{H})}{\sum_{h \in \mathcal{H}} \bar{p}_h^h Q_{\text{pub}}^h(\mathcal{H})} = \frac{\sum_{h \in \mathcal{A}_{\text{pri}}} \bar{p}_h Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})}{\sum_{h \in \mathcal{A}_{\text{pri}}} \bar{p}_h^0 Q_{\text{pri}}^h(\mathcal{A}_{\text{pri}})}$$

Similar to the preceding paragraph, a sufficient (but not necessary) condition for a suitable  $\hat{p}$  to exist is that the vector of payment rates  $\bar{p}$  is a scalar multiple of the base payment rate vector  $\bar{p}^0$ 

#### B.5.3 Solution Method

The model can be solved in three steps.

**Step 1.** The first step is to determine the normalized premium  $\hat{r}_{pri}^*(\hat{r}_{pub}, \hat{s}^0)$  the private plan sets when the public option sets a normalized premium  $\hat{r}_{pub}$  and the government has set a normalized target risk score of  $\hat{s}^0$ . The private plan's premium-setting condition equation (B9), together with the per service prices from equation (B5), imply that

$$\hat{r}_{\text{pri}}^{*}(\hat{r}_{\text{pub}},\hat{s}^{0}) = \left[\frac{1}{1 + \hat{\epsilon}(\hat{r}_{\text{pri}}^{*}(\hat{r}_{\text{pub}},\hat{s}^{0}),\hat{r}_{\text{pub}})^{-1}}\right] \times \left[\hat{f}_{\text{pri}} - \{\hat{s}_{\text{pri}} - \hat{s}^{0}\} + \{\hat{c}\hat{Q}_{\text{pri}} + \hat{a}_{\text{pri}}[\hat{p} - \hat{c}]\}m\left(\hat{D}_{\text{pri}}(\hat{r}_{\text{pub}}^{*},\hat{s}^{0}),\hat{r}_{\text{pub}})\right)\right].$$

This equation is easy to solve numerically for  $\hat{r}_{pri}^*(\hat{r}_{pub}, \hat{s}^0)$  at any  $\hat{r}_{pub}$  and  $\hat{s}^0$  given the various other parameters that appear in the equation, the demand function  $\hat{D}_{pri}$ , and the elasticity function  $\hat{\epsilon}$ .

**Step 2.** The second step is to find the normalized public option premium  $\hat{r}_{pub}^*$  that satisfies the public option's breakeven constraint, given the normalized target risk score  $\hat{s}^0$  and the premium the private plan is expected to set in response to the public option's premium. From equation (B11), I obtain

$$\hat{r}_{\text{pub}}^{*}(\hat{s}^{0}) = \hat{f}_{\text{pub}} - \{\hat{s}_{\text{pub}} - \hat{s}^{0}\} + \hat{p}M_{\text{pub}}\left(\hat{D}_{\text{pri}}\left(\hat{r}_{\text{pri}}^{*}(\hat{r}_{\text{pub}}^{*}(\hat{s}^{0}), \hat{s}^{0}\right), \hat{r}_{\text{pub}}^{*}(\hat{s}^{0})\right)\right).$$

As above, this equation is easy to solve numerically for  $\hat{r}_{pub}^*(\hat{s}^0)$  at any  $\hat{s}^0$  given the various parameters, the function  $\hat{D}_{pri}$ , and the ability to compute  $\hat{r}_{pri}^*(\hat{r}_{pub}, \hat{s}^0)$  at any point.

**Step 3.** As noted above, I assume that the government sets the target risk score so that risk adjustment is budget neutral. Thus, the final step is to find the normalized target risk score  $\hat{s}^0$  that satisfies

$$\hat{s}_{\text{pri}}\widehat{D}_{\text{pri}}\left(\hat{r}_{\text{pub}}^{*}(\hat{s}^{0}),\hat{s}^{0}\right),\hat{r}_{\text{pub}}^{*}(\hat{s}^{0})\right) + \hat{s}_{\text{pub}}\widehat{D}_{\text{pub}}\left(\hat{r}_{\text{pri}}^{*}(\hat{r}_{\text{pub}}^{*}(\hat{s}^{0}),\hat{s}^{0}),\hat{r}_{\text{pub}}^{*}(\hat{s}^{0})\right) = \hat{s}^{0}$$

This equation is also easily solved numerically given the parameters, the functions  $\hat{D}_i$ , and the ability to calculate  $\hat{r}_{pri}^*$  and  $\hat{r}_{pub}^*$  at any point. The resulting solution for  $\hat{s}^0$  can then be used to compute the corresponding equilibrium (normalized) premium  $\hat{r}_i^*$  and enrollment  $\hat{D}_i$  for each plan *i*.

#### B.5.4 Parameter Calibration

This section specifies how model parameters are set for the various simulation scenarios in Table 6.4.

**Marginal cost parameter.** The marginal cost parameter  $\hat{c}$  captures how Medicare's payment rates compare to providers' marginal costs, on average. I set a common value of  $\hat{c}$  across all simulation scenarios. Based on hospitals' cost reports to CMS, MedPAC (2020a) estimates that Medicare payment rates exceeded hospitals' marginal costs by approximately 8% in 2018; MedPAC estimated higher margins for the other categories of providers for which data are available (dialysis facilities, skilled nursing facilities, home health agencies, rehabilitation hospitals, and long-term care hospitals). Unfortunately, comparable estimates are not available for physicians, although MedPAC does present survey evidence indicating that the vast majority of physicians are accepting new Medicare patients, which strongly suggests that Medicare rates generally exceed physicians' marginal cost.

I thus set  $\hat{c}$  based on the MedPAC estimates for hospitals, so  $\hat{c} = 1/1.08$ . The simulation results are only modestly sensitive to varying  $\hat{c}$ . To see why, note that equation (B5) shows that the per service prices negotiated between providers and the private insurer depend on the provider's marginal cost only to the extent that: (a) utilization differs between public and private plan enrollees; and (b) the public option's payment rates are above providers' marginal cost. In most of the scenarios considered here, both of those differences are assumed to be relatively modest.

Demand parameters. I assume that demand for the private plan takes a logit form:

$$D_{\text{pri}}(\{r_{\text{pri}}, r_{\text{pub}}\}, \{\mathcal{A}_{\text{pri}}, \mathcal{H}\}) = \frac{\exp[\alpha + \beta \ln(r_{\text{pri}} / r_{\text{pub}})]}{1 + \exp[\alpha + \beta \ln(r_{\text{pri}} / r_{\text{pub}})]},$$

This demand specification implies that the functions  $\hat{D}_{pri}$  and  $\hat{\epsilon}$  defined above take the following forms:

$$\widehat{D}_{\text{pri}}(\hat{r}_{\text{pri}}, \hat{r}_{\text{pub}}) = \frac{\exp[\alpha + \beta \ln(\hat{r}_{\text{pri}} / \hat{r}_{\text{pub}})]}{1 + \exp[\alpha + \beta \ln(\hat{r}_{\text{pri}} / \hat{r}_{\text{pub}})]}$$

$$\hat{\epsilon}(\hat{r}_{\mathrm{pri}},\hat{r}_{\mathrm{pub}}) = \beta [1 - \widehat{D}_{\mathrm{pri}}(\hat{r}_{\mathrm{pri}},\hat{r}_{\mathrm{pub}})].$$

The parameter  $\beta$  captures how sensitive enrollees' choices are to premiums. As described in the main text, I set  $\beta$  so that the elasticity of demand with respect to premiums achieves a target elasticity of  $\epsilon_0$  when  $\hat{D}_{pri}(\hat{r}_{pri}, \hat{r}_{pub}) = 0.5$ . From the equations above, this implies setting  $\beta = 2\epsilon_0$ .

As discussed in the main text, I set the target elasticity  $\epsilon_0$  by reviewing the existing literature that examines the sensitivity of enrollees' plan choice to premiums for health plans offered on Massachusetts' pre-ACA individual market (Chan and Gruber 2010; Ericson and Starc 2015a; Jaffe and Shepard 2020) and the ACA Marketplaces (Abraham et al. 2017; Domurat 2018; Drake 2019; Saltzman 2019; Tebaldi 2017). The price elasticities from each individual paper are summarized in Table B.1, and the table notes describe how elasticities were extracted from each of these studies. Averaging across the estimates in these papers, I obtain an own-premium elasticity of -7.4.

The parameter  $\alpha$  captures whether enrollees have a systematic preference for the private plan relative to the public option, apart from premium differences. For each simulation scenario, the main text specifies that systematic preference as the change in the private plan's premium that causes an equivalent change in enrollment. Letting  $\Delta_{\alpha}$  denote that premium change, it follows that  $\alpha = \Delta_{\alpha}\beta$ .

Study	Estimated Elasticity	—
Massachusetts Connector		
Chan and Gruber (2010)	-5.9*	
Ericson and Starc (2015a)	-7.5*	
Jaffe and Shepard (2020)	-9.3	
ACA Marketplaces		
Abraham et al. (2017)	-4.6	
Domurat (2018)	-16.1*	
Drake (2019)	-4.8	
Saltzman (2019)	-8.2†	
Tebaldi (2017)	-2.8‡	
Overall Average	-7.4	

## Table B.I: Review of Own-Premium Demand Elasticities

\* These authors report semi-elasticities, which I convert to elasticities by multiplying by the relevant average premium. Chan and Gruber (2010) do not themselves report an average premium, but a comparable premium for that market and year is available from Jaffe and Shepard (2020). Ericson and Starc (2015a) report different semi-elasticities for different age groups, which I use to compute a weighted average semi-elasticity before multiplying by the average premium.

† Saltzman (2019) reports separate elasticity estimate for California (-9.1) and Washington State (-7.2). The elasticity estimate reported in the table is the simple average of these two estimates.

‡ Tebaldi (2017) does not report a summary elasticity estimate, so I infer an elasticity from the equilibrium markup reported in his policy simulations. I use simulations in which the ACA subsidies are replaced by a flat voucher; this ensures that the elasticity does not reflect effects along the lines of Jaffe and Shepard (2020), which could depress the implied elasticity.

**Private plan utilization.** The utilization parameter  $\hat{Q}_{pri}$  reflects how much an enrollee's utilization depends on whether the enrollee is covered by the private plan or the public option. For each scenario, the main text specifies utilization under both the private plan and the public option as a fraction of utilization under existing private plans. I take these utilization differentials to be specified with respect to the base payment rates. That is, if  $\Delta_{o,i}$  is the specified utilization differential for plan *i*, then

$$\Delta_{Q,i} \equiv \frac{\sum_{h \in \mathcal{H}} \bar{p}_h^0 Q_i^h(\mathcal{A}_i)}{\sum_{h \in \mathcal{H}} \bar{p}_h^0 Q_{\text{cur}}^h} - 1$$

where  $Q_{cur}^h$  is the risk-standardized per enrollee quantity of provider *h*'s services used in existing private plans. The corresponding private plan utilization parameter is  $\hat{Q}_{pri} = (1 + \Delta_{Q,pri}) / (1 + \Delta_{Q,pub})$ .

**Private plan network breadth.** The parameter  $\hat{a}_{pri}$  captures the breadth of the private plan's network relative to the public option's network on a utilization-weighted basis. The value this parameter takes in each simulation scenario is specified directly in the main text.

**Non-claims costs.** The parameters  $\hat{f}_i$  are the normalized non-claims costs of each plan *i*. For each scenario, the main text specifies each plan's non-claims costs as a percentage of existing private plans' claims spending. That is, letting  $\tau_i$  be the percentages specified for each plan *i*,

$$f_i = \tau_i \sum_{h \in \mathcal{H}} p_h^{\rm cur} Q_{\rm cur}^h,$$

where  $p_h^{\text{cur}}$  is the current (average) price paid for the services of provider *h* under existing private plans and  $Q_{\text{cur}}^h$  has the same definition as above. It then follows that  $\hat{f}_i = \tau_i \hat{p}_{\text{cur}} / (1 + \Delta_{Q,\text{pub}})$ , where

$$\hat{p}_{\rm cur} \equiv \frac{\sum_{h \in \mathcal{H}} p_h^{\rm cur} Q_{\rm cur}^h}{\sum_{h \in \mathcal{H}} \bar{p}_h^0 Q_{\rm cur}^h}$$

is the weighted average ratio of prices paid in current private plans to the base payment rates, which is also specified directly in the main text for each of the scenarios considered.

**Risk selection function.** The function m(v) captures how enrollees' propensity to use services varies with their propensity to enroll in the private plan. In scenarios where there is no adverse selection against the public option, I take  $m(v) = M_{pub}(v) = M_{pri}(v) = 1$ .

By contrast, in the individual market scenario, I assume that *m* takes the form:

$$m(v) = 1 + \gamma \left( v - \frac{1}{2} \right).$$

It is straightforward to show that this implies that the functions  $M_{pri}$  and  $M_{pub}$  take the form

$$M_{\rm pri}(v) = 1 + \frac{\gamma}{2}(v-1)$$
 and  $M_{\rm pub}(v) = 1 + \frac{\gamma}{2}v$ .

This scenario assumes that the degree of adverse selection against the public option would match the degree of selection against traditional Medicare in the context of the Medicare program. Thus, I use evidence from the Medicare program presented by Curto et al. (2019) to calibrate the parameter  $\gamma$ .

In particular, as discussed in the main text, the Curto et al. estimates imply that health status differences not accounted for in risk adjustment reduce the utilization of Medicare Advantage enrollees by 17% relative to traditional Medicare. This estimate likely reflects *both* true health status

differences along dimensions not captured in risk adjustment and greater coding intensity in Medicare Advantage plans. I therefore take 14% as a rough estimate of the portion of this differential that reflects true health status differences. <sup>108</sup> Data on county-level MA penetration from CMS indicate that Medicare Advantage plans enrolled 30% of all eligible Medicare beneficiaries in the states and year studied by Curto et al. I thus set  $\gamma$  so that  $M_{\text{pri}}(0.3)/M_{\text{pub}}(0.3) = 1 - 0.14$ .

The results are modestly sensitive to the functional form of m. Unfortunately, I am unaware of evidence that can offer guidance on the correct functional form for m. As a theoretical matter, if adverse selection against the public option arose primarily because a small number of enrollees who have high costs (after risk adjustment) always select the public option, then m would be convex. On the other hand, if selection arose because private plans were particularly good at attracting enrollees who are much healthier than they look in risk adjustment, then m could be concave. In reality, of course, m might be neither convex nor concave and take some more complicated shape.

**Coding intensity parameters.** The parameters  $\hat{s}_i$  are the normalized risk scores for the two plans. I assume that risk scores are scaled so that the public option's risk score equals the claims spending it would incur if it enrolled the whole market, which implies that  $\hat{s}_{pub} = \hat{p}$ . For each scenario, the main text specifies the percentage  $\Delta_{code}$  by which the private plan's coding efforts raise its risk scores relative to the public option's. The private plan's normalized risk score is then given by  $\hat{s}_{pri} = (1 + \Delta_{code})\hat{p}$ .

### B.5.5 Expressing Results in Terms of Existing Private Plan Premiums

The premiums reported in section 6.3.2 are expressed as a percentage of the premiums charged by existing private plans, but those premiums cannot be simulated within the model. Rather, I calculate (normalized) premiums for existing private plans from the assumptions described in the main text about how the public option's prices and utilization compare to existing private plans, as well as auxiliary assumptions about the non-claims costs and underwriting margins in existing private plans.

In particular, using the notation defined earlier in this section, normalized claims spending under existing private plans is given by  $\hat{p}_{cur} / (1 + \Delta_{0, \text{pub}})$ . Existing plans' normalized premiums are then

$$\hat{r}_{cur} \equiv (1 + \mu_{cur}) \frac{\hat{p}_{cur}}{1 + \Delta_{Q,pub}}$$

where  $\mu_{cur}$  is the gross margin earned by existing private plans, expressed as a share of claims spending, with an adjustment to exclude premium revenue collected to offset the ACA's health insurance tax. Drawing on the estimates in Tables 6.1 and 6.2, I take  $\mu_{cur} = 0.167$ .<sup>109</sup>

#### B.6 Limitations of a Model with a Single Private Insurer

For the sake of tractability, I examine a model with a single private insurer. However, most real-world insurance markets feature multiple private insurers, so it is worth briefly considering where a single-insurer model is likely to go awry in predicting outcomes under a public option.

In brief, there are two important dynamics that a single-insurer model cannot capture. First, the model cannot capture the role of competition among private plans (as opposed to between the private plan

<sup>&</sup>lt;sup>108</sup> Curto et al. apply a 3.41% coding intensity adjustment to the risk scores used in their analysis (consistent with the coding intensity adjustment applied by CMS in the year the authors study) and, thus, remove a portion of coding intensity effects. The estimates of Geruso and Layton (2020) imply that Medicare Advantage plans' coding intensity efforts increase their risk scores by 6.4% on average, suggesting that another 3 percentage points in coding intensity remains to be accounted for.

<sup>&</sup>lt;sup>109</sup> In detail, I obtain this estimate by summing two quantities: (1) all line items reported in Table 6.1, excluding federal corporate taxes and the ACA's health insurance tax, which yields an estimate of 12.7% of claims spending; and (2) the average pre-corporate-tax underwriting margin of 4.1% of claims spending reported in Table 6.2.

and the public option) in disciplining private plans' premiums. Second, the model cannot capture how shifts in enrollment *among* private plans (as opposed to between private plans and the public option) may affect providers' bargaining behavior. Together, these limitations make the model unsuitable for simulating outcomes without a public option or where the public option is a weak competitor for private plans, either because it has large non-price cost disadvantages or pays high prices.

#### B.6.1 Role of Insurer-Insurer Competition in Disciplining Premiums

In my model, the sole factor that disciplines the premium set by the single private plan is the risk of losing enrollment to the public option. Competition among private insurers plays no role. <sup>110</sup>

The omission of insurer-insurer competition is likely unimportant in most scenarios examined in this paper. Because the public option offers a broad network and has at most moderate non-price cost disadvantages relative to the private plan, the public option attracts substantial enrollment in equilibrium, so the private plan faces a sizeable demand elasticity. The private plan thus sets a moderate markup in equilibrium, and there is limited scope for additional competition to reduce it.

However, there are scenarios where omitting insurer-insurer competition would be problematic. Most obviously, the model cannot be used to simulate outcomes without a public option. In that case, the single private plan would face completely inelastic demand, set infinite premiums, and pay providers infinite prices. This absurd prediction directly reflects the lack of insurer-insurer competition.

The model's predictions will be similarly suspect in the case of a "weak" public option that captures little equilibrium market share since the demand elasticity faced by the private plan will again become unrealistically small. In the model, this can occur when the public option has large non-price cost disadvantages (e.g., due to severe adverse selection). It could also be the case if providers were not required to participate in the public option and the public option's network ended up being very narrow, making it unappealing to enrollees. One implication of this latter fact is that the present model is not suitable for modeling scenarios where public option participation is voluntary for providers, although it can provide some limited insights on this question as discussed in section B.7.

## B.6.2 Effects on Provider Profits from Shifts of Enrollment Among Private Plans

As discussed above, the prices the private plan pays providers for the marginal service are set so that the additional revenue a provider receives when the private plan attracts an additional enrollee exactly offsets the costs that shift imposes on the provider. With a single private plan, any shift in enrollment into the private plan must come entirely from the public option, so the optimal per service price is the price that covers the provider's cost of serving the marginal enrollee plus the profits the insurer loses under the public option. With multiple private plans, the marginal enrollees would be a mixture of public option enrollees and enrollees in other private plans, so the lost profits would be a mixture of lost profits under the public option and other private plans.

If the public option and private plans paid the same prices, then this distinction would be irrelevant. In general, however, many private plan networks exclude at least some providers, which in the model allows them to negotiate prices for the marginal service that are somewhat lower than the public option's. This tendency would likely be even stronger in a model that accounted for insurers' ability to threaten to drop a provider from its network and replace it with a competitor (e.g., Ho and Lee 2019). For this reason, accounting for the fact that some of a private plan's marginal enrollees come from

<sup>&</sup>lt;sup>110</sup> Another omitted factor is that (contra Assumption B3) some people would elect to go uninsured if premiums got very high, which would discipline the private plan's premium to some degree. However, estimates of extensive margin insurance enrollment elasticities are modest, so this is likely a secondary consideration relative to the effects of competition from other plans. See, for example, Fiedler (2017) for a brief recent review of this literature.

other private plans rather than the public option would likely lead providers and private plans to negotiate lower prices for the marginal service than the single-insurer model predicts.<sup>111</sup>

The reduction in the prices private plans pay at the margin would lead them to set lower premiums, which would cut into the public option's market share. The public option's reduced market share would cause the public option to account for even fewer of the private plan's marginal enrollees, further reducing the importance of the public option's price in determining the prices providers and private plans negotiate for the marginal service, while also reducing the extent to which the presence of the public option disciplined private plans' premiums. On balance, these dynamics seem likely to drive private plans' premiums and negotiated prices toward the premiums and negotiated prices that prevailed without a public option.

The implications of this fact depend on whether the public option pays more or less than existing private plans. In cases where the public option paid providers more than existing plans, the first-order effect of accounting for the presence of multiple private plans would be *reinforced* by the follow-on effects associated with the public option's declining market share. Thus, premiums and prices would plausibly be driven all the way back to the outcomes that prevailed without the public option. By contrast, the present model predicts that the provider prices and premium of the private plan would end up close to the public option's. Thus, the present model is not suitable for simulating cases where the public option pays providers more than existing plans.

On the other hand, in cases where the public option paid providers less than existing private plans, the first-order effect of accounting for the presence of multiple private plans would be *offset* by the follow-on effects associated with the decline in the public option's market share. Thus, any biases are likely to be relatively modest in cases where the public option pays providers less than existing plans.

#### B.6.3 Would Nash-in-Nash Bargaining Still be a Reasonable Assumption?

Finally, I note that accommodating multiple private plans would likely require changes to the model's bargaining structure. The Nash-in-Nash bargaining framework used here assumes that each provider-insurer negotiation takes all other contracts as given. However, in a setting with multiple insurers, providers would likely recognize that agreeing to a lower per service price with one insurer would weaken its bargaining position with other insurers, both by reducing the premium those insurers can profitably charge and by reducing how much compensation it can demand when enrollment shifts out of the first insurer's plan.<sup>112</sup> In general, an appropriate change in the bargaining protocol to capture this dynamic would likely lead to higher prices and premiums, offsetting at least a portion of the downward pressure on prices and premiums from introducing multiple insurers.

## B.7 Provider Public Option Participation Decisions

This paper focuses on public option proposals that would require providers to accept public option patients. However, as discussed in the main text, policymakers might also consider proposals under which providers could choose not to participate in the public option.

As I discussed above, the model used here is likely to perform poorly when the public option has a very narrow network. In this case, the public option will be a weak competitor for the private plan, leading

<sup>&</sup>lt;sup>111</sup> This might only be true if the different private plans offer different networks, but that is the usual case.

<sup>&</sup>lt;sup>112</sup> Indeed, if this model were applied to the status quo without a public option, all per service prices would equal the provider's marginal cost, leading insurers to set premiums far too low to support the overall average provider prices that are actually observed. This problem with the Nash-in-Nash framework is not as glaring in the model of Ho and Lee (2017) since they limit provider-insurer pairs to negotiate linear contracts, rather than allowing payers and providers to negotiate two-part-tariffs as I do here. This results in providers' market power being reflected in insurers' payments to providers at the margin, which leads to more reasonable results in that setting.

the single private plan to set an unrealistically high premium. It follows that this model is not suitable for a full analysis of providers' decisions about whether to participate in the public option.

However, the model can provide some insight on whether it is plausible that the public option could attract a broad network if provider participation were voluntary.<sup>113</sup> Specifically, I examine whether, starting from some reasonably broad public option network  $\mathcal{A}_{pub}$ , it will be in the interest of the providers contained in  $\mathcal{A}_{pub}$  to remain in the public option's network. If the answer is yes for all or almost all providers, then it is plausible that the public option could assemble a broad provider network. If not, then it is plausible that the public option's network will end up being relatively narrow.

To streamline notation in what follows, I define the function  $w(\mathcal{A}_{pub}) \equiv (r_{pub}^*(\mathcal{A}_{pub}), \{\mathcal{A}_{pub}, \mathcal{A}_{pri}\})$ , which maps the public option's network  $\mathcal{A}$  to its premium and the network list. The provider's profits when the public option has network  $\mathcal{A}$  can then be written as

$$\pi_h^{P*}(\mathcal{A}_{\text{pub}}) = \pi_h^P\left(\boldsymbol{r}^*\left(w(\mathcal{A}_{\text{pub}}), \boldsymbol{p}^J(\mathcal{A})\right), \boldsymbol{p}^J(\mathcal{A}), \boldsymbol{t}^*\left(w(\mathcal{A}_{\text{pub}})\right)\right).$$

The net benefit to a provider  $h \in \mathcal{A}_{pub}$  of withdrawing from the public option's network is then:

$$\pi_{h}^{P*}\left(\mathcal{A}_{\text{pub}}^{\backslash h}\right) - \pi_{h}^{P*}\left(\mathcal{A}_{\text{pub}}\right)$$

$$= \underbrace{D_{\text{pri}}^{*}\left(w(\mathcal{A}_{\text{pub}}^{\backslash h})\right)Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}})\left[p_{h}^{J}(\mathcal{A}^{\text{pub},h}) - c_{h}\right] + t_{h}^{*}\left(w\left(\mathcal{A}_{\text{pub}}^{\backslash h}\right)\right)}_{\text{profits from private plan when NOT in public option}} - \underbrace{\left[D_{\text{pri}}^{*}\left(w(\mathcal{A}_{\text{pub}})\right)Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}})\left[p_{h}^{J}(\mathcal{A}) - c_{h}\right] + t_{h}^{*}\left(w(\mathcal{A}_{\text{pub}})\right)\right]}_{\text{profits from private plan when in public option}} - \underbrace{\left[D_{\text{pri}}^{*}\left(w(\mathcal{A}_{\text{pub}})\right)Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pub}})\left[p_{h}^{h}(\mathcal{A}_{\text{pub}})\right]\right]}_{\text{profits from private plan when in public option}} - \underbrace{D_{\text{pub}}^{*}\left(w(\mathcal{A}_{\text{pub}})\right)Q_{\text{pub}}^{h}(\mathcal{A}_{\text{pub}})\left[\bar{p}_{h} - c_{h}\right]}_{\text{profits from public option volume}}, (B12)$$

where  $D_{\text{pub}}^*(r_{\text{pub}}, \mathcal{A}) \equiv 1 - D_{\text{pri}}^*(r_{\text{pub}}, \mathcal{A})$  is the public option's enrollment for a premium  $r_{\text{pub}}$  and network list  $\mathcal{A}$ . The provider's choice thus depends on whether exiting the public option increases its profits on its private plan business by enough to offset the lost public option volume.

It is easy to see that a provider  $h \notin \mathcal{A}_{pri}$  will never want to opt out of the public option since it loses profits under the public option but gains nothing under the private plan. In applying this conclusion to a real-world setting with multiple private plans, it is most reasonable to think of it as applying only to providers that participate in *no* private plans. Such providers are likely relatively rare, although there may be some in the individual market, where provider networks are often narrow due to both strategic (e.g., Ho and Lee 2019) and selection-related (e.g., Shepard 2016) considerations.

To consider the case of providers  $h \in \mathcal{A}_{pri}$ , I make two additional definitions. The first is the insurer's gross profits if it drops provider *h* from its network but continues to pay the per service prices  $p^{J}(\mathcal{A})$ :

$$\tilde{\pi}_{-h}^{I}(r_{\text{pub}},\mathcal{A}) \equiv \tilde{\pi}^{I}\left(\boldsymbol{r}^{*}\left(\boldsymbol{w}(\mathcal{A}_{\text{pub}}),\boldsymbol{p}^{J}(\mathcal{A})\right),\mathcal{A}^{\text{pri},h},\boldsymbol{p}^{J}(\mathcal{A})\right)$$

<sup>&</sup>lt;sup>113</sup> For the purposes of this discussion, I use the version of the model without the extensions to incorporate risk selection and risk adjustment that were introduced in section B.4.

The second is the insurer's gross profits if it paid provider *h* a per service price of  $c_h$  instead of  $p_h^J(r_{\text{pub}}, \mathcal{A})$ :

$$\hat{\pi}_{h}^{I}(r_{\text{pub}},\mathcal{A}) \equiv \tilde{\pi}_{*}^{I}(r_{\text{pub}},\mathcal{A}) + D_{\text{pri}}^{*}(r_{\text{pub}},\mathcal{A})Q_{\text{pri}}^{h}(\mathcal{A}_{\text{pri}})[p_{h}^{J}(r_{\text{pub}},\mathcal{A}) - c_{h}].$$

Using these definitions, equation (B<sub>5</sub>), equation (B<sub>7</sub>), and the fact that  $Q_{\text{pub}}^{h}\left(\mathcal{A}_{\text{pub}}^{\setminus h}\right) = 0$ , it follows that:

$$\pi_{h}^{P*}\left(\mathcal{A}_{\text{pub}}^{\backslash h}\right) - \pi_{h}^{P*}\left(\mathcal{A}_{\text{pub}}\right)$$

$$= (1 - \theta) \left[\underbrace{\left\{\widehat{\pi}_{h}^{I}\left(w\left(\mathcal{A}_{\text{pub}}^{\backslash h}\right)\right) - \widetilde{\pi}_{-h}^{I}\left(w\left(\mathcal{A}_{\text{pub}}^{\backslash h}\right)\right)\right\} - \left\{\widehat{\pi}_{h}^{I}\left(w\left(\mathcal{A}_{\text{pub}}\right)\right) - \widetilde{\pi}_{-h}^{I}\left(w\left(\mathcal{A}_{\text{pub}}\right)\right)\right\}\right]}_{\text{change in insurer's incremental gross profits from agreement, if provider h paid at cost}}\right]$$

$$-\underbrace{\left[\overline{p}_{h} - c_{h}\right]Q_{\text{pub}}^{h}\left(\mathcal{A}_{\text{pub}}\right)\left[D_{\text{pub}}^{*}\left(w\left(\mathcal{A}_{\text{pub}}\right)\right) + \theta\Delta D_{\text{pri}}^{h}\left(w\left(\mathcal{A}_{\text{pub}}\right)\right)\right]}_{\text{public option volume and leverage effect}}, (B13)$$

The first term on the right-hand side of equation (B13) captures the main potential benefit to a provider of opting out of the public option: making itself more valuable to the private plan. Offering access to provider *h* is likely to be particularly valuable to the private plan when the private plan is the *only* way to access provider *h*'s services, so this term is likely to be positive and potentially large. That, in turn, is likely to make the private plan more eager to reach an agreement with provider *h*, allowing the provider to extract some a portion  $1 - \theta$  of that additional revenue as higher payments.

But opting out also has costs for a provider, as reflected in the second term of equation (B13). Most directly, the provider loses volume it previously received under the public option, reflected by the  $D_{pub}^*$  term. There is also a respect in which opting out of the public option weakens the provider's bargaining leverage. In particular, when provider *h* and the private plan fail to reach a network agreement, some of the insurer's enrollment is likely to shift to the public option. When provider *h* is participating in the public option, failing to reach agreement with the private plan thus generates an offsetting increase in volume under the public option, making it easier for the provider to insist on better contract terms. But when provider *h* opts out of the public option, this effect vanishes.

Which of these two effects will be larger is not clear *a priori*. The first effect will be more likely to dominate if patients place a particularly high value on access to provider *h* or if the public option pays prices close to providers' marginal cost, while the second effect will tend to dominate otherwise. This is thus fundamentally an empirical question, although as discussed in the main text it seems plausible that opting out will be attractive for providers able to attract the highest prices today. That, in turn, will tend to cause enrollment in the public option to fall, likely reducing the magnitude of the second term and making it more likely additional providers will opt out.

## Appendix C Nash Bargaining Lemmas

Lemmas C1 and C2 characterize the solution to transferrable-utility Nash bargaining problems. Essentially identical results are widely available in the literature (e.g., Osborne and Rubenstein 1994; Mas-Collel and Whinston 1995). I state them here for convenient reference in the subsequent proofs.

**Lemma C1.** Consider constants  $g_1, g_2$  with  $g_1 + g_2 \ge 0$  and  $\theta \in (0,1)$ . The following holds:

$$t^* \equiv \operatorname*{argmax}_{t \in \mathbb{R}} (g_1 - t)^{\theta} (g_2 + t)^{1-\theta} = (1 - \theta)g_1 - \theta g_2.$$

Further, the maxim and  $f(t) \equiv (g_1 - t)^{\theta} (g_2 + t)^{1-\theta}$  is strictly quasi-concave on the interval  $[-g_1, g_2]$ .

*Proof.* The function *f* is well-defined on the interval  $[-g_1, g_2]$ , which is non-empty since  $g_1 + g_2 \ge 0$ .

If  $g_1 + g_2 = 0$ , then the interval  $[-g_1, g_2]$  consists of a single point. Strict quasi-concavity follows trivially. Additionally,  $t^* = -g_1 = g_2$ , which trivially implies  $t^* = (1 - \theta)g_1 - \theta g_2$ .

Now suppose  $g_1 + g_2 > 0$ . Observe that for  $t \in (-g_1, g_2)$ 

$$\frac{df}{dt}(t) = f(t) \left[ -\frac{\theta}{g_1 - t} + \frac{1 - \theta}{g_2 + t} \right].$$

Since f(t) > 0 on this interval, it is easily verified that this derivative has a unique zero at  $t^* = (1 - \theta)g_1 - \theta g_2$ , is strictly positive for  $t < t^*$ , and is strictly negative for  $t > t^*$ . Since  $f(-g_1) = f(g_2) = 0$ , it follows that f(t) is strictly quasi-concave on  $[-g_1, g_2]$  and  $t^*$  is the unique maximum.

**Lemma C2.** Consider functions  $g_1(x)$  and  $g_2(x)$  on some set  $\mathcal{X}$ , and suppose that  $g_1(x) + g_2(x)$  attains a unique maximum  $\hat{x} \in \mathcal{X}$ . The maximization problem

$$(x^*, t^*) \equiv \underset{x \in \mathcal{X}, t \in \mathbb{R}}{\operatorname{argmax}} (g_1(x) - t)^{\theta} (g_2(x) + t)^{1-\theta}$$

has a well-defined solution if and only if  $g_1(\hat{x}) + g_2(\hat{x}) \ge 0$ . If a solution exists, then  $x^* = \hat{x}$  and

$$t^* = (1-\theta)g_1(\hat{x}) - \theta g_2(\hat{x}).$$

*Proof.* For convenience, I define  $f(x, t) \equiv (g_1(x) - t)^{\theta} (g_2(x) + t)^{1-\theta}$ .

I show first that if this maximization problem has a solution  $(x^*, t^*)$ , then  $g_1(\hat{x}) + g_2(\hat{x}) \ge 0$ . In particular,  $f(x^*, t^*)$  must be well-defined, so  $g_1(x^*) - t^* \ge 0$  and  $g_2(x^*) + t^* \ge 0$ . It follows that

$$g_1(\hat{x}) + g_2(\hat{x}) \ge g_1(x^*) + g_2(x^*) = [g_1(x^*) - t^*] + [g_2(x^*) + t^*] \ge 0.$$

Now, I suppose that  $g_1(\hat{x}) + g_2(\hat{x}) \ge 0$  and show that  $(\hat{x}, \hat{t})$  with  $\hat{t} \equiv (1 - \theta)g_1(\hat{x}) - \theta g_2(\hat{x})$  is the unique solution to the maximization problem. In particular, let  $(x', t') \ne (\hat{x}, \hat{t})$  be any other tuple for which the maximand f(x', t') is well-defined.

If  $x' = \hat{x}$ , then it follows from Lemma C1 that  $f(\hat{x}, \hat{t}) \ge f(\hat{x}, t')$ , with strict inequality unless  $t' = \hat{t}$ . If  $x' \ne \hat{x}$ , then define  $\delta \equiv [g_1(\hat{x}) + g_2(\hat{x}) - [g_1(x') + g_2(x')]$  and  $t'' \equiv t' - g_1(x') + g_1(\hat{x}) - \delta / 2$ . Then,

$$g_1(\hat{x}) - t'' = g_1(x') - t' + \delta/2$$
 and  $g_2(\hat{x}) + t'' = g_2(x') + t' + \delta/2$ .

The definition of  $\hat{x}$  implies that  $\delta > 0$ , so it follows immediately that  $f(\hat{x}, t'') > f(x', t')$ . Furthermore, Lemma C1 implies that  $f(\hat{x}, \hat{t}) \ge f(\hat{x}, t'')$ , so  $f(\hat{x}, \hat{t}) > f(x', t')$ .

# Appendix D Price Cap Proofs

This appendix collects arguments, lemmas, and proofs relevant to the analysis in Appendix A. The first subsection characterizes the solution to the Nash bargaining problem (A1) for various assumptions about the set of permissible negotiated prices  $\mathcal{P}$ . The second subsection then states lemmas used in the proofs of Propositions A1-A6, and the final subsection provides proofs of the propositions.

#### D.I Solution of Nash Bargaining Problem

This section characterizes the solution to the Nash bargaining problem (A1) under two different policy regimes. I first consider the case where negotiated prices are unregulated (that is,  $\mathcal{P} = \mathbb{R}$ ) and the consider the case with a comprehensive price cap (that is,  $\mathcal{P} = \tilde{\mathcal{P}} = (-\infty, \bar{p}]$ ). Throughout this subsection, I assume that the disagreement payoffs take the form  $\tilde{W} = W(\tilde{p}, \tilde{l}, \tilde{a})$  and  $\tilde{\pi} = \pi(\tilde{p}, \tilde{l}, \tilde{a})$  for some profile of disagreement actions with  $\tilde{p} \in \tilde{\mathcal{P}}$ ,  $\tilde{l} \in \tilde{\mathcal{L}}$ , and  $\tilde{a} \in \tilde{\mathcal{A}}$ . As shown in Appendix A, this ensures that the bargaining problem (A1) has at least one solution for all  $\mathcal{P}$  and  $\tilde{\mathcal{P}}$  considered here.

#### D.1.1 Solution When Negotiated Prices Are Unregulated

I first show that when  $\mathcal{P} = \mathbb{R}$ , the Nash bargaining problem (A1) has a unique solution, and that solution satisfies  $a^* = 1$  as well as equations (A2) and (A3). To that end, it is convenient to consider the following transformed version of the maximization problem (A1):

$$(\hat{Q}, \hat{t}, \hat{a}) = \underset{\substack{Q \in [0, \infty) \\ t \in \mathbb{R} \\ a \in [0, 1]}}{\operatorname{argmax}} \left[ aV(Q) - t - \widetilde{W} \right]^{\theta} \left[ -acQ + t - \widetilde{\pi} \right]^{1-\theta}.$$
 (D1)

By comparison to (A1), It is clear that if (D1) has a unique solution and there exists a unique  $(\hat{p}, \hat{l})$  such that  $Q(\hat{p}, \hat{l}) = \hat{Q}$  and  $\hat{a}\hat{p}\hat{Q} = \hat{t}$ , then  $(\hat{p}, \hat{l}, \hat{a})$  is the unique solution to (A1).

To that end, define  $h(Q, a) \equiv a[V(Q) - cQ] - \tilde{W} - \tilde{\pi}$ , the sum of the parties' payoffs in the transformed problem (D1). It is clear that the function *h* is uniquely maximized when a = 1 and  $Q = Q^*$ , the efficient quantity defined in Appendix A. Furthermore, by assumption it follows that

$$\widetilde{W} + \widetilde{\pi} = \widetilde{a} \left[ V \left( Q(\widetilde{p}, \widetilde{l}) \right) - c Q(\widetilde{p}, \widetilde{l}) \right],$$

from which it follows immediately that  $h(Q^*, 1) \ge 0$ . The problem (D1) thus satisfies the conditions of Lemma C2, so (D1) has a unique solution:  $\hat{a} = 1$ ,  $\hat{Q} = Q^*$  and  $\hat{t} = (1 - \theta)[V(Q^*) - \tilde{W}] - \theta [-cQ^* - \tilde{\pi}]$ .

To complete the proof, set  $\hat{p} = \hat{t}/Q^*$  and choose  $\hat{l}$  so that  $Q(\hat{p}, \hat{l}) = Q^*$ , which is possible by Assumption A3. These are clearly the unique values  $(\hat{p}, \hat{l})$  such that  $Q(\hat{p}, \hat{l}) = \hat{Q}$  and  $\hat{a}\hat{p}\hat{Q} = \hat{t}$ . It follows that  $(\hat{p}, \hat{l}, 1)$  solves (A1). Simple algebra verifies that  $(\hat{p}, \hat{l})$  satisfies equations (A2) and (A3).

#### D.1.2 Solution Under a Comprehensive Price Cap

I now characterize the solution to (A1) under a comprehensive price cap (that is, when  $\mathcal{P} = \tilde{\mathcal{P}} = \bar{\mathcal{P}}$ ).

To start, note that if  $\bar{p} \ge p^*(\tilde{W}, \tilde{\pi}, \mathbb{R})$ , then the constraint on negotiated prices does not bind. Thus, the unique solution to the unconstrained problem is also the unique solution when  $\mathcal{P} = \bar{\mathcal{P}}$ .

Thus, I focus on the case with  $\bar{p} < p^*(\tilde{W}, \tilde{\pi}, \mathbb{R})$ . I show the following: (a) the problem (A1) has a unique solution; (b)  $a^*(\tilde{W}, \tilde{\pi}, \bar{\mathcal{P}}) = 1$ ; (c)  $p^*(\tilde{W}, \tilde{\pi}, \bar{\mathcal{P}}) = \bar{p}$ ; and (d)  $Q(p^*(\tilde{W}, \tilde{\pi}, \bar{\mathcal{P}}), l^*(\tilde{W}, \tilde{\pi}, \bar{\mathcal{P}})) > Q^*$ .

To this end, it is convenient to consider a slightly different transformed maximization problem:
$$\left(\hat{Q}, \hat{p}, \hat{a}\right) = \underset{\substack{Q \in [0,\bar{Q}]\\p \in (-\infty,\bar{p}]\\a \in [0,1]}}{\operatorname{argmax}} \left[a\{V(Q) - pQ\} - \widetilde{W}\right]^{\theta} [a\{p-c\}Q - \tilde{\pi}]^{1-\theta},$$
(D2)

where  $\bar{Q}$  is the quantity such that  $Q(p, 1) = \bar{Q}$  for all p, which Assumption A1 ensures exists. By comparison to (A1), it is clear that if (D2) has a unique solution and there exists a unique  $\hat{l}$  such that  $Q(\hat{p}, \hat{l}) = \hat{Q}$ , then  $(\hat{p}, \hat{l}, \hat{a})$  is the unique solution to (A1). For future reference, I define  $\widehat{W}(Q, p, a) \equiv a[V(Q) - pQ]$  and  $\widehat{\pi}(Q, p, a) \equiv a[p - c]Q$ , and I let *h* denote the maximand in (D2).

To see that (D2) has a solution, let  $\Omega$  be the set of payoff tuples  $(W', \pi')$  for which  $W' \ge \tilde{W}$  and  $\pi' \ge \tilde{\pi}$ and for which  $W' = \hat{W}(Q, p, a)$  and  $\pi' = \hat{\pi}(Q, p, a)$  for some vector (Q, p, a) that meets the constraints in (D2). The fact that  $\tilde{W} = W(\tilde{p}, \tilde{l}, \tilde{a})$  and  $\tilde{\pi} = \pi(\tilde{p}, \tilde{l}, \tilde{a})$  ensures that  $\Omega$  is non-empty. It is also easily seen that  $\Omega$  is compact. The continuity of the maximand in (D2) then implies that (D2) has a solution.

I now characterize an arbitrary solution  $(\hat{Q}, \hat{p}, \hat{a})$  of (D2). I show it has several properties:

- $\hat{a} > 0$  and  $\hat{Q} > 0$ : If  $\hat{a} = 0$  or  $\hat{Q} = 0$ , then  $\hat{W}(\hat{Q}, \hat{p}, \hat{a}) = \hat{\pi}(\hat{Q}, \hat{p}, \hat{a}) = 0$ . But taking  $a' = 1, Q' = Q^*$ , and  $p' = (\min\{\bar{p}, V(Q^*) / Q^*\} + c) / 2$ , yields  $\hat{W}(Q', p', a') > 0$  and  $\hat{\pi}(Q', p', a') > 0$ . This implies that  $h(Q', p', a') > h(\hat{Q}, \hat{p}, \hat{a})$ , contradicting the fact that  $(\hat{Q}, \hat{p}, \hat{a})$  solves (D2).
- $\hat{a} = 1$ : Suppose to the contrary that  $\hat{a} < 1$  and consider two cases. If  $\hat{p} < \bar{p}$ , define  $Q' = \hat{a}\hat{Q}$  and  $p' = \hat{p} + \epsilon$  for an arbitrary  $\epsilon > 0$ . Then, for small enough  $\epsilon$ , it follows that  $p' < \bar{p}$ ,

$$\hat{\pi}(Q',p',1) = \hat{\pi}(\hat{Q},\hat{p},\hat{a}) + \epsilon \hat{a}\hat{Q} > \hat{\pi}(\hat{Q},\hat{p},\hat{a}) \text{ and}$$
$$\hat{W}(Q',p',1) = \hat{W}(\hat{Q},\hat{p},\hat{a}) + V(\hat{a}\hat{Q}) - \hat{a}V(\hat{Q}) - \epsilon \hat{a}\hat{Q} > \hat{W}(\hat{Q},\hat{p},\hat{a}),$$

where the second inequality uses the concavity of *V*, which contradicts the fact that  $(\hat{Q}, \hat{p}, \hat{a})$  solves (D2). Likewise, if  $\hat{p} = \bar{p}$ , define  $Q' = (1 + \epsilon)\hat{a}\hat{Q}$  for an arbitrary  $\epsilon > 0$ . Then, for small enough  $\epsilon$ , it follows that  $Q' \in [0, \bar{Q}]$ ,

$$\hat{\pi}(Q', \hat{p}, 1) = (1 + \epsilon)\hat{\pi}(\hat{Q}, \hat{p}, \hat{a}) > \hat{\pi}(\hat{Q}, \hat{p}, \hat{a}), \text{ and}$$
$$\hat{W}(Q', \hat{p}, 1) = \hat{W}(\hat{Q}, \hat{p}, \hat{a}) + V(Q') - \hat{a}V(\hat{Q}) - \epsilon\hat{p}\hat{a}\hat{Q} > \hat{W}(\hat{Q}, \hat{p}, \hat{a}).$$

where the second inequality again follows from the fact that the function *V* is concave. This pair of inequalities also contradicts the fact that  $(\hat{Q}, \hat{p}, \hat{a})$  solves (D2).

•  $\hat{p} = \overline{p}$ : Suppose to the contrary that  $\hat{p} < \overline{p}$ . Then, define for an arbitrary  $\epsilon > 0$ 

$$Q' = \hat{Q} + \epsilon \left[ Q^* - \hat{Q} \right] \text{ and } p' = c + \left[ \hat{p} - c \right] \frac{\hat{Q}}{Q'} + \frac{1}{2Q'} \left\{ \left[ V(Q') - cQ' \right] - \left[ V(\hat{Q}) - c\hat{Q} \right] \right\}.$$

and observe that

$$\hat{\pi}(Q', p', \hat{a}) - \hat{\pi}(\hat{Q}, \hat{p}, \hat{a}) = \hat{W}(Q', p', \hat{a}) - \hat{W}(\hat{Q}, \hat{p}, \hat{a}) = \frac{1}{2}\hat{a}\{[V(Q') - cQ'] - [V(\hat{Q}) - c\hat{Q}]\}$$

It is clear that  $p' < \bar{p}$  for sufficiently small  $\epsilon$ , so the fact that  $(\hat{Q}, \hat{p}, \hat{a})$  solves (D2) implies that the right-hand-side of the above equation must be precisely zero, which requires  $\hat{Q} = Q^*$ .

It thus must be that  $(Q^*, \hat{p}, 1)$  solves (D2). The fact that  $\hat{p} < \bar{p}$  implies that  $\hat{W}(\hat{Q}, \hat{p}, \hat{a}) - \tilde{W}$  and  $\hat{\pi}(\hat{Q}, \hat{p}, \hat{a}) - \pi$  must either be both positive or both zero. In the former case,

$$\frac{d\ln h}{dp}(Q^*, \hat{p}, 1) = -\theta \left[ \frac{Q^*}{V(Q)^* - \hat{p}Q^* - \tilde{W}} \right] + (1 - \theta) \left[ \frac{Q^*}{(\hat{p} - c)Q^* - \tilde{\pi}} \right] = 0$$

This implies that  $\hat{p} = p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R})$  and, thus,  $\overline{p} > p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R})$ , contradicting the assumption that  $\overline{p} < p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R}_+)$ . A similar contradiction arises if  $\widehat{W}(Q^*, \hat{p}, 1) - \widetilde{W} = \widehat{\pi}(Q^*, \hat{p}, 1) - \widetilde{\pi} = 0$ .

Q̂ > Q\*: Suppose to the contrary that Q̂ < Q\*. Define a price p' = c + (p̂ − c)(Q̂/Q\*) + ε for an arbitrary ε > 0. Then, for small enough ε, p' < p̄,</li>

$$\hat{\pi}(Q^*, p', \hat{a}) = \hat{\pi}(\hat{Q}, \hat{p}, \hat{a}) + \epsilon \hat{a}Q^* > \hat{\pi}(\hat{Q}, \hat{p}, \hat{a}), \text{ and}$$
$$\hat{W}(Q^*, p', \hat{a}) = \hat{W}(\hat{Q}, \hat{p}, \hat{a}) + \hat{a}[(V(Q^*) - cQ^*) - (V(\hat{Q}) - c\hat{Q})] - \epsilon \hat{a}Q^* > \hat{W}(\hat{Q}, \hat{p}, \hat{a})$$

where final inequality uses the fact that  $Q^*$  maximizes V(Q) - cQ. This implies that  $h(Q^*, p', \hat{a}) > h(\hat{Q}, \hat{p}, \hat{a})$ , contradicting the fact that  $(\hat{Q}, \hat{p}, \hat{a})$  solves (D2).

Next, I suppose that  $\hat{Q} = Q^*$ , so that  $(Q^*, \bar{p}, 1)$  solves (D2). It is easy to verify that  $\hat{W}_Q(Q^*, \bar{p}, 1) = c - \bar{p} = -\hat{\pi}_Q(Q^*, \bar{p}, 1) \neq 0$ , which in turn implies that either  $\hat{W}(Q^*, \bar{p}, 1) - \tilde{W}$  and  $\hat{\pi}(Q^*, \bar{p}, 1) - \tilde{\pi}$  are both strictly positive or both precisely zero. In the former case, it follows that

$$\frac{d\ln h}{dQ}(Q^*,\bar{p},1) = -\theta \left[\frac{\bar{p}-c}{V(Q^*)-\bar{p}Q^*-\tilde{W}}\right] + (1-\theta) \left[\frac{\bar{p}-c}{(\bar{p}-c)Q^*-\tilde{\pi}}\right] = 0$$

This implies that  $\bar{p} = p^*(\tilde{W}, \tilde{\pi}, \mathbb{R})$ , contradicting the assumption that  $\bar{p} < p^*(\tilde{W}, \tilde{\pi}, \mathbb{R})$ . A similar contradiction arises if  $\hat{W}(Q^*, \bar{p}, 1) - \tilde{W} = \hat{\pi}(Q^*, \bar{p}, 1) - \tilde{\pi} = 0$ .

The arguments above imply that (D2) has at least one solution and all solutions have the form  $(\hat{Q}, \bar{p}, 1)$  with  $\hat{Q} > Q^*$ . I now show that there is exactly one such solution. In particular, suppose that  $(\hat{Q}', \bar{p}, 1)$  and  $(\hat{Q}'', \bar{p}, 1)$  were distinct solutions. Define  $\hat{Q}''' = \alpha \hat{Q}' + (1 - \alpha) \hat{Q}''$  for some  $\alpha \in (0, 1)$ . Then,

$$\hat{\pi}(\hat{Q}^{\prime\prime\prime},\bar{p},1) = \alpha \hat{\pi}(\hat{Q}^{\prime},\bar{p},1) + (1-\alpha)\hat{\pi}(\hat{Q}^{\prime\prime},\bar{p},1), \text{ and}$$
$$\hat{W}(\hat{Q}^{\prime\prime\prime},\bar{p},1) > \alpha \hat{W}(\hat{Q}^{\prime},\bar{p},1) + (1-\alpha)\hat{W}(\hat{Q}^{\prime\prime},\bar{p},1),$$

where the inequality follows from the concavity of *V*. Next, using the standard result that  $g(x, y) = x^{\theta}y^{1-\theta}$  is weakly increasing in both arguments and strictly quasi-concave, observe that

$$\begin{split} h(\hat{Q}^{\prime\prime\prime},\bar{p},1) &= g\left(\hat{\pi}(\hat{Q}^{\prime\prime\prime},\bar{p},1),\widehat{W}(\hat{Q}^{\prime\prime\prime},\bar{p},1)\right) \\ &\geq g\left(\alpha\hat{\pi}(\hat{Q}^{\prime},\bar{p},1) + (1-\alpha)\hat{\pi}(\hat{Q}^{\prime\prime},\bar{p},1),\alpha\widehat{W}(\hat{Q}^{\prime},\bar{p},1) + (1-\alpha)\widehat{W}(\hat{Q}^{\prime\prime},\bar{p},1)\right) \\ &> g\left(\hat{\pi}(\hat{Q}^{\prime},\bar{p},1),\widehat{W}(\hat{Q}^{\prime},\bar{p},1)\right) = h(\hat{Q}^{\prime},\bar{p},1), \end{split}$$

which contradicts the assumption that  $(\hat{Q}', \bar{p}, 1)$  and  $(\hat{Q}'', \bar{p}, 1)$  solve (D2).

To complete the proof, I show that there is a unique  $\hat{l} \in [0,1]$  such that  $Q(\bar{p}, \hat{l}) = \hat{Q}$ . To see this, note that there exists l' such that  $Q(\bar{p}, l') = Q^*$  by Assumption A3 and recall that  $Q(\bar{p}, 1) = \bar{Q}$  by definition. Since  $\hat{Q} \in (Q^*, \bar{Q}]$  and  $Q(\bar{p}, l)$  is continuous and monotonic as a function of l, a suitable  $\hat{l}$  must exist.

#### D.2 Lemmas for Proofs of Propositions

To prove the propositions in Appendix A, I begin by characterizing the insurer and provider's best response functions when the provider's charge is unregulated and the provider cannot reject patients. Formally, the provider's best response function in this case is  $r^P(\tilde{l}) \equiv \operatorname{argmax}_{p \in \mathbb{R}} d^P(p, \tilde{l}, 1)$ , while the insurer's best response function is  $r^I(\tilde{p}) \equiv \operatorname{argmax}_{l \in [0,1]} d^I(\tilde{p}, l, 1)$ .

To that end, I prove three lemmas. Lemma D1 characterizes the "quasi-markup" term  $h(\tilde{p}, \tilde{l}; \beta) \equiv \tilde{p} - \beta c - (1 - \beta)V'(Q(\tilde{p}, \tilde{l}))$ , which appears in both the insurer and the provider's first-order condition:

$$\frac{d}{d\tilde{p}}d^{P}(\tilde{p},\tilde{l},1) = \tilde{Q} + \tilde{Q}_{p}\left[\tilde{p} - (1 - \gamma(1 - \theta))c - \gamma(1 - \theta)V'(\tilde{Q})\right] = \tilde{Q} + \tilde{Q}_{p}h\left(\tilde{p},\tilde{l};1 - \gamma(1 - \theta)\right)$$
(D3)

$$\frac{d}{d\tilde{l}}d^{l}(\tilde{p},\tilde{l},1) = -\tilde{Q}_{l}\big[\tilde{p} - \gamma\theta c - (1 - \gamma\theta)V'\big(\tilde{Q}\big)\big] = -\tilde{Q}_{l}h\big(\tilde{p},\tilde{l};\gamma\theta\big).$$
(D4)

Lemma D2 and Lemma D3 then use Lemma D1 to characterize the two best response functions.

#### Lemma D1 (Properties of the Quasi-Markup). The following hold:

- (i) For any  $\beta \in [0,1]$ , *h* is continuous and increasing in  $\tilde{l}$  and  $\tilde{p}$ . Additionally, for  $\beta \in (0,1]$ , *h* is strictly increasing in  $\tilde{p}$ , and, for  $\beta \in [0,1)$ , *h* is strictly increasing in  $\tilde{l}$ .
- (ii) For any  $\tilde{l} \in [0,1]$  and  $\beta \in [0,1]$ , there is a unique interval  $[\tilde{p}', \tilde{p}'']$  such that  $h(\tilde{p}, \tilde{l}; \beta) = 0$  for any  $\tilde{p} \in [\tilde{p}', \tilde{p}'']$ . Furthermore,  $\tilde{p}' > 0$ .

Proof. Starting with (i), continuity follows from Assumptions A1 and A2.

To see that *h* is increasing in  $\tilde{p}$  (strictly so for  $\beta > 0$ ), observe that

$$\frac{d}{d\tilde{p}}\left[\tilde{p}-\beta c-(1-\beta)V'(Q(\tilde{p},\tilde{l}))\right] = 1-(1-\beta)V''(Q(\tilde{p},\tilde{l}))Q_p(\tilde{p},\tilde{l})$$

and apply the fact that  $V''(Q(p, l))Q_p(p, l) \le 1$  by Assumption A4.

Similarly, to see that *h* is increasing in  $\tilde{l}$  (strictly so for  $\beta < 1$ ), note that

$$\frac{d}{d\tilde{l}}\left[\tilde{p}-\beta c-(1-\beta)V'(Q(\tilde{p},\tilde{l}))\right] = -(1-\beta)V''(Q(\tilde{p},\tilde{l}))Q_l(\tilde{p},\tilde{l})$$

The conclusion then follows from the fact that *V* is strictly concave and  $Q_l > 0$ .

To see (ii), observe that  $h(0, \tilde{l}; \beta) < 0$  for any  $\tilde{l} \in [0,1]$ , and note that  $h(\tilde{p}, \tilde{l}; \beta) \to \infty$  as  $\tilde{p} \to \infty$  since, by Assumption A2, *V*' is bounded above. Since *h* is continuous and increasing in  $\tilde{p}$ , the existence of the desired interval follows.

#### Lemma D2 (Insurer's Best Response). The following hold:

- (i)  $d^{l}(\tilde{p}, \tilde{l}, 1)$  is strictly quasi-concave in  $\tilde{l}$ ;
- (ii)  $r^{I}$  is well-defined and continuous; and
- (iii) there exist  $\tilde{p}_0 > c$  and  $\tilde{p}_1 < c$  such that:  $r^I(\tilde{p}) = 1$  for  $\tilde{p} \in (-\infty, \tilde{p}_1]$ ;  $r^I(\tilde{p}) \in (0,1)$  and  $r^I$  is strictly decreasing for  $\tilde{p} \in (\tilde{p}_1, \tilde{p}_0)$ ; and  $r^I(\tilde{p}) = 0$  for  $\tilde{p} \in [\tilde{p}_0, \infty)$ .

*Proof.* To show that  $d^{I}(\tilde{p}, \tilde{l}, 1)$  is strictly quasi-concave in  $\tilde{l}$ , it suffices to show that  $d_{\tilde{l}}^{I}(\tilde{p}, \tilde{l}, 1)$  is zero at no more than one point and, if such a zero exists, is positive below that point and negative above that point. Examining (D4), this follows immediately from the fact that  $Q_{l} > 0$  and the fact that the quasi-markup  $\tilde{p} - \gamma \theta c - (1 - \gamma \theta) V'(\tilde{Q})$  is strictly increasing in  $\tilde{l}$  by Lemma D1. Since  $d^{I}$  is strictly quasi-concave in  $\tilde{l}$ , the function  $r^{I}$  is well-defined. Additionally, because  $r^{I}$  is a well-defined function and  $d^{I}$  is continuous, the maximum theorem implies that  $r^{I}$  is continuous.

Turning to (iii), choose  $\tilde{p}_1$  to be the largest value such that  $h(\tilde{p}_1, 1; \gamma \theta) = 0$ , and  $\tilde{p}_0$  to be the smallest value such that that  $h(\tilde{p}_0, 0; \gamma \theta) = 0$ ; these values must exist by part (ii) of Lemma D1. The fact that  $\tilde{p}_1 < c$  follows from the fact that  $V'(Q(\tilde{p}, 1)) < c$  for all  $\tilde{p}$  by Assumption A3. Similarly, the fact that  $\tilde{p}_0 > c$  follows from the fact that  $V'(Q(\tilde{p}, 0)) > c$  for all  $\tilde{p}$ .

Examining (D4) and using the fact that *h* is increasing in  $\tilde{p}$  and strictly increasing  $\tilde{l}$ , it follows that  $d_{\tilde{l}}^{l}(\tilde{p}, \tilde{l}, 1) > 0$  for all  $\tilde{l} \in [0, 1)$  if  $\tilde{p} \in [0, \tilde{p}_{1}]$ , which implies  $r^{l}(\tilde{p}) = 1$  for  $\tilde{p} \in [0, \tilde{p}_{1}]$ . Similarly, it follows that  $d_{\tilde{l}}^{l}(\tilde{p}, \tilde{l}, 1) < 0$  for all  $\tilde{l} \in (0, 1]$  if  $\tilde{p} \in [\tilde{p}_{0}, \infty)$ , which implies that  $r^{l}(\tilde{p}) = 0$  for  $\tilde{p} \in [\tilde{p}_{0}, \infty)$ .

Essentially the same logic implies that  $r^{I}(\tilde{p}) \in (0,1)$  for  $\tilde{p} \in (\tilde{p}_{1}, \tilde{p}_{0})$ . To see that  $r^{I}$  is strictly decreasing on this interval, I use the implicit function theorem to show that

$$\frac{dr^{l}}{d\tilde{p}} = \frac{1 - (1 - \gamma\theta)V''(Q)Q_{p}}{Q_{l}(1 - \gamma\theta)V''(Q)}$$

where I have suppressed function arguments to streamline notation. It is clear from the assumptions that the numerator is positive and that the denominator is negative, so  $r_{\hat{v}}^{I} < 0$  follows.

**Lemma D3 (Provider's Best Response).** For  $\tilde{l} \in [0,1)$ , the following hold:

- (i)  $d^{P}(\tilde{p}, \tilde{l}, 1)$  is strictly quasi-concave in  $\tilde{p}$ ;
- (ii)  $r^{P}$  is well-defined, continuous, and strictly increasing, and it satisfies  $r^{P}(\tilde{l}) > c$ ,  $d^{P}(r^{P}(\tilde{l}), \tilde{l}, 1) > 0$ , and  $r^{P}(\tilde{l}) \to \infty$  as  $\tilde{l} \to 1$ .

Additionally,  $d^{p}(\tilde{p}, 1, 1)$  is strictly increasing in  $\tilde{p}$  and  $d^{p}(\tilde{p}, 1, 1) \rightarrow \infty$  as  $\tilde{p} \rightarrow \infty$ .

*Proof.* To start, I consider  $\tilde{l} \in [0,1)$ . I rewrite (D3) as

$$d_{\tilde{p}}^{P}(\tilde{p},\tilde{l},1) = \tilde{Q}_{p}[\tilde{Q}/\tilde{Q}_{p} + \tilde{p} - (1 - \gamma(1 - \theta))c - \gamma(1 - \theta)V'(\tilde{Q})]$$

Differentiating the expression in brackets on the right-hand side and applying Assumption A4 implies that this expression is strictly increasing in  $\tilde{p}$  with a slope bounded below by some  $\epsilon > 0$ . This implies that  $d^P$  is strictly quasi-concave in  $\tilde{p}$ , and, together with the fact that the expression in brackets is negative for  $\tilde{p} = 0$ , also implies that  $d^P_{\tilde{p}}(\tilde{p}, \tilde{l}, 1)$  has a unique zero, which must occur at a positive price  $\tilde{p}$ . Thus, the function  $r^P$  is well-defined with  $r^P(\tilde{l}) > 0$  for all  $\tilde{l} \in [0,1)$ . Because  $r^P$  is single-valued and  $d^P$  is continuous, the maximum theorem implies that  $r^P$  is continuous.

To show that  $r^{P}$  is strictly increasing, I use the implicit function theorem to show

$$\frac{dr^{P}}{d\tilde{l}} = \frac{-Q_{l} \left[ 1 - \gamma (1 - \theta) V^{\prime\prime}(Q) Q_{p} \right] + Q_{pl} \frac{Q}{Q_{p}}}{Q_{p} \left[ 1 - Q_{pp} \frac{Q}{Q_{p}^{2}} + 1 - \gamma (1 - \theta) V^{\prime\prime}(Q) Q_{p} \right]},$$

where I have suppressed function arguments to streamline notation. It is straightforward to use the assumptions to verify that both the numerator and denominator are negative, so  $r_i^p > 0$  as desired.

Next, observe from (D3) that since  $V'(Q(\tilde{p}, 0)) > c$  for all  $\tilde{p}$  by Assumption A3, it must be the case that  $d_{\tilde{p}}^{P}(c, 0, 1) \ge Q(c, 0) > 0$ . This implies in turn that  $r^{P}(0) > c$ , which when combined with the fact that  $r^{P}$  is strictly increasing in  $\tilde{l}$  implies that  $r^{P}(\tilde{l}) > c$  for all  $\tilde{l} \in [0,1)$ .

To see that  $d^{P}(r^{P}(\tilde{l}), \tilde{l}, 1) > 0$ , observe that for any  $\tilde{l}$ 

$$d^{p}(\tilde{p},\tilde{l},1) \equiv Q(\tilde{p},\tilde{l}) \left[ \tilde{p} - \{1 - \gamma(1-\theta)\}c - \gamma(1-\theta) \frac{V(Q(\tilde{p},\tilde{l}))}{Q(\tilde{p},\tilde{l})} \right]$$
$$\geq Q(\tilde{p},\tilde{l})[\tilde{p} - \{1 - \gamma(1-\theta)\}c - \gamma(1-\theta)V'(0)].$$

The right-hand side of the equation above is strictly positive for  $\tilde{p} > \{1 - \gamma(1 - \theta)\}c + \gamma(1 - \theta)V'(0)$ . Since  $d^{p}(r^{p}(\tilde{l}), \tilde{l}, 1) \ge d^{p}(\tilde{p}, \tilde{l}, 1)$  for all  $\tilde{p}$  and all  $\tilde{l} < 1$ , it follows that  $d^{p}(r^{p}(\tilde{l}), \tilde{l}, 1) > 0$ .

Turning to the case with  $\tilde{l} = 1$ , note that for all  $\tilde{p}$ 

$$d^{P}(\tilde{p},1,1) = \tilde{p}\bar{Q} - \{1 - \gamma(1-\theta)\}c\bar{Q} - \gamma(1-\theta)V(\bar{Q}),$$

where  $\overline{Q}$  is the unique quantity of services delivered for  $\tilde{l} = 1$  (and any price  $\tilde{p}$ ). It then follows immediately that  $d^{P}(\tilde{p}, 1, 1)$  is strictly increasing and that  $d^{P}(\tilde{p}, 1, 1) \to \infty$  as  $\tilde{p} \to \infty$ .

Finally, to show that  $r^{P}(\tilde{l}) \to \infty$  as  $\tilde{l} \to 1$ , I fix a price  $\tilde{p}'$  and show that there exists  $\delta > 0$  such that  $r^{P}(\tilde{l}) > \tilde{p}'$  whenever  $\tilde{l} \in (1 - \delta, 1)$ . To that end, choose some  $\tilde{p}''$  such that  $d^{P}(\tilde{p}'', 1, 1) > \tilde{p}'\bar{Q}$ , which is possible since  $d^{P}(\tilde{p}, 1, 1) \to \infty$  as  $\tilde{p} \to \infty$ , and choose  $\delta > 0$  so that  $d^{P}(\tilde{p}'', \tilde{l}, 1) > \tilde{p}'\bar{Q}$  whenever  $\tilde{l} \in (1 - \delta, 1)$ , which is possible because  $d^{P}$  is continuous. To complete the proof, note that for any  $\tilde{l} > 1 - \delta$ 

$$r^{P}(\tilde{l}) > \frac{d^{P}(r^{P}(\tilde{l}), \tilde{l}, 1)}{\overline{Q}} \ge \frac{d^{P}(\tilde{p}^{\prime\prime}, \tilde{l}, 1)}{\overline{Q}} > \tilde{p}^{\prime},$$

where the first inequality follows from simple algebra, the second inequality follows because  $r^{P}(\tilde{l})$  is a best response, and the final inequality follows by construction.

#### D.3 Proofs of Propositions

I now prove Propositions A1-A6. The proofs rely heavily on the properties of the best response functions  $r^{I}$  and  $r^{P}$  that were established in Lemma D2 and Lemma D3. To streamline the prose, I sometimes omit explicit references to these lemmas where not necessary for clarity.

**Proof of Proposition A1.** I begin with the case where the provider cannot reject patients absent an agreement (that is, when  $\tilde{A} = \{1\}$ ). I first establish existence and uniqueness.

To demonstrate existence, define the function  $k(\tilde{p}) = \tilde{p} - r^P(r^I(\tilde{p}))$ . It follows easily from the facts established in Lemmas D2 and D3 that this function is well-defined and continuous for any  $\tilde{p} \ge c$ . Now,  $k(c) = c - r^P(r^I(c)) < 0$  since  $r^I(c) < 1$  and  $r^P(\tilde{l}) > c$  for all  $\tilde{l} \in [0,1)$ . Additionally, for  $\tilde{p}' = \max\{r^P(0), \tilde{p}_0\}$ , where  $\tilde{p}_0$  is some price such that  $r^I(\tilde{p}_0) = 0$ , it must be the case that  $k(\tilde{p}') = \max\{r^P(0), \tilde{p}_0\} - r^P(0) \ge 0$ . It follows that there must exist some  $\tilde{p} \in (c, \tilde{p}']$  such that  $k(\tilde{p}) = 0$ . Clearly,  $(\tilde{p}, r^I(\tilde{p}))$  is an equilibrium. This equilibrium must be unique because  $r^I$  is decreasing in  $\tilde{p}, r^P$ is increasing in  $\tilde{l}$  for  $\tilde{l} \in [0,1)$ , and  $r^P(\tilde{l}) \to \infty$  as  $\tilde{l} \to 1$ . Note that  $\tilde{p} > c$  and, thus,  $r^I(\tilde{p}) < 1$ .

For the remainder of the proof, I let  $(\tilde{p}, \tilde{l})$  denote the equilibrium strategies.

I first show that  $Q(\tilde{p}, \tilde{l}) < Q^*$ . Since *V* is strictly concave and  $V'(Q^*) = c$ , it suffices to show that  $V'(Q(\tilde{p}, \tilde{l})) > c$ . If  $\tilde{l} = 0$ , then  $V'(Q(\tilde{p}, \tilde{l})) > c$  follows directly from Assumption A3. If  $\tilde{l} \in (0,1)$ , then  $d_l^l(\tilde{p}, \tilde{l}, 1) = 0$ , so (D4) together with the fact that  $\tilde{p} > c$  implies that  $V'(Q(\tilde{p}, \tilde{l})) > c$ , as desired.

I now pause to show that  $\tilde{p} > \theta c + (1 - \theta)V'(Q(\tilde{p}, \tilde{l}))$ . Since  $\tilde{p}$  is a best response,  $d_{\tilde{p}}^{P}(\tilde{p}, \tilde{l}, 1) = 0$ , so (D3) implies that  $h(\tilde{p}, \tilde{l}; 1 - \gamma(1 - \theta)) > 0$ . Similarly, since  $\tilde{l}$  is a best response and  $\tilde{l} < 1$ ,  $d_{\tilde{l}}^{I}(\tilde{p}, \tilde{l}, 1) \leq 0$ , equation (D4) implies that  $h(\tilde{p}, \tilde{l}; \gamma\theta) \geq 0$ . Combining these two inequalities demonstrates that

$$\tilde{p} - \theta c - (1 - \theta) V'(Q(\tilde{p}, \tilde{l})) = \theta h(\tilde{p}, \tilde{l}; 1 - \gamma(1 - \theta)) + (1 - \theta) h(\tilde{p}, \tilde{l}; \gamma\theta) > 0$$

from which the desired inequality follows.

Now, to see that  $p_{nocap}^* < \tilde{p}$ , observe that

$$p_{\text{nocap}}^* Q^* = \tilde{p}Q(\tilde{p},\tilde{l}) + \theta c [Q^* - Q(\tilde{p},\tilde{l})] + (1-\theta) [V(Q^*) - V(Q(\tilde{p},\tilde{l}))] < \tilde{p}Q(\tilde{p},\tilde{l}) + [\theta c + (1-\theta)V'(Q(\tilde{p},\tilde{l}))] [Q^* - Q(\tilde{p},\tilde{l})] (*)$$

where the equality follows from (A3) and the inequality follows since  $Q(\tilde{p}, \tilde{l}) < Q^*$  and V is strictly concave. Combining  $\tilde{p} > \theta c + (1 - \theta)V'(Q(\tilde{p}, \tilde{l}))$  with equation (\*) yields the result.

To see that  $\tilde{l} = 0$  when the parties can commit to disagreement actions (that is,  $\gamma = 1$ ), substitute the inequality  $\tilde{p} > \theta c + (1 - \theta)V'(Q(\tilde{p}, \tilde{l}))$  into (D4). This implies  $d_{\tilde{l}}^{l}(\tilde{p}, \tilde{l}, 1) < 0$ , and the result follows.

Finally, I return to the case where the provider can reject patients absent an agreement (that is, when  $\tilde{\mathcal{A}} = [0,1]$ ). Lemma D3 implies that  $d^P(r^P(\tilde{l}), \tilde{l}, 1) > 0$  for any  $\tilde{l}$ . Since  $d^P(p, l, a) = ad^P(p, l, 1)$ , it follows that strategies with  $\tilde{a} < 1$  may be ignored. Thus, the equilibrium when the provider can reject patients must be identical to the equilibrium when it cannot reject patients.

**Proof of Proposition A2.** To begin, I define the provider's best response function with an out-ofnetwork cap:  $\bar{r}^{P}(\tilde{l}; \bar{p}) = \operatorname{argmax}_{p \in (-\infty, \bar{p}]} d^{P}(p, \tilde{l}, 1)$ . The properties of  $r^{P}(\tilde{l})$  from Lemma D3 imply that  $\bar{r}^{P}(\tilde{l}; \bar{p}) = \min\{r^{P}(\tilde{l}), \bar{p}\}$  and that  $\bar{r}^{P}$  is a continuous and increasing function of  $\tilde{l}$ .

I now establish existence and uniqueness. To demonstrate existence, define the function  $k(\tilde{p}) \equiv \tilde{p} - \bar{r}^P(r^I(\tilde{p}))$ . Lemmas D2 and D3 imply that this function is well-defined and continuous for  $\tilde{p} \ge c$ . Now, observe that  $k(c) = c - \bar{r}^P(r^I(c)) \le 0$  since  $\bar{r}^P(\tilde{l}) \ge c$  for all  $\tilde{l}$ . Additionally,  $k(\bar{p}) \ge \bar{p} - \bar{p} = 0$ . It follows that there exists some  $\tilde{p} \in [c, \bar{p}]$  such that  $k(\tilde{p}) = 0$ . Clearly,  $(\tilde{p}, r^I(\tilde{p}))$  is an equilibrium. This equilibrium must be unique because  $r^I$  is decreasing in  $\tilde{p}$  and  $\bar{r}^P$  is increasing in  $\tilde{l}$ .

Turning to part (i) of the proposition, when  $\bar{p} \geq \tilde{p}_{\text{nocap}}$ , it is clear that the unique equilibrium of the game without an out-of-network cap is still the unique equilibrium. It follows immediately that the equilibrium strategies have the stated properties.

When  $\bar{p} < \tilde{p}_{\text{nocap}}$ , the fact that  $r^{I}$  is decreasing implies that  $\tilde{l}_{\text{out}} = r^{I}(\tilde{p}_{\text{out}}) \ge r^{I}(\bar{p}) \ge r^{I}(\tilde{p}_{\text{nocap}}) = \tilde{l}_{\text{nocap}}$ . This inequality is strict if  $\bar{p} < \tilde{p}_{0}$ , where  $\tilde{p}_{0} > c$  is the lowest price with  $r^{I}(\tilde{p}_{0}) = 0$ , since  $r^{I}$  is strictly decreasing for  $\tilde{p} \in [c, \tilde{p}_{0}]$  by Lemma D2. Likewise, since  $r^{P}$  is increasing, it must also be the case that  $r^{P}(\tilde{l}_{\text{out}}) \ge r^{P}(\tilde{l}_{\text{nocap}}) = \tilde{p}_{\text{nocap}} > \bar{p}$ , so  $\tilde{p}_{\text{out}} = \bar{r}^{P}(\tilde{l}_{\text{out}}; \bar{p}) = \min\{r^{P}(\tilde{l}_{\text{out}}), \bar{p}\} = \bar{p}$ .

The fact that  $Q(\tilde{p}_{out}, \tilde{l}_{out}) > Q(\tilde{p}_{nocap}, \tilde{l}_{nocap})$  for  $\bar{p} < \tilde{p}_{nocap}$  follows immediately from the features of the equilibrium strategies and the properties of Q stated in Assumption A1. To see that  $Q(\tilde{p}_{out}, \tilde{l}_{out}) = Q^*$ 

for  $\bar{p} = c$ , note that Lemma D2 implies that  $\tilde{l}_{out} = r^I(c) \in (0,1)$ , so  $d_{\tilde{l}}^I(\tilde{p}_{out}, \tilde{l}_{out}, 1) = 0$ . From (D4), this implies  $V'(Q(\tilde{p}_{out}, \tilde{l}_{out})) = c$ , which implies in turn that  $Q(\tilde{p}_{out}, \tilde{l}_{out}) = Q^*$ .

I now turn to part (ii) and characterize  $p_{out}^*$ . Note first that the equilibrium strategies are obviously continuous functions of  $\bar{p}$ , and, by (A3) and the continuity of the underlying model primitives,  $p_{out}^*$  is a continuous function of the equilibrium strategies. It follows that  $p_{out}^*$  is a continuous function of  $\bar{p}$ .

I next establish some useful facts for two subcases that will be used repeatedly below:

- *p̄* ≥ *p̃*<sub>nocap</sub>: In this case, the fact that the equilibrium strategies are unchanged from the case without a cap implies that *p*<sup>\*</sup><sub>out</sub>(*p̄*) = *p*<sup>\*</sup><sub>nocap</sub> and (*p*<sup>\*</sup><sub>out</sub>)'(*p̄*) = 0.
- $\bar{p} < \tilde{p}_{\text{nocap}}$ : In this case, equation (A3) and the form of the equilibrium strategies imply that

$$p_{\text{out}}^*(\bar{p})Q^* = \theta c Q^* + (1-\theta)V(Q^*) + [\bar{p} - \theta c]Q(\bar{p}, r^I(\bar{p})) - (1-\theta)V(Q(\bar{p}, r^I(\bar{p}))).$$
(†)

Note that in the specific case when  $\bar{p} = c$ , substituting  $Q(\tilde{p}_{out}, \tilde{l}_{out}) = Q^*$  into (†) yields  $p^*_{out}(c) = c$ . Furthermore, differentiating (†) with respect to  $\bar{p}$  yields

$$(p_{\text{out}}^*)'(\bar{p})Q^* = Q + \left[Q_p + \frac{dr^I}{d\tilde{p}}Q_l\right][\bar{p} - \theta c - (1 - \theta)V'(Q)],\tag{\ddagger}$$

where I have suppressed function arguments to streamline notation.

I next more fully characterize  $(p_{out}^*)'$ . The facts established above imply that  $p_{out}^*$  is differentiable except possibly for  $\bar{p} \in \{\tilde{p}_0, \tilde{p}_{nocap}\}$ . (In those instances, I treat  $(p_{out}^*)'(\bar{p})$  as being the corresponding right derivative.) I proceed by considering three distinct subcases:

• Case 1 ( $\gamma = 0$  and  $\tilde{l}_{nocap} > 0$ ): In this case, I show that

$$(p_{\text{out}}^*)'(\bar{p}) = \begin{cases} \frac{1}{Q^*} \left[ Q(\bar{p}, r^I(\bar{p})) + \theta \frac{\bar{p} - c}{V''(Q(\bar{p}, r^I(\bar{p})))} \right] & \text{if } \bar{p} \in [c, \tilde{p}_{\text{nocap}}) \\ 0 & \text{if } \bar{p} \in [\tilde{p}_{\text{nocap}}, \infty) \end{cases}$$

Since  $\tilde{l}_{nocap} > 0$ , Lemma D2 implies  $r^{I}(\bar{p}) \in (0,1)$  for any  $\bar{p} \in [c, \tilde{p}_{nocap})$ . Thus,  $d_{\bar{l}}^{I}(\bar{p}, r^{I}(\bar{p}), 1) = 0$ , so (A7) implies  $V'(Q(\bar{p}, r^{I}(\bar{p}))) = \bar{p}$ . Similarly, the expression for  $dr^{I} / d\tilde{p}$  derived in the proof of Lemma D2 for this case implies that, when  $\bar{p} \in [c, \tilde{p}_{nocap})$ ,

$$Q_{p} + \frac{dr^{I}}{d\tilde{p}}Q_{l} = Q_{p} + \left[\frac{1 - V''(Q)Q_{p}}{Q_{l}V''(Q)}\right]Q_{l} = \frac{1}{V''(Q)'}$$

where I have again suppressed function arguments. Substituting into (‡) yields the desired expression for  $(p_{out}^*)'(\bar{p})$  for these values of  $\bar{p}$ . The case where  $\bar{p} \ge \tilde{p}_{nocap}$  was handled above.

• Case 2 ( $\gamma = 0$  and  $\tilde{l}_{nocap} = 0$ ): In this case, I show that

$$(p_{\text{out}}^{*})'(\bar{p}) = \begin{cases} \frac{1}{Q^{*}} \left[ Q(\bar{p}, r^{I}(\bar{p})) + \theta \frac{\bar{p} - c}{V''(Q(\bar{p}, r^{I}(\bar{p})))} \right] & \text{if } \bar{p} \in [c, \tilde{p}_{0}) \\ \frac{1}{Q^{*}} \left[ Q(\bar{p}, 0) + Q_{p}(\bar{p}, 0) \{ \bar{p} - \theta c - (1 - \theta) V'(Q(\bar{p}, 0)) \} \right] & \text{if } \bar{p} \in [\tilde{p}_{0}, \tilde{p}_{\text{nocap}}) \\ 0 & \text{if } \bar{p} \in [\tilde{p}_{\text{nocap}}, \infty) \end{cases}$$

Note that  $\tilde{l}_{nocap} = 0$ , implies that  $\tilde{p}_0 < \tilde{p}_{nocap}$  since  $r^I$  is decreasing. To characterize  $(p_{out}^*)'(\bar{p})$  for  $\bar{p} \in [c, \tilde{p}_0)$ , the same arguments used for Case 1 apply. For  $\bar{p} \in [\tilde{p}_0, \tilde{p}_{nocap})$ , note that  $r^I(\bar{p}) = 0$ , so  $dr^I/d\tilde{p} = 0$ , and apply (‡) again. The case with  $\bar{p} \ge \tilde{p}_{nocap}$  was handled above.

• Case 3 ( $\gamma = 1$ ): In this case, I show that

$$(p_{\text{out}}^{*})'(\bar{p}) = \begin{cases} Q(\bar{p}, r^{I}(\bar{p}))/Q^{*} & \text{if } \bar{p} \in [c, \tilde{p}_{0}) \\ \frac{1}{Q^{*}} [Q(\bar{p}, 0) + Q_{p}(\bar{p}, 0)\{\bar{p} - \theta c - (1 - \theta)V'(Q(\bar{p}, 0))\}] & \text{if } \bar{p} \in [\tilde{p}_{0}, \tilde{p}_{\text{nocap}}) \\ 0 & \text{if } \bar{p} \in [\tilde{p}_{\text{nocap}}, \infty) \end{cases}$$

For  $\bar{p} \in [c, \tilde{p}_0)$ , Lemma D2 implies  $r^I(\bar{p}) \in (0,1)$ , so  $d_{\bar{l}}^I(\bar{p}, r^I(\bar{p}), 1) = 0$ , which, together with (D4), implies  $\bar{p} - \theta c - (1 - \theta)V'(Q) = 0$ . Substituting into (‡) yields the result. For  $\bar{p} \in [\tilde{p}_0, \tilde{p}_{\text{nocap}})$ , note that  $r^I(\bar{p}) = 0$ , so  $dr^I/d\tilde{p} = 0$ , and apply (‡) once again. The case where  $\bar{p} \ge \tilde{p}_{\text{nocap}}$  was handled above.

Now, note that since  $Q(c, r^{I}(c)) = Q^{*}$  and  $r^{I}$  is a decreasing function, it follows that  $Q(\bar{p}, r^{I}(\bar{p})) < Q^{*}$  for any  $\bar{p} > c$ . It is then straightforward (albeit tedious) to use the various expressions for  $(p_{out}^{*})'(\bar{p})$  derived above to show that  $(p_{out}^{*})'(\bar{p}) \leq Q(\tilde{p}_{out}, \tilde{l}_{out}) / Q^{*} \leq 1$ , with the second equality strict unless  $\bar{p} = c$ . To complete the main part of (ii), note that these bounds on  $(p_{out}^{*})'(\bar{p})$ , together with the continuity of  $p_{out}^{*}$  and the fact that  $p_{out}^{*}(c) = c$ , imply that  $p_{out}^{*} \leq \bar{p}$  for all  $\bar{p}$  and  $p_{out}^{*} < \bar{p}$  for  $\bar{p} > c$ .

Turning to (ii).(a), it suffices to note that  $(p_{out}^*)'(\bar{p}) < 1$  for any  $\bar{p} > c$ . This fact, together with the continuity of  $p_{out}^*$  and the fact that  $p_{out}^*(c) = c$ , implies that  $p_{cap}^*(p_{nocap}^*) < p_{nocap}^*$ , so a suitable  $\tilde{p}'$  exists.

Finally, for (ii).(b), I show that  $(p_{out}^*)'(\bar{p}) > 0$  for  $\bar{p} < \tilde{p}_{nocap}$ . When  $\bar{p} \in [c, \tilde{p}_0)$ , this follows immediately from the expressions derived in Case 3 above. When  $\bar{p} \in [\tilde{p}_0, \tilde{p}_{nocap})$ , note that  $(p_{out}^*)'(\bar{p}) = d_{\tilde{p}}^P(\bar{p}, 0, 1) / Q^*$  and observe that  $d_{\tilde{p}}^P(\bar{p}, 0, 1) > 0$  since the equilibrium of the uncapped game is  $(\tilde{p}_{nocap}, 0)$ . Because  $p_{out}^*$  is strictly increasing for  $\bar{p} < \tilde{p}_{nocap}$  and  $p_{out}^*(\tilde{p}_{nocap}) = p_{nocap}^*$ , it also follows that  $p_{out}^* < p_{nocap}^*$  for any  $\bar{p} < \tilde{p}_{nocap}$ . Parallel logic implies that  $(p_{out}^*)'(\tilde{p}_{nocap}) = 0.\square$ 

**Proof of Proposition A3.** I start with part (i). When the parties cannot commit to disagreement actions (so  $\gamma = 0$ ), note that  $d^{P}(\bar{p}, \tilde{l}, 1) > 0$  for any  $\tilde{l}$  since  $\bar{p} > c$  by assumption. Since  $d^{P}(p, l, a) = ad^{P}(p, l, 1)$ , strategies with  $\tilde{a} < 1$  can never be a best response and may be ignored. It then follows immediately from Proposition A2 that  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1)$  is the unique equilibrium of the current game and the negotiated price is  $p_{out}^{*}(\bar{p})$ .

I now turn to part (ii), in which the parties can commit to disagreement actions (so  $\gamma = 1$ ).

I first show that there is a unique out-of-network cap  $\bar{p} > p^*(0,0,\mathbb{R})$  such that  $p^*_{out}(\bar{p}) = p^*(0,0,\mathbb{R})$ . Proposition A2, together with equation (A3), show that  $p^*_{out}(c) = c < p^*(0,0,\mathbb{R})$ . For  $\bar{p} = \tilde{p}_{nocap}$ , equation (A3) and the properties of the equilibrium strategies derived in Proposition A2 imply that

$$p_{\text{out}}^*(\bar{p}) = p^*(0,0,\mathbb{R}) + [1/Q^*]d^P(r^P(0),0,1) > p^*(0,0,\mathbb{R}),$$

where the inequality follows since  $d^p(r^p(0),0,1) > 0$  by Lemma D3. The fact that  $p_{out}^*$  is continuous and strictly increasing on  $[c, \tilde{p}_{nocap}]$  implies that a suitable  $\bar{p}$  exists, which I denote  $\bar{p}_{reject}$ . The fact that  $\bar{p}_{reject} > p_{out}^*(\bar{p}_{reject}) = p^*(0,0,\mathbb{R})$  follows immediately from Proposition A2.

Now, note that equation (A3) implies that  $d^P(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1) = [p^*_{out}(\bar{p}) - p^*(0, 0, \mathbb{R})]Q^*$ , which implies in turn that  $d^P(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1) > 0$  when  $\bar{p} > \bar{p}_{reject}$  and  $d^P(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1) < 0$  when  $\bar{p} < \bar{p}_{reject}$ . It is thus natural to consider three subcases:  $\bar{p} > \bar{p}_{reject}$ ,  $\bar{p} < \bar{p}_{reject}$ , and  $\bar{p} = \bar{p}_{reject}$ .

First, consider  $\bar{p} > \bar{p}_{reject}$ . Observe that, for any  $\tilde{l}$ ,

$$d^{P}(\tilde{p}_{\text{out}}(\bar{p}),\tilde{l},1) = -d^{I}(\tilde{p}_{\text{out}}(\bar{p}),\tilde{l},1) \geq -d^{I}(\tilde{p}_{\text{out}}(\bar{p}),\tilde{l}_{\text{out}}(\bar{p}),1) = d^{P}(\tilde{p}_{\text{out}}(\bar{p}),\tilde{l}_{\text{out}}(\bar{p}),1) > 0.$$

where the first inequality follows since  $\tilde{l}_{out}$  is the insurer's best response, and the second inequality was established above when  $\bar{p} > \bar{p}_{reject}$ . Since  $d^P(p, l, a) = ad^P(p, l, 1)$ , it follows that strategies with  $\tilde{a} < 1$  can never be a best response and may be ignored. It then follows from Proposition A2 that  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1)$  is the unique equilibrium of the current game and the negotiated price is  $p^*_{out}(\bar{p})$ .

Next, consider  $\bar{p} < \bar{p}_{reject}$ . Since  $d^{P}(p, l, a) = ad^{P}(p, l, 1)$  and  $d^{I}(p, l, a) = ad^{I}(p, l, a)$ , Proposition A2 implies that any equilibrium with  $\tilde{a} > 0$  must have the form  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), \tilde{a})$ ; however, since it was shown above that  $d^{P}(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1) < 0$ , the provider's best response to  $\tilde{l}_{out}(\bar{p})$  must have  $\tilde{a} = 0$ , so this cannot be an equilibrium. It is easy to check that  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 0)$  is an equilibrium and leads to a negotiated price  $p^{*}(0,0,\mathbb{R})$ . There are other equilibria with  $\tilde{a} = 0$ , but since all have disagreement payoffs  $\tilde{W} = \tilde{\pi} = 0$ , examining (A1) shows that they all produce the same negotiated outcomes.

To derive the bound on  $p_{nocap}^* - p^*(0,0,\mathbb{R})$ , it is convenient to define a function  $g(Q) = \theta cQ + (1 - \theta)V(Q)$ . Using equation (A3), it is easy to see that

$$p_{\text{nocap}}^* - p^*(0,0,\mathbb{R}) = \frac{1}{Q^*} \left[ \tilde{p}_{\text{nocap}} \tilde{Q}_{\text{nocap}} - g(\tilde{Q}_{\text{nocap}}) \right], \tag{*}$$

Next, note that equation (A3) also implies that

$$p^*_{ ext{nocap}}Q^* - ilde{p}_{ ext{nocap}} ilde{Q}_{ ext{nocap}} = g(Q^*) - gig( ilde{Q}_{ ext{nocap}}ig).$$

Since *g* is strictly concave and g(0) = 0, the preceding equation then implies that

$$g(\tilde{Q}_{\text{nocap}}) > g'(\tilde{Q}_{\text{nocap}})\tilde{Q}_{\text{nocap}} > \frac{g(Q^*) - g(\tilde{Q}_{\text{nocap}})}{Q^* - \tilde{Q}_{\text{nocap}}}\tilde{Q}_{\text{nocap}} = \frac{p_{\text{nocap}}^* Q^* - \tilde{p}_{\text{nocap}} \tilde{Q}_{\text{nocap}}}{Q^* - \tilde{Q}_{\text{nocap}}}\tilde{Q}_{\text{nocap}}$$

Combining this inequality with equation (\*) then yields the result:

$$p_{\text{nocap}}^* - p^*(0,0,\mathbb{R}) < \frac{1}{Q^*} \left[ \tilde{p}_{\text{nocap}} \tilde{Q}_{\text{nocap}} - \frac{p_{\text{nocap}}^* Q^* - \tilde{p}_{\text{nocap}} \tilde{Q}_{\text{nocap}}}{Q^* - \tilde{Q}_{\text{nocap}}} \tilde{Q}_{\text{nocap}} \right] = \frac{s}{1-s} \left[ \tilde{p}_{\text{nocap}} - p_{\text{nocap}}^* \right].$$

Finally, when  $\bar{p} = \bar{p}_{reject}$  it is easy to use arguments similar to those above to show that  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1)$  is an equilibrium and that there also exist equilibria with  $\tilde{a} < 1$ . It is easy to show that any such equilibria lead to a negotiated price  $p^*(0, 0, \mathbb{R})$ .

**Proof of Proposition A4.** I start with part (i). Note that the same arguments used in the proof of Proposition A3 establish that the provider will never wish to turn away patients when commitment is not possible, so I restrict attention to cases where the provider is required to set  $\tilde{a} = 1$ .

To begin, I define best response functions in this game. The provider's best response function is  $\bar{r}^{P}(\tilde{l};\bar{p}) = \operatorname{argmax}_{p \in [0,\bar{p}]} d^{P}(p,\tilde{l},1)$ , and Lemma D3 implies that  $\bar{r}^{P}(\tilde{l};\bar{p}) = \min\{r^{P}(\tilde{l}),\bar{p}\}$ . The insurer's best response function is  $\underline{r}^{I}(\tilde{p};\underline{l}) = \operatorname{argmax}_{l \in [l,1]} d^{I}(\tilde{p},l,1)$ , and Lemma D2 implies that  $\underline{r}^{I} =$ 

 $\max\{r^{I}(\tilde{p}), \underline{l}\}$ . The facts established in Lemmas D2 and D3 imply that both functions are continuous,  $\bar{r}^{P}$  is weakly increasing, and  $\underline{r}^{I}$  is weakly decreasing. Existence and uniqueness then follow from an argument essentially identical to the corresponding argument in Proposition A2.

Now, let  $(\tilde{p}, \tilde{l})$  denote the equilibrium disagreement strategies and  $p^*$  the resulting negotiated price.

I first show  $\tilde{l} = \underline{l}$ . Note first that since  $\tilde{p} \le \overline{p}$ ,  $\tilde{l} \ge \underline{l}$ , and Q is decreasing in p and increasing in l, it follows that  $Q(\tilde{p}, \tilde{l}) \ge Q(\overline{p}, \underline{l}) = Q^*$ , which implies in turn that  $V'(Q(\tilde{p}, \tilde{l})) \le c$ . Additionally,  $\tilde{p} = \overline{r}^P(\tilde{l}) > c$  by Lemma D3. Equation (D4) then implies that  $d_{\tilde{l}}^I(\tilde{p}, \tilde{l}, 1) < 0$ , which requires  $\tilde{l} = \underline{l}$  since  $\tilde{l}$  is the insurer's best response.

To characterize  $\tilde{p}$ , I separately consider cases with  $\bar{p} \leq \tilde{p}_{nocap}$  and  $\bar{p} > \tilde{p}_{nocap}$ :

•  $\bar{p} \leq \tilde{p}_{nocap}$ : Since  $\underline{r}^{I}$  is decreasing, it follows that

 $\tilde{l} = \underline{r}^{I}(\tilde{p}) \ge \underline{r}^{I}(\bar{p}) \ge \underline{r}^{I}(\tilde{p}_{\text{nocap}}) \ge \tilde{l}_{\text{nocap}}.$ 

Since  $\bar{r}^{P}$  is increasing, it follows in turn that

$$\tilde{p} = \bar{r}^{P}(\tilde{l}) \ge \bar{r}^{P}(\tilde{l}_{\text{nocap}}) = \min\{r^{P}(\tilde{l}_{\text{nocap}}), \bar{p}\} = \min\{\tilde{p}_{\text{nocap}}, \bar{p}\} = \bar{p},$$

so  $\tilde{p} = \bar{p}$ . Recalling that  $Q(\bar{p}, \underline{l}) = Q^*$  and substituting into (A3) then yields  $p^* = \bar{p}$ .

•  $\bar{p} > \tilde{p}_{nocap}$ : Proposition A1 demonstrated that  $Q(\tilde{p}_{nocap}, \tilde{l}_{nocap}) < Q^* = Q(\bar{p}, \underline{l})$ . Since Q is strictly decreasing in p and strictly increasing in l, this fact together with  $\bar{p} > \tilde{p}_{nocap}$  implies  $\underline{l} > \tilde{l}_{nocap}$ . Since  $\bar{r}^P$  is increasing, this implies in turn that  $\tilde{p} = \bar{r}^P(\tilde{l}) = \bar{r}^P(\tilde{l}) \ge \bar{r}^P(\tilde{l}_{nocap}) \ge \tilde{p}_{nocap}$ .

Next, using the shorthand  $\tilde{Q} \equiv Q(\tilde{p}, \tilde{l})$ , note that

$$\begin{aligned} \theta \pi \big( \tilde{p}, \tilde{l}, 1 \big) - (1 - \theta) W \big( \tilde{p}, \tilde{l}, 1 \big) &= d^{P} \big( \tilde{p}, \underline{l}, 1 \big) - (1 - \gamma) (1 - \theta) \big[ V(\tilde{Q}) - c \tilde{Q} \big] \\ &\geq d^{P} \big( \bar{p}, \underline{l}, 1 \big) - (1 - \gamma) (1 - \theta) \big[ V(\tilde{Q}) - c \tilde{Q} \big] \\ &\geq d^{P} \big( \bar{p}, \underline{l}, 1 \big) - (1 - \gamma) (1 - \theta) \big[ V(Q^{*}) - c Q^{*} \big] \\ &= \bar{p} Q^{*} - c Q^{*} - (1 - \theta) \big[ V(Q^{*}) - c Q^{*} \big], \end{aligned}$$

where the first inequality follows because  $\tilde{p}$  is a best response and the second because  $Q^*$  maximizes V(Q) - cQ. Combining this inequality with (A3) yields  $p^* \ge \bar{p}$ , as desired.

Turning to part (ii), I note that this portion of the proposition can be proved using arguments that are almost identical to the arguments used to prove part (ii) of Proposition A3, so I omit the proof.□

**Proof of Proposition A5.** I begin by stating for convenient reference two facts that were noted in Appendix A and proven in section D.1.2 regarding the solution to (A1) when  $\mathcal{P} = \overline{\mathcal{P}}$ :

- *Fact 1:* If  $\widetilde{W}$  and  $\widetilde{\pi}$  are disagreement payoffs for which  $p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R}) \leq \overline{p}$ , then: (i)  $p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}) = p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R})$ ; (ii)  $l^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}) = l^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R})$ ; and (iii)  $Q(p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), l^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}})) = Q^*$ .
- *Fact 2:* If  $\widetilde{W}$  and  $\widetilde{\pi}$  are disagreement payoffs for which  $p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R}) > \overline{p}$ , then: (i)  $p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}) = \overline{p}$ ; and (ii)  $Q(p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), l^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}})) > Q^*$ .

Next, I establish two additional facts that, taken together, demonstrate that the parties' rankings of alternative profiles of disagreement payoffs when  $\mathcal{P} = \overline{\mathcal{P}}$  are tightly related to the parties' ranking when negotiated prices are unconstrained (that is, when  $\mathcal{P} = \mathbb{R}$ ). In particular:

Fact 3: If (W̃, π̃) and (W̃', π̃') are pairs of disagreement payoffs for which p<sup>\*</sup>(W̃', π̃', ℝ) ≤ p<sup>\*</sup>(W̃, π̃, ℝ) ≤ p̄, then:

 $\pi(p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), l^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), 1) \ge \pi(p^*(\widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}}), l^*(\widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}}), 1); \text{ and}$ 

 $W(p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), l^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), 1) \leq W(p^*(\widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}}), l^*(\widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}}), 1).$ 

If  $p^*(\widetilde{W}', \widetilde{\pi}', \mathbb{R}) < p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R})$ , then the concluding inequalities are both strict.

• *Fact 4:* If  $\widetilde{W}$  and  $\widetilde{\pi}$  are disagreement payoffs for which  $p^*(\widetilde{W}, \widetilde{\pi}, \mathbb{R}) > \overline{p}$ , and  $\widetilde{W}'$  and  $\widetilde{\pi}'$  are disagreement payoffs for which  $p^*(\widetilde{W}', \widetilde{\pi}', \mathbb{R}) \le \overline{p}$ , then:

$$\pi \left( p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), l^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), 1 \right) > [\overline{p} - c] Q^* \ge \pi \left( p^* \left( \widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}} \right), l^* \left( \widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}} \right), 1 \right); \text{and}$$
$$W \left( p^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), l^*(\widetilde{W}, \widetilde{\pi}, \overline{\mathcal{P}}), 1 \right) < V(Q^*) - \overline{p} Q^* \le W \left( p^* \left( \widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}} \right), l^* \left( \widetilde{W}', \widetilde{\pi}', \overline{\mathcal{P}} \right), 1 \right).$$

Fact 3 follows immediately from Fact 1. In Fact 4, the first inequality in each conclusory statement follows from Fact 2, while the second inequality follows from Fact 1.

I now prove part (i) of the proposition. Consider two sub-cases:

- Parties cannot commit to disagreement actions: In this case, the parties choose disagreement actions to maximize their disagreement payoffs without regard to the effect on their negotiated payoffs. The form of the Nash bargaining problem (A1) is thus irrelevant to the choice of disagreement actions, so the equilibrium disagreement actions under a comprehensive price cap of *p* are identical to those under an out-of-network cap of *p*: *p*<sub>out</sub>(*p*) and *l*<sub>out</sub>(*p*). Propositions A2 and A4 imply that *p*<sup>\*</sup><sub>out</sub>(*p*) ≤ *p*, so Fact 1 implies that negotiated contract terms for a comprehensive price cap of *p* are the same as under an out-of-network cap of *p*.
- Parties can commit to disagreement actions and the provider cannot reject patients: I again proceed by verifying that the change in set of permissible negotiated prices from *P* = ℝ to *P* = *P* does not change the equilibrium disagreement actions. That is harder in this case because the parties choose disagreement actions to maximize their payoffs in the Nash bargaining problem (A1). For convenience, I let (*p*, *l*) denote (*p*<sub>out</sub>(*p*), *l*<sub>out</sub>(*p*)), the equilibrium strategies with an out-of-network cap of *p*, and let *W* and *π* denote the corresponding disagreement payoffs. Recall that Proposition A2 implies p<sup>\*</sup>(*W*, *π*, ℝ) = p<sup>\*</sup><sub>out</sub>(*p*) ≤ *p*.

I first show that  $(\tilde{p}, \tilde{l})$  is still an equilibrium of the disagreement game. Suppose the provider deviated and played  $\tilde{p}'$ , and let  $\tilde{W}'$  and  $\tilde{\pi}'$  be the resulting disagreement payoffs. This strategy must have  $p^*(\tilde{W}', \tilde{\pi}', \mathbb{R}) \leq p^*(\tilde{W}, \tilde{\pi}, \mathbb{R})$  since  $\tilde{p}$  was a best response under an out-of-network cap. Since  $p^*(\tilde{W}, \tilde{\pi}, \mathbb{R}) \leq \bar{p}$ , Fact 3 implies that the provider still weakly prefers  $\tilde{p}$  to  $\tilde{p}'$  under a comprehensive price cap, so  $\tilde{p}$  is still the provider's best response.

Similarly, suppose the insurer deviated and played  $\tilde{l}'$ , and again let  $\tilde{W}'$  and  $\tilde{\pi}'$  be the resulting disagreement payoffs. This strategy must have  $p^*(\tilde{W}', \tilde{\pi}', \mathbb{R}) \ge p^*(\tilde{W}, \tilde{\pi}, \mathbb{R})$  since  $\tilde{l}$  was a best response under an out-of-network cap. Now, consider two cases. If  $p^*(\tilde{W}', \tilde{\pi}', \mathbb{R}) \le \bar{p}$ , then Fact 3 implies that the insurer still prefers  $\tilde{l}$  to  $\tilde{l}'$  under a comprehensive price cap, so  $\tilde{l}$  is still a best response for the provider. If  $p^*(\tilde{W}', \tilde{\pi}', \mathbb{R}) > \bar{p}$ , the same conclusion follows from Fact 4.

Now, consider any strategy profile  $(\tilde{p}', \tilde{l}')$  that was not an equilibrium under an out-of-network cap, and let  $\tilde{W}'$  and  $\tilde{\pi}'$  be the corresponding disagreement payoffs. I show that  $(\tilde{p}', \tilde{l}')$  is still not an equilibrium. To do so, I consider two cases.

First, suppose  $p^*(\widetilde{W}', \widetilde{\pi}', \mathbb{R}) > \overline{p}$ . In this case, choose a strategy  $\widetilde{l}''$  so  $Q(\widetilde{p}', \widetilde{l}'') = Q^*$ , which is possible by Assumption A3. Letting  $\widetilde{W}''$  and  $\widetilde{\pi}''$  be the corresponding disagreement payoffs, (A3) implies that  $p^*(\widetilde{W}'', \widetilde{\pi}'', \mathbb{R}) = \widetilde{p}' \leq \overline{p} < p^*(\widetilde{W}', \widetilde{\pi}', \mathbb{R})$ . Fact 4 then implies that the insurer strictly prefers  $\widetilde{l}''$  to  $\widetilde{l}'$  under a comprehensive price cap, so  $(\widetilde{p}', \widetilde{l}')$  is not an equilibrium.

Second, suppose  $p^*(\widetilde{W}', \widetilde{\pi}', \mathbb{R}) \leq \overline{p}$ . In this case, note that since  $(\widetilde{p}', \widetilde{l}')$  was not an equilibrium under an out-of-network cap, the provider or the insurer must have had a strategy that produced a strictly higher negotiated payoff.

If the provider had such a strategy, let  $\tilde{p}''$  be that strategy, and let  $\tilde{W}''$  and  $\tilde{\pi}''$  be the resulting disagreement payoffs. Clearly,  $p^*(\tilde{W}'', \tilde{\pi}'', \mathbb{R}) > p^*(\tilde{W}', \tilde{\pi}', \mathbb{R})$ . If  $p^*(\tilde{W}'', \tilde{\pi}'', \mathbb{R}) \le \bar{p}$ , Fact 3 implies the provider still strictly prefers  $\tilde{p}''$  to  $\tilde{p}'$  under a comprehensive price cap, so  $(\tilde{p}', \tilde{l}')$  is not an equilibrium. The same conclusion follows from Fact 4 if  $p^*(\tilde{W}'', \tilde{\pi}'', \mathbb{R}) > \bar{p}$ .

Similarly, if the insurer had such a strategy, let  $\tilde{l}''$  be that strategy, and let  $\tilde{W}''$  and  $\tilde{\pi}''$  be the resulting disagreement payoffs. Clearly,  $p^*(\tilde{W}'', \tilde{\pi}'', \mathbb{R}) < p^*(\tilde{W}', \tilde{\pi}', \mathbb{R})$ , so Fact 3 implies that the insurer still strictly prefers  $\tilde{l}''$  to  $\tilde{l}'$ , and  $(\tilde{p}', \tilde{l}')$  cannot be an equilibrium.

I now turn to part (ii), which concerns the case where the provider can reject patients and the parties can commit to disagreement actions. Because the introduction of a constraint on negotiated prices in the Nash bargaining problem (A1) is irrelevant when  $\bar{p} \ge p^*(0,0,\mathbb{R})$ , the proofs of subparts (a) and (b) almost exactly parallel the proof of the corresponding statements in Proposition A3 related to an out-of-network cap. The exception is that the proof now builds upon the facts regarding the disagreement actions when providers cannot reject patients that were established in part (i) of this proposition, rather than the corresponding facts established in Proposition A2 for an out-of-network cap.

I thus omit the proof of subparts (a) and (b) and focus on subpart (c), which considers  $\bar{p} < p^*(0,0,\mathbb{R})$ . To that end, note that part (i) of this proposition implies that the only potential equilibrium with  $\tilde{a} = 1$  is  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1)$ . Proposition A2 showed that the corresponding negotiated price when  $\mathcal{P} = \mathbb{R}$  is  $p_{out}^*(\bar{p}) < \bar{p} < p^*(0,0,\mathbb{R})$ . Fact 4 then implies that  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1)$  is not an equilibrium. It is, however, easy to see that  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 0)$  is an equilibrium; there are many other equilibria with  $\tilde{a} = 0$ , but since all have  $\tilde{W} = \tilde{\pi} = 0$ , all lead to the same negotiated outcomes.

I now characterize those negotiated outcomes. By Fact 2, the negotiated price under a comprehensive price cap  $\bar{p} < p^*(0,0,\mathbb{R})$ , is  $p^*(0,0,\bar{\mathcal{P}}) = \bar{p}$ . Additionally,  $Q_{\text{comp}}(\bar{p}) = Q(\bar{p}, l^*(0,0,\bar{\mathcal{P}})) > Q^*$ .

To establish the other properties of  $Q_{\text{comp}}$ , I first characterize the negotiated coverage terms  $l^*(0,0,\bar{P})$ .

To that end, recall that it was shown in the text of Appendix A that there exist network agreements that give both parties strictly positive payoffs. Inspecting (A1), it is thus clear that the negotiated agreement must have  $\pi(\bar{p}, l^*(0,0, \mathcal{P})) > 0 = \tilde{\pi}$  and  $W(\bar{p}, l^*(0,0, \mathcal{P})) > 0 = \tilde{W}$  since other potential agreements would result in the maximand in (A1) being either zero or undefined.

It follows that the maximand in (A1) is differentiable as a function of *l* at the optimum. Let  $h(l; \bar{p})$  be the natural log of the maximand in (A1) when  $a^* = 1$ ,  $p^* = \bar{p}$ , and  $\tilde{W} = \tilde{\pi} = 0$ . Then,

$$\frac{d}{dl}h(l;\bar{p}) = \frac{Q_l}{V(Q) - \bar{p}Q} \left[ \left\{ \theta V'(Q) + (1-\theta)\frac{V(Q)}{Q} \right\} - \bar{p} \right],\tag{*}$$

where I have suppressed the arguments of the functions Q and  $Q_l$  to streamline notation. It is easily verified that the term in curly brackets is strictly decreasing in l, which implies in turn that the righthand side of equation (\*) can change sign at most once as l increases, so equation (\*) has at most one zero and, if it has a zero, that zero occurs at  $l^*(0,0,\overline{P})$ .

Now, to see that  $Q_{\text{comp}}(\bar{p}) \to Q^*$  as  $\bar{p} \to p^*(0,0,\mathbb{R})$ , note that

$$\theta V'(Q^*) + (1-\theta) \frac{V(Q^*)}{Q^*} = \theta c + (1-\theta) \frac{V(Q^*)}{Q^*} = p^*(0,0,\mathbb{R}).$$

It follows that, for  $\bar{p} = p^*(0,0,\mathbb{R})$ , equation (\*) has a zero at the value *l* such that  $Q(\bar{p}, l) = Q^*$ . Due to the continuity of the primitives, it follows that for  $\bar{p}$  sufficiently close to  $p^*(0,0,\mathbb{R})$ , equation (\*) has a zero at a value of *l* such that  $Q(\bar{p}, l)$  is arbitrarily close to  $Q^*$ . The conclusion follows.

Finally, to see that that  $Q_{\text{comp}}(\bar{p})$  is strictly decreasing as a function of  $\bar{p}$  whenever  $Q_{\text{comp}}(\bar{p}) < Q(\bar{p}, 1)$ , observe that  $Q^* < Q_{\text{comp}}(\bar{p}) < Q(\bar{p}, 1)$  implies that  $l^*(0,0,\bar{P}) \in (0,1)$ , so  $l^*(0,0,\bar{P})$  is the unique zero of (\*). The conclusion then follows from the fact that the term in curly brackets is strictly decreasing in l.

**Proof of Proposition A6.** I begin with part (i). In the context of the model, the only difference between a default contract policy with a contract price of  $\bar{p}$  and an out-of-network cap of  $\bar{p}$  is the access standard. But the access standard is irrelevant in the cases considered in part (i) because providers either cannot reject patients or, as shown in Proposition A3, do not wish to. It follows that disagreement actions and negotiated contract terms are identical to those under an out-of-network cap of  $\bar{p}$ , so the result follows immediately from Propositions A2 and A3.

I now prove (ii). The analogy with an out-of-network cap of  $\bar{p}$ , together with Proposition A3, implies that the access standard is again irrelevant for  $\bar{p} > \bar{p}_{reject}$ , so (ii).a follows from Proposition A3.

Turning to (ii).b, I first show that  $(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), \underline{a})$  is an equilibrium. Proposition A2 implies that  $\tilde{l}_{out}(\bar{p})$  was the insurer's best response to  $(\tilde{p}_{out}(\bar{p}), 1)$  under an out-of-network cap of  $\bar{p}$ , and this remains the case under the default contract policy since the insurer's problem is unchanged. Because  $d^{l}(\tilde{p}, \tilde{l}, \tilde{a}) = \tilde{a}d^{l}(\tilde{p}, \tilde{l}, 1), \tilde{l}_{out}(\bar{p})$  is clearly also the insurer's best response to  $(\tilde{p}_{out}(\bar{p}), \underline{a})$ .

Similarly, Proposition A2 showed that  $\tilde{p}_{out}(\bar{p})$  was the provider's best response to  $\tilde{l}_{out}(\bar{p})$  under an outof-network cap of  $\bar{p}$  when the provider was required to play  $\tilde{a} = 1$ . Because  $d^P(\tilde{p}, \tilde{l}, \tilde{a}) = \tilde{a}d^P(\tilde{p}, \tilde{l}, 1)$ and Proposition A3 shows that  $d^P(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1) < 0$ , it follows easily that  $(\tilde{p}_{out}(\bar{p}), \underline{a})$  is the provider's best response to  $\tilde{l}_{out}(\bar{p})$  under the default contract policy.

I now show that this is the only equilibrium. In particular, let  $(\tilde{p}, \tilde{l}, \tilde{a})$  be an equilibrium of the current game. Because  $d^{P}(\tilde{p}, \tilde{l}, \tilde{a}) = \tilde{a}d^{P}(\tilde{p}, \tilde{l}, 1)$  and  $d^{I}(\tilde{p}, \tilde{l}, \tilde{a}) = \tilde{a}d^{I}(\tilde{p}, \tilde{l}, 1)$ , the analogy with an out-of-network cap implies that  $(\tilde{p}, \tilde{l}, 1)$  is an equilibrium of the game with an out-of-network cap  $\bar{p}$  when the provider cannot reject patients absent an agreement. Since Proposition A2 implies that this game has a unique equilibrium, it follows that  $\tilde{p} = \tilde{p}_{out}(\bar{p})$  and  $\tilde{l} = \tilde{l}_{out}(\bar{p})$ . Furthermore, Proposition A3 implies that  $d^{P}(\tilde{p}_{out}(\bar{p}), \tilde{l}_{out}(\bar{p}), 1) < 0$ , so the fact that  $d^{P}(\tilde{p}, \tilde{l}, \tilde{a}) = \tilde{a}d^{P}(\tilde{p}, \tilde{l}, 1)$  implies that  $\tilde{a} = \underline{a}$ .

Finally, observe that (A3) and (A4) imply that the negotiated price in this case is

 $p^*(0,0,\mathbb{R}) + [1/Q^*]d^P(\tilde{p}_{\text{out}}(\bar{p}),\tilde{l}_{\text{out}}(\bar{p}),\underline{a})$ 

$$= \underline{a} \Big[ p^*(0,0,\mathbb{R}) + (1/Q^*) d^P \big( \tilde{p}_{\text{out}}(\bar{p}), \tilde{l}_{\text{out}}(\bar{p}), 1 \big) \Big] + (1-\underline{a}) p^*(0,0,\mathbb{R}) = \underline{a} p^*_{\text{out}}(\bar{p}) + (1-\underline{a}) p^*(0,0,\mathbb{R}),$$

which completes the proof.

### Appendix E Public Option Proofs

This appendix states and proves a helpful lemma and then states and proves Propositions E1 and E2.

**Lemma E1.** Let  $\mathcal{A}_{\text{pri}}$  be a private plan network that is viable with respect to a public option premium  $r_{\text{pub}}$  and public option network  $\mathcal{A}_{\text{pub}} \neq \emptyset$ . If Assumptions B1-B3 hold, then  $GFT_h^I(r_{\text{pub}}, \mathcal{A}, p^I(\mathcal{A})) + GFT_h^P(r_{\text{pub}}, \mathcal{A}, p^I(\mathcal{A})) \geq 0$  for each  $h \in \mathcal{A}_{\text{pri}}$ , where  $\mathcal{A} \equiv \{\mathcal{A}_{\text{pri}}, \mathcal{A}_{\text{pub}}\}$ .

*Proof.* Throughout, I streamline notation by suppressing the public option premium  $r_{pub}$  where it appears as a function argument and short-handing the bilateral profit maximizing prices  $p^{J}(\mathcal{A})$  as  $p^{J}$ . Additionally, I let  $\delta_{h}$  be defined as it is defined in the definition of viability.

I proceed by verifying two facts for any  $h \in \mathcal{A}_{pri}$ : (i)  $GFT_h^P(\mathcal{A}, p^J) \ge 0$ ; and (ii)  $GFT_h^I(\mathcal{A}, p^J) \ge 0$ . To verify the first claim, simply observe that

$$GFT_h^P(\mathcal{A}, \mathbf{p}^J) = D_{\text{pri}}(\mathbf{r}^*(\mathcal{A}^{\text{pri},h}, \mathbf{p}^J), \mathcal{A}^{\text{pri},h})Q_{\text{pub}}^h(\mathcal{A}_{\text{pub}})[\bar{p}_h - c_h] \ge 0.$$

To verify the second claim, observe that

$$\begin{split} \tilde{\pi}^{I}(\boldsymbol{r}^{*}(\boldsymbol{\mathcal{A}},\boldsymbol{p}^{J}),\boldsymbol{\mathcal{A}}) \\ &\geq D_{\mathrm{pri}}(\{r_{\mathrm{pri}}^{*}(\boldsymbol{\mathcal{A}}^{\mathbf{pri},h},\boldsymbol{p}^{J}) + \delta_{h},r_{\mathrm{pub}}\},\boldsymbol{\mathcal{A}}) \left[r_{\mathrm{pri}}^{*}(\boldsymbol{\mathcal{A}}^{\mathbf{pri},h},\boldsymbol{p}^{J}) + \delta_{h} - f_{\mathrm{pri}} - \sum_{l \in \mathcal{A}_{\mathrm{pri}}} p_{l}^{J} Q_{\mathrm{pri}}^{l}(\boldsymbol{\mathcal{A}}_{\mathrm{pri}})\right] \\ &= D_{\mathrm{pri}}(\{r_{\mathrm{pri}}^{*}(\boldsymbol{\mathcal{A}}^{\mathbf{pri},h},\boldsymbol{p}^{J}) + \delta_{h},r_{\mathrm{pub}}\},\boldsymbol{\mathcal{A}}) \left[r_{\mathrm{pri}}^{*}(\boldsymbol{\mathcal{A}}^{\mathbf{pri},h},\boldsymbol{p}^{J}) - f_{\mathrm{pri}} - \sum_{l \in \mathcal{A}_{\mathrm{pri}}^{h}} p_{l}^{J} Q_{\mathrm{pri}}^{l}(\boldsymbol{\mathcal{A}}_{\mathrm{pri}}^{h})\right] \\ &\geq D_{\mathrm{pri}}(\boldsymbol{r}^{*}(\boldsymbol{\mathcal{A}}^{\mathbf{pri},h},\boldsymbol{p}^{J}),\boldsymbol{\mathcal{A}}^{\mathbf{pri},h}) \left[r_{\mathrm{pri}}^{*}(\boldsymbol{\mathcal{A}}^{\mathbf{pri},h},\boldsymbol{p}^{J}) - f_{\mathrm{pri}} - \sum_{l \in \mathcal{A}_{\mathrm{pri}}^{h}} p_{l}^{J} Q_{\mathrm{pri}}^{l}(\boldsymbol{\mathcal{A}}_{\mathrm{pri}}^{h})\right] \\ &= \tilde{\pi}^{I}(\boldsymbol{r}^{*}(\boldsymbol{\mathcal{A}}^{\mathbf{pri},h},\boldsymbol{p}^{J}),\boldsymbol{\mathcal{A}}^{\mathbf{pri},h}), \end{split}$$

where the first inequality holds because  $r_{\text{pri}}^*$  maximizes the insurer's gross profits, the first equality follows from the definition of  $\delta_h$ , and the second inequality follows because the network  $\mathcal{A}_{\text{pri}}$  is viable and the term in brackets is strictly positive by equation (B4). The conclusion follows.

**Proposition E1.** Let  $\mathcal{A}_{\text{pri}}$  be a private plan network that is viable with respect to a public option premium  $r_{\text{pub}}$  and network  $\mathcal{A}_{\text{pub}} \neq \emptyset$ . If Assumptions B1-B3 hold, then the system (B6) has a unique solution. Furthermore, the per service price satisfies  $p_h^*(r_{\text{pub}}, \mathcal{A}) = p_h^J(\mathcal{A})$ , and  $p_h^*(r_{\text{pub}}, \mathcal{A})$  and  $t_h^*(r_{\text{pub}}, \mathcal{A})$  together satisfy equation (B7) for each  $h \in \mathcal{A}_{\text{pri}}$ , where  $\mathcal{A} \equiv \{\mathcal{A}_{\text{pri}}, \mathcal{A}_{\text{pub}}\}$ .

*Proof.* Throughout the proof, I suppress the network list  $\mathcal{A}$  and the public option premium  $r_{\text{pub}}$  when they appear as function arguments to streamline notation since they do not vary. To begin, note that

the definitions of  $GFT_h^I$  and  $GFT_h^P$ , together with the fact that  $p_h^J$  (uniquely) maximizes the joint profits of the insurer and provider *h* for any vector  $\boldsymbol{p}_{-\boldsymbol{h}}$ , implies that  $p_h^J$  (uniquely) maximizes  $GFT_h^I(\{p_h, \boldsymbol{p}_{-\boldsymbol{h}}\}) + GFT_h^P(\{p_h, \boldsymbol{p}_{-\boldsymbol{h}}\})$  for any vector of prices for the other providers  $\boldsymbol{p}_{-\boldsymbol{h}}$ .

To show existence, consider a potential solution with  $\breve{p}_h = p_h^J$  and  $\breve{t}_h = (1 - \theta) GFT_h^I(\mathbf{p}^J) - \theta GFT_h^P(\mathbf{p}^J)$ for each  $h \in \mathcal{A}_{\text{pri}}$ . Lemma E1 implies that  $GFT_h^I(\mathbf{p}^J) + GFT_h^P(\mathbf{p}^J) \ge 0$  for all  $h \in \mathcal{A}_{\text{pri}}$ , and it was established above that  $p_h^J$  maximizes  $GFT_h^I(\{p_h, \breve{p}_{-h}\}) + GFT_h^P(\{p_h, \breve{p}_{-h}\})$  for all  $h \in \mathcal{A}_{\text{pri}}$ . Lemma C2 then implies that  $\breve{p}_h$  and  $\breve{t}_h$  solves each equation in the system (B6). Simple algebra using the definitions of  $GFT_h^I$  and  $GFT_h^P$  then shows that equation (B7) is satisfied as well.

To show uniqueness, let  $(\mathbf{\tilde{p}}, \mathbf{\tilde{t}})$  be any contract terms that satisfy (B6). By Lemma C2, each  $\mathbf{\tilde{p}}_h$  maximizes  $GFT_h^I(\{p_h, \mathbf{\tilde{p}}_{-h}\}) + GFT_h^P(\{p_h, \mathbf{\tilde{p}}_{-h}\})$  with respect to  $p_h$ . From above, that implies that  $\mathbf{\tilde{p}}_h = p_h^J$  for each  $h \in \mathcal{A}_{\text{pri}}$ . Lemma C2 then implies that  $\mathbf{\tilde{t}}_h = (1 - \theta)GFT_h^I(\mathbf{p}^I) - \theta GFT_h^P(\mathbf{p}^I)$  for each  $h \in \mathcal{A}_{\text{pri}}$ . Simple algebra using the definitions of  $GFT_h^I$  and  $GFT_h^P$  then shows that (B7) is satisfied as well.

**Proposition E2.** Let  $\mathcal{A}_{pri}$  and  $\mathcal{B}_{pri}$  be private plan networks with  $\mathcal{B}_{pri} \subset \mathcal{A}_{pri}$ , let  $r_{pub}$  be a public option premium, and let  $\mathcal{C} \neq \emptyset$  be a public option network, and define

$$k(r, \mathcal{D}) \equiv \tilde{\pi}^{I}_{*}(r, \mathcal{D}) - \sum_{h \in \mathcal{D}_{\text{pri}}} GFT^{I}_{h}(r, \mathcal{D}, p^{J}(\mathcal{D})).$$

for a public option premium r and network list  $\mathcal{D}$ . If Assumptions B1-B4 hold, then  $k(r_{\text{pub}}, \{\mathcal{A}_{\text{pri}}, \mathcal{C}\}) \ge k(r_{\text{pub}}, \{\mathcal{B}_{\text{pri}}, \mathcal{C}\}) \ge 0$ , where  $\mathcal{A} \equiv \{\mathcal{A}_{\text{pri}}, \mathcal{C}\}$  and  $\mathcal{B} \equiv \{\mathcal{B}_{\text{pri}}, \mathcal{C}\}$ .

*Proof.* Throughout the proof, I suppress  $r_{\text{pub}}$  where it appears as a function argument to streamline notation. To start, note that  $k(\mathbf{B}) = 0$  if  $|\mathcal{B}_{\text{pri}}| \le 1$ .

To complete the proof, it then suffices to show that  $k(\mathcal{A}) \ge k(\mathcal{B})$  for the case where  $\mathcal{B}_{pri} = \mathcal{A}_{pri}^{\setminus h}$  for some  $h \in \mathcal{A}_{pri}$  and  $|\mathcal{A}_{pri}| > 1$  To that end, first note that:

$$k(\mathcal{A}) = \tilde{\pi}_{*}^{I}(\mathcal{A}) - GFT_{h}^{I}(\mathcal{A}, \mathbf{p}^{J}(\mathcal{A})) - \sum_{l \in \mathcal{B}_{pri}} GFT_{l}^{I}(\mathcal{A}, \mathbf{p}^{J}(\mathcal{A}))$$
$$= \tilde{\pi}^{I}(\mathbf{r}^{*}(\mathcal{B}, \mathbf{p}^{J}(\mathcal{A})), \mathcal{B}, \mathbf{p}^{J}(\mathcal{A})) - \sum_{l \in \mathcal{B}_{pri}} GFT_{l}^{I}(\mathcal{A}, \mathbf{p}^{J}(\mathcal{A})).$$

Next, note that the fact that the insurer sets  $r_{pri}^*$  to maximize its gross profits implies that

$$\begin{split} \tilde{\pi}^{l} \left( \boldsymbol{r}^{*} \left( \boldsymbol{\mathcal{B}}, \boldsymbol{p}^{\boldsymbol{J}}(\boldsymbol{\mathcal{A}}) \right), \boldsymbol{\mathcal{B}}, \boldsymbol{p}^{\boldsymbol{J}}(\boldsymbol{\mathcal{A}}) \right) &= D_{\text{pri}} \left( \boldsymbol{r}^{*} \left( \boldsymbol{\mathcal{B}}, \boldsymbol{p}^{\boldsymbol{J}}(\boldsymbol{\mathcal{A}}) \right), \boldsymbol{\mathcal{B}} \right) \left[ r_{\text{pri}}^{*} \left( \boldsymbol{\mathcal{B}}, \boldsymbol{p}^{\boldsymbol{J}}(\boldsymbol{\mathcal{A}}) \right) - f_{\text{pri}} - \sum_{l \in \mathcal{B}_{\text{pri}}} p_{l}^{J}(\boldsymbol{\mathcal{A}}) Q_{\text{pri}}^{l} (\boldsymbol{\mathcal{B}}_{\text{pri}}) \right] \\ &\geq D_{\text{pri}} \left( \boldsymbol{r}^{*} \left( \boldsymbol{\mathcal{B}}, \boldsymbol{p}^{\boldsymbol{J}}(\boldsymbol{\mathcal{B}}) \right), \boldsymbol{\mathcal{B}} \right) \left[ r_{\text{pri}}^{*} \left( \boldsymbol{\mathcal{B}}, \boldsymbol{p}^{\boldsymbol{J}}(\boldsymbol{\mathcal{B}}) \right) - f_{\text{pri}} - \sum_{l \in \mathcal{B}_{\text{pri}}} p_{l}^{J}(\boldsymbol{\mathcal{A}}) Q_{\text{pri}}^{l} (\boldsymbol{\mathcal{B}}_{\text{pri}}) \right] \\ &= \tilde{\pi}_{*}^{I} (\boldsymbol{\mathcal{B}}) + D_{\text{pri}}^{*} (\boldsymbol{\mathcal{B}}) \sum_{l \in \mathcal{B}_{\text{pri}}} \left[ p_{l}^{J} (\boldsymbol{\mathcal{B}}) - p_{h}^{J} (\boldsymbol{\mathcal{A}}) \right] Q_{\text{pri}}^{h} (\boldsymbol{\mathcal{B}}_{\text{pri}}). \end{split}$$

Now, observe that Assumption B4 implies that for each  $l \in \mathcal{B}_{rpi}$ ,

$$D_{\text{pri}}^*(\boldsymbol{\mathcal{B}})[p_l^J(\boldsymbol{\mathcal{B}}) - p_h^J(\boldsymbol{\mathcal{A}})]Q_{\text{pri}}^h(\boldsymbol{\mathcal{B}}_{\text{pri}}) - GFT_l^I(\boldsymbol{\mathcal{A}}, \boldsymbol{p^J}(\boldsymbol{\mathcal{A}})) \geq -GFT_l^I(\boldsymbol{\mathcal{B}}, \boldsymbol{p^J}(\boldsymbol{\mathcal{B}})).$$

Combining the preceding three inequalities then yields the result:

$$k(\mathcal{A}) \geq \tilde{\pi}_{*}^{I}(\mathcal{B}) + \sum_{l \in \mathcal{B}_{\text{pri}}} \left[ D_{\text{pri}}^{*}(\mathcal{B}) \left[ p_{l}^{J}(\mathcal{B}) - p_{h}^{J}(\mathcal{A}) \right] Q_{\text{pri}}^{h}(\mathcal{B}_{\text{pri}}) - GFT_{l}^{I}\left(\mathcal{A}, \boldsymbol{p}^{J}(\mathcal{A})\right) \right] \\ \geq \tilde{\pi}_{*}^{I}(\mathcal{B}) - \sum_{l \in \mathcal{B}_{\text{pri}}} GFT_{l}^{I}\left(\mathcal{B}, \boldsymbol{p}^{J}(\mathcal{B})\right) = k(\mathcal{B}). \Box$$



Leonard D. Schaeffer Center for Health Policy & Economics The USC-Brookings Schaeffer Initiative for Health Policy is a partnership between the Economic Studies Program at Brookings and the USC Schaeffer Center for Health Policy & Economics and aims to inform the national health care debate with rigorous, evidencebased analysis leading to practical recommendations using the collaborative strengths of USC and Brookings.

Questions about the research? Email communications@brookings.edu. Be sure to include the title of this paper in your inquiry.

© 2018 The Brookings Institution | 1775 Massachusetts Ave., NW, Washington, DC 20036 | 202.797.6000

### PATIENT SUPPORT & ADVOCACY

# AMA backs new approaches to cover more of the uninsured

### Andis Robeznieks

**Senior News Writer** 



There is true potential to make significant strides in covering the uninsured by pursuing auto-enrollment as a strategy to cover many of the remaining uninsured who have coverage options available to them at no cost after any applicable subsidies. In addition, a public option has the potential to provide patients with more health plan choice.

# **AMA Connect**

Access world-class clinical research, award-winning tools and resources and the latest news from the AMA.

Get the App

Before either of these approaches to cover the uninsured and improve coverage affordability are implemented, however, safeguards need to be developed to protect patients, physicians and their practices, according to an AMA Council on Medical Service report adopted at the November 2020 AMA Special Meeting.

"A public option should not be seen as a panacea to cover the uninsured," said AMA President Susan R. Bailey, MD. "It should not be used to replace private insurance; rather, it can be used to maximize competition. With appropriate guardrails, the AMA will examine proposals that would provide additional coverage options to our patients." the Children's Health Insurance Program (CHIP), or via premium tax credits to purchase marketplace coverage. Automatic enrollment could maximize coverage rates and cover millions of the uninsured. When patients able to secure affordable and meaningful coverage, they are increasingly able to access the care that they need.

Details on what these safeguards must include were incorporated into new policies adopted by the AMA House of Delegates.

The policy states that the AMA will advocate that any public option to expand health insurance coverage must meet the following standards:

The primary goals of establishing a public option are to maximize patient choice of health plan and maximize health plan marketplace competition. Eligibility for premium tax credit and cost-sharing assistance to purchase the public option is restricted to individuals without access to affordable employersponsored coverage that meets standards for minimum value of benefits. Physician payments under the public option are established through meaningful negotiations and contracts. Physician payments under the public option must be higher than prevailing Medicare rates and at rates sufficient to sustain the costs of medical practice.

Physicians have the freedom to choose whether to participate in the public option. Public option proposals should not require provider participation or tie physician participation in Medicare, Medicaid or any commercial product to participation in the public option.

The public option is financially self-sustaining and has uniform solvency requirements.

The public option does not receive advantageous government subsidies in comparison to those provided to other health plans.

The public option shall be made available to uninsured individuals who fall into the "coverage gap" in states that do not expand Medicaid—having incomes above Medicaid eligibility limits but below the federal poverty level, which is the lower limit for premium tax credits—at no or nominal cost.

The council's report notes tremendous potential in the use of auto-enrollment to improve the coverage reach of the <u>AMA proposal for reform</u>, especially amid the

guide states and the federal government as they pursue auto-enrollment initiatives:

Individuals must provide consent to the applicable state and/or federal entities to share their health insurance status and tax data with the entity with the authority to make coverage determinations.

Individuals should only be auto-enrolled in health insurance coverage if they are eligible for coverage options that would be of no cost to them after the application of any subsidies. Candidates for auto-enrollment would, therefore, include individuals eligible for Medicaid/CHIP or zero-premium marketplace coverage.

Individuals should have the opportunity to opt out from health insurance coverage into which they are auto-enrolled.

Individuals should not be penalized if they are auto-enrolled into coverage for which they are not eligible or remain uninsured despite believing they were enrolled in health insurance coverage via auto-enrollment.

Individuals eligible for zero-premium marketplace coverage should be randomly assigned among the zero-premium plans with the highest actuarial values. Health plans should be incentivized to offer pre-deductible coverage including physician services in their bronze and silver plans, to maximize the value of zero-

premium plans to plan enrollees.

Individuals enrolled in a zero-premium bronze plan who are eligible for costsharing reductions should be notified of the cost-sharing advantages of enrolling in silver plans.

There should be targeted outreach and streamlined enrollment mechanisms promoting health insurance enrollment, which could include raising awareness of the availability of premium tax credits and cost-sharing reductions, and establishing a special enrollment period.

"The AMA believes that now is the time to build upon the ACA to cover more of the uninsured. We look forward to being at the table to represent physicians and our patients to ensure that our patients are able to secure affordable and meaningful coverage, and access the care that they need," Dr. Bailey said.



Access to Health Care Coverage

Affordable Care Act

**Council on Medical Service** 

Special Meeting of the AMA House of Delegates

AMA Policies

### **Essential Tools & Resources**

Featured updates: COVID-19 resource center

Listen to the AMA Moving Medicine podcast

Subscribe to the AMA's Advocacy Update newsletter

Explore CME options on the AMA Ed Hub™

COVID-19: Health equity resources

# **RELATED CONTENT**

Susan Bailey, MD, discusses "Get Covered America Day"

3 things to tell your patients about signing up at HealthCare.gov

# **FEATURED STORIES**



#### **PHYSICIAN HEALTH**

### 6 practices to support organizational resiliency and physician well-being



#### **OVERDOSE EPIDEMIC**

### As COVID-19 surges, AMA sounds alarm on nation's overdose epidemic

courts and on the Hill to remove obstacles to patient care and confront today's greatest health crises.

### Join the AMA

# Get Advocacy Update

Stay up to date on the top federal, state and judicial issues affecting patients and physicians with a bi-weekly newsletter.

### Sign Up/Create Account

The AMA promotes the art and science of medicine and the betterment of public health.

AMA Contact Us Download AMA Connect app for iPhone or Android

AMA Careers Events Press Center AIMA FOUNDATION

### The best in medicine, delivered to your mailbox

### **Email Address**

**Subscribe** 

I verify that I'm in the U.S. and agree to receive communication from the AMA or third parties on behalf of AMA.

## JAMA NETWORK<sup>™</sup> | FREIDA<sup>™</sup> | AMA ED HUB<sup>™</sup> | COVID-19 RESOURCES | COVID-19 CPT<sup>®</sup> CODES | AMA JOURNAL OF ETHICS<sup>®</sup> | CPT | STORE | AMA PHYSICIAN PROFILES

Terms of Use | Privacy Policy | Code of Conduct | Website Accessibility

Copyright 1995 - 2021 American Medical Association. All rights reserved.

# Health Policy Brief

November 2020

# Limited Access to Health Data on American Indian and Alaska Natives Impedes Population Health Insights

Tara L. Becker, Susan H. Babey, Riti Shimkhada, AJ Scheitler, and Ninez A. Ponce

The lack of reporting on AIAN populations and their health issues challenges policymakers charged with addressing disparities."

**SUMMARY:** American Indian and Alaska Native (AIAN) people are underrepresented and often invisible in public health data and research. AIAN health data capacity is impeded by the quality of information collected, released, and reported on AIANs in population-based surveys. AIANs are either put in a residual "other" category or, typically, depicted as single-race non-Latinx AIANs. Though the figure varies substantially across federal surveys, fewer than two in five AIANs report as single-race non-Latinx AIANs. Drawing population inferences based on singlerace AIANs also fails to capture the considerable segment of the AIAN population that comprises individuals of more than one race. To promote more accurate insights on the health of the AIAN population, we examined eight population datasets that focus on health, health status, health behaviors, and health access. For each survey, we assessed whether it is possible to identify AIAN respondents from (1) readily accessible public-use data files and (2) restricted data files. We also assessed the extent to which data users can distinguish three major subgroups within the AIAN race category from these data files: single-race non-Latinx AIAN, single-race Latinx AIAN, and AIAN of more than one race. In this policy brief, we discuss the implications of the limited accessibility of AIAN information in population datasets and provide some recommendations that may help improve the availability of AIAN health information.

mproving the health of an estimated 5.7 million American Indians and Alaska Natives (AIANs) in the nation<sup>1</sup> is hampered by population data systems that hide or obscure their representation in federal data systems. In most national, populationbased survey data, the number of AIAN respondents interviewed is too small to allow the inclusion of race/ethnicity information that reports AIAN as a separate category in the publicly available data files. Doing so presents a disclosure risk, because AIAN respondents could potentially be identified by data users. The public and survey respondents expect privacy, and survey managers ensure this commitment to guard against disclosure breaches, which could lead

to community distrust. Although protecting respondents is of primary importance for survey managers, one result of this limitation is that conducting research that focuses on AIAN populations is often not possible using publicly available data. The lack of reporting on these populations and their health issues challenges policymakers and program developers charged with addressing disparities.

Individuals who identify as AIAN are likely to also self-identify as another race and are more likely to identify with Latinx ethnicity. (In this report, "Latinx" is used to denote those who are Latino/Latina as well as those who are Hispanic or of SpanishIn public-use data files, often only singlerace non-Latinx AIAN are classified as AIAN, substantially reducing the sample size of the population."

speaking origin.) The most common raceclassification systems in public health and most other population-based data combine those who report more than one race into a single category, which makes it impossible to identify AIANs who report being two or more races. In addition, most public health datasets contain at least one measure that combines Latinx ethnicity with the five major Office of Management and Budget race categories: non-Latinx American Indian or Alaska Native, non-Latinx Native Hawaiian/ Pacific Islander, non-Latinx Asian, non-Latinx black or non-Latinx African American, and non-Latinx white. This means that when AIAN respondents can be identified in public-use data files, often only single-race non-Latinx AIAN are classified as AIAN, substantially reducing the sample size of the AIAN population.

This policy brief describes the accessibility of information on AIAN in each of eight population health surveys (see box, this page). For each survey, we assessed whether it is possible to identify AIAN respondents in (1) public-use data files, which are readily accessible, and (2) restricted-use data files. We also assessed the extent to which each data file allows users to distinguish three important subgroups within the AIAN race category: single-race non-Latinx AIAN, single-race Latinx AIAN, and AIAN of more than one race. Exhibit 1 provides information about the eight surveys evaluated.

#### SURVEY ACRONYMS

- BRFSS Behavioral Risk Factor Surveillance System
- CHIS California Health Interview Survey
- MCBS Medicare Current Beneficiary Survey
- NHANES National Health and Nutrition Examination Survey
- NHIS National Health Interview Survey
- NSCH National Survey of Children's Health
- NSDUH National Survey on Drug Use and Health (before 2002: National Household Survey of Drug Abuse)
- PATH Population Assessment of Tobacco and Health

#### Exhibit 1

#### **Description of Eight Population Health Surveys**

Survey	Time Period of Survey	Survey Population	Primary Source for	Longitudinal?
BRFSS	Began 1984 in 15 states; nationwide since 1993	Noninstitutionalized civilian adults in the U.S. and territories	State-level population health information	No
CHIS	Biennial 2001–2009; continuously since 2011	Noninstitutionalized civilian adults, adolescents, and children in California	Population health information for the state of California	No
MCBS	Continuously since 1991	Medicare enrollees	Medicare cost and utilization information	Yes
NHANES	Began 1960s; continuously since 1999	Noninstitutionalized civilian residents of the U.S.	Physical examination data	No
NHIS	Continuously since 1957	Noninstitutionalized civilian residents of the U.S.	National population health information	No*
NSCH	2003, 2007, 2011–2012; annually since 2016	Noninstitutionalized children under age 18 living in the U.S.	National and state-level population health information on children	No
NSDUH	Began 1979; annually since 1990; all 50 states + D.C. since 1999	Noninstitutionalized civilian residents of the U.S. ages 12 and over	Detailed substance use information	No
PATH	Began 2013	Noninstitutionalized civilian residents of the U.S. ages 12 and over	Detailed tobacco use and cessation information	Yes

\* Subsample of respondents followed longitudinally through the Medical Expenditures Panel Survey

#### Accessibility of AIAN Subgroup Information in Public-Use Data Files by Survey

	Ava					
Survey	All AIAN	Single-race Non-Latinx AIAN	Single-race Latinx AIAN	AIAN More Than One Race	Restricted Data if Not in PUF?	
CHIS	Yes*	Yes*	Yes*	Yes*	CHIS Data Access Center	
BRFSS	2001–2012	from 2001	from 2001	2001–2012**	FSRDC, NCHS RDC	
NHIS	No	from 1997	from 1997	No**	FSRDC, NCHS RDC	
$\mathbf{N}\mathbf{S}\mathbf{D}\mathbf{U}\mathbf{H}^{\dagger}$	No	Yes	No	No	FSRDC, NCHS RDC	
NSCH	No	No‡	No‡	No	FSRDC, NCHS RDC	
MCBS	No	No	No	No	Limited dataset obtained from CMS with data use agreement	
NHANES	No	No	No	No	FSRDC, NCHS RDC	
PATH	No	No	No	No	ICPSR Virtual Data Enclave	

\* Available for all age groups in two-year combined public-use files, not in single-year public-use files

\*\* Respondents who reported more than one race were asked for a single main (NHIS) or preferred race (BRFSS), and those who selected AIAN as a main/preferred race can be identified in the PUF data through 2019.

† Public-use data files are available only from 2002.

‡ It is possible to identify single-race AIAN (both non-Latinx and Latinx) who live in the subset of states in which AIANs make up 5% or more of the child population, but not all single-race AIAN. Note: FSRDC = Federal Statistical Research Data Center NCHS RDC = National Center for Health Statistics Research Data Center

CMS = Centers for Medicare and Medicaid Services ICPSR = Inter-university Consortium for Political and Social Research

We selected these surveys based on three primary criteria: (1) how often the survey is used in published research studies, (2) the uniqueness of the information contained in the survey, and (3) the collection of detailed racial/ethnic information that allows the identification of Latinx AIANs and AIANs who report more than one race.

Using these criteria, BRFSS and NHIS were selected based on their extensive use by public health researchers. The remaining six surveys were selected based on the uniqueness of their content or their focus on a specific subpopulation. MCBS is the primary source of information on Americans enrolled in Medicare. The California Health Interview Survey (CHIS) is the largest continuously collected state health survey, and California contains a sizable AIAN population. NSCH is the largest public health survey targeted specifically to children. NHANES is unique for its collection of both survey and biological data. NSDUH contains detailed population health data on drug use, and PATH contains detailed population health data on tobacco

use and cessation efforts. Each of these surveys evaluates collected race information in a way that allows researchers to identify respondents of more than one race, and each collects Latinx ancestry information separately from race. Both of these steps are necessary to allow identification of the total AIAN population and the three AIAN subgroups.

#### AIAN Information in Population Health Surveys

#### AIAN Information in Public-Use Data Files

Only two of the eight surveys—CHIS and BRFSS—allow users to identify all four AIAN groups in public-use data files in any time period (Exhibit 2). The remaining datasets present limited or no identifiable information on AIANs in the public-use data files.

• In CHIS, it is possible to identify all three AIAN race subgroups (single-race non-Latinx AIAN, single-race Latinx AIAN, and AIAN reporting more than one race) for all ages by using the public-use data file that combines two years of data. Only two of the eight surveys allow users to identify all four AIAN groups in public-use data files."

Restricteduse data files contain more detailed race information and allow researchers to identify each of the three AIAN subgroups.

- Before 2013, BRFSS included in publicuse files detailed information on all races reported by the respondent, as well as a separate indicator for Latinx ancestry. Beginning with the 2013 data, this detailed information is no longer available; single-race AIAN respondents can be identified. However, BRFSS includes a "preferred race" measure, in which respondents who report more than one race choose which race they most identify with. Using this measure, it is possible to identify a subset of AIAN respondents of more than one race who most identify as AIAN.
- Beginning with the 1997 data, NHIS public-use data files have included a raceonly measure that identifies single-race AIAN respondents, but combines those who report AIAN and another race with other respondents who report two or more races.<sup>1</sup> When combined with the indicator for Latinx ancestry, NHIS data identify both single-race non-Latinx AIAN and single-race Latinx AIAN. Though it is not possible to identify all respondents who are more than one race, up until 2018, NHIS asked those reporting more than one race to identify which one best represented their race; those who reported AIAN as their main race can thus be identified in the public-use data for each year through 2018.
- In the NSDUH public-use data files, only single-race non-Latinx AIAN respondents can be identified, because all Latinx AIAN are classified as Latinx, while AIANs reporting more than one race are classified with all other respondents who report two or more races.
- In NSCH public-use data files, it is possible to identify single-race AIAN (Latinx and non-Latinx) only within a subset of U.S. states in which at least 5% of the population is AIAN.
- In MCBS, NHANES, and PATH, AIANs cannot be identified in the public-use data files.

#### Access to Restricted-Use Data Files

Each of the eight datasets has restricted-use data files that contain more detailed race information and allow researchers to identify each of the three AIAN subgroups (Exhibit 2). Five of these datasets now make their restricted data available through either a federal statistical research data center (FSRDC) or a National Center for Health Statistics research data center (NCHS RDC). Three of these (NHANES, NHIS, and NSCH) have been available this way for several years; access to BRFSS and NSDUH was added more recently.

The FSRDCs are located throughout the country. We accessed the FSRDC located at UCLA. NCHS RDCs open to nonfederal researchers are located in two locations in the greater Washington, D.C., metro area. Direct access using the NCHS RDC is advertised as taking from 8 to 12 weeks. However, acquiring access to an FSRDC can take more than three months, due to NCHS proposal review and federal background checks needed for acquiring Special Sworn Status through the U.S. Census Bureau. Researchers can incur substantial fees and user costs (the costs for our project were \$4,500 for access to four NCHS datasets, and \$15,000 for FSRDC access). The NCHS fees are based on the number of datasets and years requested. The FSRDC fees support the operations of the local FSRDCs, and the cost varies depending on the staffing needs for the project. Once approved, a researcher can conduct analyses in the secure site of the FSRDC, then submit the output to NCHS. After disclosure review by NCHS and the U.S. Census, NCHS emails the output to the researcher.

Three of the restricted datasets we used were accessed through other means. Researchers who would like to use the CHIS restricted data can do so only by submitting a research application to the CHIS DAC and paying



#### Weighted Percentage of AIANs by AIAN Subgroup and Survey

Note: Analyses used weights provided by administrators to account for the design of each survey.

a setup fee of \$500 and a user fee that on average ranges from \$1,000 to \$3,000. Although they are not granted direct access to the CHIS data, researchers can submit analysis requests or statistical analysis programs to a CHIS statistician, who will then produce the requested output. Researchers who want to use the MCBS limited dataset (restricted data) can request the data from CMS. Once CMS has approved the request, researchers enter into a data use agreement (DUA) with CMS. In addition, effective this past June, researchers incur a fee of \$600 per year of MCBS data requested. Once fees are paid, the restricted MCBS data are provided to the researcher. Access to restricted-use data for PATH can be obtained through the ICPSR Virtual Data Enclave.

#### Implications of Inaccessibility of AIAN Information in Health Datasets

Most often, when researchers can identify any AIAN respondents in the public-use data, the only AIAN subgroup that can be identified is single-race non-Latinx. If most AIANs fell into this category, this would have less impact on our understanding of healthrelated outcomes for AIAN populations. However, this is not the case. Using restrictedaccess files for all datasets except CHIS and BRFSS, Exhibit 3 shows the percentage of the population that falls into each of the AIAN subgroups within each survey.

Despite differences across surveys in the size of the overall AIAN population, we can see a clear pattern. In six of the eight surveys, AIANs reporting more than one race make up the largest proportion of the overall AIAN population. Reflecting the high percentage of Latinx residents in California, single-race Latinx AIAN respondents in CHIS comprise the largest AIAN subgroup. In BRFSS, single-race non-Latinx respondents comprise the highest percentage of the overall AIAN population. Further, as seen in most population surveys, the population of AIANs reporting more than one race is substantially larger than that of single-race non-Latinx AIANs. AIANs reporting more than one race make up the largest proportion of the overall AIAN population."



Weighted Percentage of AIANs Who Are Single-Race Non-Latinx AIAN by Survey



Note: Analyses used weights provided by administrators to account for the design of each survey.

The practice of focusing on single-race non-Latinx AIAN respondents significantly reduces the size of the AIAN population."

The practice of focusing on single-race non-Latinx AIAN respondents significantly reduces the size of the AIAN population. This can be seen in Exhibit 4, which shows the percentage of the overall AIAN population in each survey representing single-race non-Latinx AIAN. Though the number varies substantially across surveys, fewer than two in five AIANs report as single-race non-Latinx AIAN. In Wave 1 of PATH, which was collected in 2013–2014, only 12.9% of AIANS reported as singlerace Latinx AIAN. In comparison, in 2013 BRFSS, just under two-fifths (38.5%) of all AIANs reported as single-race non-Latinx AIAN. Although single-race non-Latinx AIANs comprise less than 40% of the total AIAN population nationally—and in some surveys, less than 20%—this is the AIAN subgroup most often available to researchers. As a result, this is the AIAN subgroup most often used when making inferences about the health of the AIAN population.

#### **Conclusions and Recommendations**

Few population health datasets include measures that allow researchers to identify any AIAN populations in their public-use data. Population-level public health research on AIANs remains scarce, in part because of the difficulties researchers face in accessing information about this population. When these datasets are the primary source of information on a particular topic (such as PATH's wealth of information on tobacco use) or are of a specific type (such as the NHANES biological data collection), researchers' ability to use the data to assess these health measures for AIAN populations is nearly foreclosed.

The convention of tabulation and racial/ ethnic reporting in publicly available data is intended to (1) report single-race non-Latinx and (2) assign all respondents of more than one race to one multiracial category. As shown in this brief, this convention obscures insights about the population that has substantial subpopulations who are Latinx and are of more than one race.

Restricted data generally provide the disaggregation needed for the AIAN population, but access to restricted data is often difficult, expensive, and timeconsuming. This discourages the use of such data, thus significantly limiting access to information about the health-related disparities faced by the AIAN population and rendering their needs invisible in public health policy. There may be significant health-related differences across the subgroups we examined; the presence of such differences would suggest that not accounting for the experience of all three of these subgroups of the AIAN population leads to an incomplete understanding of the health-related challenges faced by AIANs. Unless there is better measurement of the barriers to accessing data on the AIAN population, and a lowering of these barriers, these subgroups will continue to be underrepresented in public health research and public health programs.

Survey leaders and researchers should consider the following to improve measurement and availability of information about the health of the AIAN population:

- *Oversampling* methods can be used to increase the number of AIAN respondents to mitigate disclosure risk. This is expensive, but it is still an obvious and important strategy for improving federal health data on the AIAN population.
- *Release pooled multiyear public-use files* that include more detailed race/ethnicity data. Pooling multiyear data reduces the disclosure risk that may be associated with providing more detailed race data. For example, CHIS provides two-year publicuse data files that include sufficient racial/ ethnic detail to identify all of the AIAN subgroups.
- Include information on the overall AIAN population. When sample sizes prohibit the inclusion of any of the AIAN subgroups, datasets should include information on the overall AIAN population. It is preferable to include the overall AIAN category along with the single-race AIAN category to expand tabulation options for the AIAN population. In cases where disclosure risk prevents the release of measures identifying any AIAN subgroup, such as single-race non-Latinx AIAN, survey administrators should consider publicly releasing at a minimum an overall AIAN indicator that combines single-race AIAN and AIAN of more than

one race into one category. This indicator would allow continued access to data on AIAN populations when disclosure concerns prevent the analysis of AIAN subgroups. The inclusion of at least the overall AIAN population category would allow researchers interested in the AIAN population to use the dataset.

- Note when conclusions about AIAN bealth are based solely on single-race non-Latinx AIANs. When analyzing data in which only single-race non-Latinx AIANs are identifiable as AIAN, researchers should make it clear that results pertain only to this population, not to AIANs more generally. Much of what we know about the health of the AIAN population is based on single-race non-Latinx AIANs. However, this subgroup comprises less than about 40% of the total AIAN population in BRFSS and only about 13% in PATH.
- *Reduce cost/time for accessing restricted data.* If it is not possible for AIAN information to be included in public-use datasets for some surveys, the accessibility of that survey's restricted data becomes extremely important for obtaining information about the AIAN population. This is especially critical for surveys that are the primary source of information on a health topic, such as NSDUH and PATH.

#### **Author Information**

The authors of this policy brief hold the following positions at the UCLA Center for Health Policy Research: Tara L. Becker, senior public administration analyst; Susan H. Babey, PhD, senior research scientist; Riti Shimkhada, MPH, PhD, senior research scientist; AJ Scheitler, EdD, director of stakeholder relations; Ninez A. Ponce, MPP, PhD, professor at the UCLA Fielding School of Public Health and director of the UCLA Center for Health Policy Research.

#### **Funder Information**

This policy brief was made possible through funding from the Office of the Assistant Secretary of Planning and Research (ASPE), U.S. Department of Health and Human Services.



The California Health Interview Survey (CHIS) covers a wide array of health-related topics, including health insurance coverage, health status and behaviors, and access to health care. It is based on interviews conducted continuously throughout the year with respondents from more than 20,000 California households.

CHIS is a collaboration among the UCLA Center for Health Policy Research, California Department of Public Health, California Department of Health Care Services, and the Public Health Institute. For more information about CHIS, please visit **chis.ucla.edu**. 10960 Wilshire Blvd., Suite 1550 Los Angeles, California 90024



The UCLA Center for Health Policy Research is part of the UCLA Fielding School of Public Health.



The analyses, interpretations, conclusions, and views expressed in this policy brief are those of the authors and do not necessarily represent the UCLA Center for Health Policy Research, the Regents of the University of California, or collaborating organizations or funders.

#### PB2020-8

Copyright © 2020 by the Regents of the University of California. All Rights Reserved.

Editor-in-Chief: Ninez A. Ponce, PhD

Phone: 310-794-0909 Fax: 310-794-2686 Email: chpr@ucla.edu healthpolicy.ucla.edu

#### Acknowledgments

For their thoughtful review and feedback, the authors wish to thank Delight Satter, MPH (Confederated Tribes of Grand Ronde), senior health scientist, Office of Tribal Affairs and Strategic Alliances, Center for State, Tribal, Local, and Territorial Support at the Centers for Disease Control & Prevention (CDC); Jennifer Parker, PhD, director, Division of Research and Methodology at the National Center for Health Statistics; and Randall Akee, PhD, associate professor, UCLA American Indian Studies and Luskin School of Public Affairs.

#### **Suggested Citation**

Becker TL, Babey SH, Shimkhada R, Scheitler AJ, Ponce NA. 2020. *Limited Access to Health Data on American Indian and Alaska Natives Impedes Population Health Insights.* Los Angeles, Calif.: UCLA Center for Health Policy Research.

#### Endnote

1

U.S. Census Bureau. American Community Survey, 2018 1-Year Estimates, Table B02010. Generated by Ninez Ponce using data.census.gov (2 August 2020).





Support for this research was provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the Foundation.

### The Implications of Eliminating Essential Health Benefits: An Update

Linda J. Blumberg and Jessica Banthin

#### **NOVEMBER 2020**

#### Introduction

The Affordable Care Act (ACA) requires private nongroup (also called individual market) insurers to cover 10 essential health benefits: ambulatory patient services; emergency services; hospitalization; pregnancy, maternity, and newborn care; mental health and substance use disorder services; prescription drugs; rehabilitative and habilitative services and devices: laboratory services; preventive and wellness services and chronic disease management; and pediatric services (including oral and vision care). The law includes these benefits to ensure enrollees have adequate coverage for medically necessary services.<sup>1</sup> In addition, the law prohibits insurers from placing annual or lifetime dollar limits on coverage for these benefits. Before implementation of these rules on January 1, 2014, nongroup limited benefits insurers typically considerably to reduce their risks of enrolling people with disproportionately high medical needs.<sup>2,3</sup> For example, nongroup policies commonly either excluded prescription drugs entirely or placed stringent limitations on coverage, excluded maternity care entirely or charged more than the average cost of a typical birth to include such coverage, and rarely covered any mental health and substance use disorder treatment.

By requiring all nongroup insurers to cover these benefits, consumers do not have to assess differences in covered services when evaluating plan choices, and insurers cannot exclude certain benefits to lower their premiums and attract healthier-than-average enrollees. It also means the cost associated with each benefit is spread across all enrollees and, through federal subsidies, all taxpayers. The additional premium cost for providing each benefit when all plans are required to include them is much smaller than the cost associated with having only people who need certain essential health

#### **Essential Health Benefits as Shares of a Nongroup Premium, 2020**



Source: Analysis based on data from the 2020 CCIIO Actuarial Value Calculator, Silver, and 2017 MEPS-HC by Actuarial Research Corporation.

benefits pay for them on their own. And requiring that these benefits be covered by nongroup insurance means they are broadly available and affordable when needed. Still, the requirement that these essential benefits be included in ACAcompliant nongroup insurance coverage increases premiums beyond what they would be if people could purchase plans covering fewer benefits. This had made the requirements somewhat controversial and spurred interest in reducing or eliminating them among some insurers and policymakers; some have proposed allowing states to use waivers to reduce or eliminate essential health benefit requirements.

Here, we update earlier work that evaluated the effect of particular essential health benefit requirements on ACA-compliant nongroup insurance premiums and estimated the implications of removing them for people who use those services.<sup>4</sup> Using more recent data on annual premiums and health care spending by service, we find the following about typical nongroup insurance premiums:

- Office-based and outpatient hospital care account for almost 40 percent of premiums, or \$2,291 out of a typical \$5,883 annual silver premium for a 40-year-old in 2020.<sup>5</sup>
- Inpatient care accounts for another 20 percent of premiums, or \$1,154 of that same silver premium.
- Prescription drugs account for 29 percent of premiums, or \$1,718 of the example premium. They are second only to office-based physician care in the share of enrollees who use the service during the year: more than half of people enrolled in nongroup insurance use prescription drugs. Most enrollees use at least one generic drug, whereas 28 percent of all enrollees use at least one brand-name, nonspecialty drug, and 3 percent use at least one specialty drug.<sup>6</sup>
- Maternity and newborn care and rehabilitative and habilitative care account for very small fractions of nongroup premiums, about 4 percent and 1 percent. These services account for \$211 and \$84 of the typical premium described earlier. However, excluding these

services from coverage would leave people needing these services to finance large health care bills on their own, about \$16,850 per person per year for maternity/newborn care and \$2,530 per person per year for rehabilitative/habilitative care.

• Eliminating categories of care that account for even a small fraction of premiums leads to very high costs for people needing to finance that care themselves.

#### **Data and Methods**

This analysis is based largely on the federal government's Actuarial Value (AV) Calculator for exchange plans<sup>7</sup> and data from the 2017 Medical Expenditure Panel Survey Household Component (MEPS-HC), using both the full-year consolidated file (HC-201) and eventlevel files (HC-197A-I) when needed. Though the AV Calculator is specific to nongroup health insurance plans, MEPS-HC provides information for all civilian, noninstitutionalized people. Except for comparisons by coverage type, the MEPS-HC data were tabulated to exclude people with either Medicare or Medicaid and to identify people covered by private nongroup plans, which include coverage through the ACA marketplaces and other ACA compliant individual market plans.

We examined health care spending from both data sources, partitioned into services intended to replicate essential health benefits as closely as possible. We obtained information on use of covered services from the MEPS-HC data. For hospital inpatient, outpatient hospital, and emergency room care, we separate costs associated with facility fees from those for providers. Physician office visit costs and usage for preventive, primary, and specialty care were partitioned based on data in the MEPS event files, but they were presented separately in the data underlying the AV Calculator. Though specific identifiers for generic, brand-name, and specialty drugs were partitioned in the AV Calculator, they were not available in the MEPS-HC or the prescription drug event file. Therefore, to examine both spending and usage from a single source, we use a simplifying assumption that drugs costing fewer than \$50 per prescription are generic and those costing \$1,000 or more are specialty; we consider the remainder brand-name, nonspecialty drugs.

Having obtained average costs and use by service, we then computed the approximate share of benefits paid for the covered services and adjusted this total benefit amount up to a typical silver marketplace premium for a 40 year old in 2020, \$5,883. In general, we maintained the service partition as shown in the AV Calculator and used the MEPS-HC data for the share of people who used a given service, because the latter is not part of the AV Calculator.

Spending and use for mental health and substance use disorders could not be easily identified separately in the MEPS-HC, and the data in the event files were sparse. The AV Calculator estimates outpatient spending on these services is 1.6 percent of total spending. Inpatient and prescription drug costs associated with mental health and substance use disorder care are indistinguishable in the data from inpatient and prescription drug costs associated with other conditions. If inpatient care and prescription drugs for mental health and substance use disorder care could be separated from general medical care, mental health and substance use treatment would likely account for more than 1.6 percent of premium costs. However, it would be difficult to identify and exclude such care from general inpatient and prescription drug coverage in the data.

#### **Results**

In 2020, a typical nongroup marketplace premium for a 40-year-old, single enrollee is just under \$5,900 (table 1). This premium includes both costs associated with medical claims and administrative expenses. After computing the share of claims associated with each type of service, we applied those percentages to this dollar value to compute the amount of the premium associated with each type of service.

We find that the largest shares of a nongroup premium are attributable to prescription drugs (29 percent or \$1,718) and inpatient care (20 percent or \$1,154). Benefits that account for the smallest shares of premium cost are:

# Table 1. Essential Health Benefit Costs as Shares of a Nongroup Insurance Premium for a Single,40-Year-Old Enrollee, 2020

Type of service	Incremental premium cost per year	Share of premium	Share of nongroup enrollees who use the service	Additional premium cost if only users finance costs now covered by insurance*
Rehabilitative/habilitative care	\$84	1%	3%	\$2,528
Maternity/newborn care	\$211	4%	1%	\$16,852
Inpatient care	\$1,154	20%	3%	\$33,295
Emergency room care	\$402	7%	9%	\$4,521
Outpatient facility care	\$744	13%	13%	\$5,616
Provider care in outpatient facilities + nonphysician professional care	\$925	16%	43%	\$2,160
Office-based physician care	\$622	11%	58%	\$1,065
Preventive	\$226	4%	39%	\$584
Primary	\$194	3%	28%	\$697
Specialty	\$202	3%	28%	\$721
Prescription drugs	\$1,718	29%	54%	\$3,170
Generic	\$286	5%	50%	\$571
Brand-name	\$1,014	17%	28%	\$3,665
Specialty	\$418	7%	3%	\$14,358
Pediatric dental and vision care	\$24	0%	7%	\$356
Total cost of essential health benefits	\$5,883	100%		

\*These estimates represent the premium cost associated with each essential health benefit if it was no longer required to be included in all nongroup insurance plans and only people using that type of care bought insurance for it. While such benefits would not be available in separate policies in reality, these calculations represent the average financing burden that would fall on people needing different types of care in a particular year should these costs no longer be spread broadly across the larger nongroup insured popuation.

Source: Analysis based on data from the 2020 CCIIO Actuarial Value Calculator, Silver, and 2017 MEPS-HC by Actuarial Research Corporation.

- rehabilitative and habilitative care, which account for only 1 percent of the premium (\$84) when combined;
- maternity and newborn care, which account for just 4 percent (\$211);
- pediatric dental and vision care, benefits not considered essential for adults, which account for less than 1 percent (\$24); and
- emergency room care (including facility charges), which accounts for 7 percent (\$402).

More people use physician care in officebased settings (58 percent) than any other essential health benefit; this benefit accounts for 11 percent of the premium. Breaking out physician care costs by types of services, we find that expenses are quite evenly split between services for preventive care, primary care, and specialty care, each accounting for 3–4 percent of the premium dollar.

Prescription drug coverage accounts for the largest share of premium expenses (29 percent) and is used by the second highest share of enrollees (54 percent). Pre-ACA nongroup coverage often excluded this benefit, or offered it for generic drugs only or with stringent limits on the number of prescriptions fillable. Brand-name drugs constitute most prescription drug spending, accounting for 17 percent of the premium dollar, compared with 7 percent for specialty drugs and 5 percent for generics. Only 3 percent of nongroup enrollees use specialty drugs (i.e., drugs without generic alternatives generally used by people with serious medical conditions). If only those needing specialty drugs in a given year bought coverage that included them, the additional premium cost for that small population would be \$14,358. Without access to such coverage, these expenses could reach into the hundreds of thousands of dollars for some people, depending on their specific conditions and needs.

Only about 1 percent of nongroup insurance enrollees use benefits for maternity and newborn care, another benefit generally excluded from pre-ACA nongroup insurance plans. If only pregnant women were to purchase coverage for those benefits, their additional premium costs would be \$16,852, compared with the \$211 premium cost when these expenses are spread across all people with nongroup coverage.

Inpatient care, used by only 3 percent of nongroup enrollees annually, adds substantially to premiums, \$1,154 for a typical 40-year-old enrollee. Inpatient care is also associated with very high expenses should a person need it, and high costs are often incurred unexpectedly. If insured inpatient care costs were divided evenly across only those who used it each year-a practical impossibility-each person would incur costs exceeding \$33,000. The variation in care needed would lead to some people paying much more than this average estimate if they had to pay for such care on their own, out-of-pocket. These amounts would certainly constitute barriers to needed care for many people. Even average insured expenses for emergency room care, which, as noted
above, are incurred by less than 10 percent of nongroup enrollees, would amount to more than \$4,500 per person using these services in a given year.

### Discussion

No individual can consistently and accurately predict their medical needs for the coming year. Thus, expecting people to purchase insurance coverage each year only for the services they anticipate needing is illogical, and, in fact, conceptually inconsistent with the principle of insuring against uncertain events. In practice, removing particular benefits from the essential health benefit requirements would likely eliminate coverage for such benefits in the nongroup insurance market entirely or would lead to services being covered with substantial limits. If any particular benefit were voluntary for the insurer, any single insurer that included the benefit would attract users of that benefit to their plan. This would, in turn, lead to higher costs and premiums for that plan, thus dissuading others from enrolling. This was generally the case for benefits like mental health services, substance use disorder treatment, prescription drugs (especially brand-name and specialty

drugs), and maternity care before the ACA. Consequently, people needing those services were left to finance them on their own or go without them.

Health insurance coverage affordability remains an issue, as evidenced by policymakers' and others' interests in improving and extending financial assistance for coverage in the nongroup marketplaces. However, affordability concerns are also the rationale some use for supporting elimination of some essential health benefits from nongroup insurance coverage requirements. As this analysis shows, premiums can be reduced by excluding particular benefits, but doing so does not address affordability when people need such services; in fact, such exclusions raise the cost for those needing care and would frequently mean they cannot access it.

About two-thirds of premiums are attributable to care considered core components of insurance: professional and facility costs for inpatient, outpatient, emergency room, and office-based care. Excluding prescription drug coverage, maternity care, rehabilitative and habilitative, or mental health and substance use disorder treatment would

lead to lower premiums but would place thousands of dollars of additional costs, on average, on people needing those services and leave others with significant unmet medical need. For example, more than half of current nongroup enrollees use prescription drug benefits in a single year, meaning the value of coverage excluding such benefits would be significantly reduced for most people. The variation in spending around these averages means people with the greatest health care needs would face the greatest financial barriers to accessing necessary health care for benefits excluded from the insurance package.

Health insurance is intended to spread the risk of medical expenses across a population, making access to needed services affordable and accessible. Because of significant yearto-year uncertainty in individuals' and families' medical needs, coverage for a reasonably broad array of essential services spreads these costs over time and across a heterogeneous population. Doing otherwise poses significant risk to people who have unanticipated medical needs and can place prohibitive financial burdens on those with significant health problems.

#### **ENDNOTES**

<sup>1</sup> Fully insured, small-employer plans are also required to cover these essential health benefits.

- <sup>2</sup> Claxton G, Cox C, Damico A, Levitt L, Pollitz K. Preexisting conditions and medical underwriting in the individual insurance market before the ACA. Henry J. Kaiser Family Foundation. 2016. <u>https://www.kff.org/health-reform/issue-brief/pre-existing-conditions-and-medical-underwriting-in-the-individual-insurance-market-prior-to-theaca/</u>. Published December 12, 2016. Accessed October 5, 2020.
- <sup>3</sup> Claxton G, Levitt L, Pollitz K, Damico A. (2013). Why Premiums Will Change for People Who Now Have Nongroup Insurance. Henry J. Kaiser Family Foundation. <u>https://www.kff.org/health-reform/perspective/why-premiums-will-change-for-people-who-now-have-nongroup-insurance/</u>.
- <sup>4</sup> Blumberg LJ, Holahan J. The implications of cutting essential health benefits: An analysis of nongroup insurance premiums under the ACA. Urban Institute. 2017. <u>https://www.urban.org/research/publication/implications-cutting-essential-health-benefits-analysis-nongroup-insurance-premiums-under-aca</u>. Published July 10, 2017. Accessed October 5, 2020.
- <sup>5</sup> The premium level used here to describe the dollar amount devoted to particular benefits out of a premium is from a representative nongroup market plan (Florida BlueSelect silver 1736S plan ID 16842FL0120080 in area FL08) taken from the 2020 HIX Compare dataset, sponsored by the Robert Wood Johnson Foundation and available at <a href="https://hixcompare.org/individual-markets.html">https://hixcompare.org/individual-markets.html</a>. Though premiums for people ages 27 and 50 are published, the premium for a 40-year-old enrollee is calculated from the standard age curve, as found in Lorenz S. *Guidance Regarding Age Curves and State Reporting*. Washington: U.S. Department of Health and Human Services, Center for Medicare & Medicaid Services, Center for Consumer Information and Insurance Oversight; 2016. <a href="https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/Final-Guidance-Regarding-Age-Curves-and-State-Reporting-12-16-16.pdf">https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/Final-Guidance-Regarding-Age-Curves-and-State-Reporting-12-16-16.pdf</a>.
- <sup>6</sup> Because of data limitations described in the methods section, we proxy prescription drug tiers by assuming drugs costing fewer than \$50 per prescription are generics, those costing \$1,000 or more fall into the specialty category, and the remainder are brand-name, nonspecialty drugs.
- <sup>7</sup> Final 2020 Actuarial Value Calculator Methodology. Washington: U.S. Department of Health and Human Services, Center for Medicare & Medicaid Services, Center for Consumer Information and Insurance Oversight; 2019. <u>https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/2020-AV-Calculator-Methodology.pdf</u>. We used the silver continuance tables, including prescription drugs, for this analysis. As the user guide explains, "The Actuarial Value Calculator (AV Calculator) is designed to give an estimate of the actuarial value for a given plan design. This version of the AV Calculator uses data from a large national commercial database to build continuance tables by metal tier."

### The views expressed are those of the authors and should not be attributed to the Robert Wood Johnson Foundation or the Urban Institute, its trustees, or its funders.

### **ABOUT THE AUTHORS & ACKNOWLEDGMENTS**

Linda J. Blumberg is an Institute Fellow and Jessica Banthin is a Senior Fellow in the Urban Institute's Health Policy Center. The authors thank Actuarial Research Corporation for providing actuarial and technical assistance for this project. The authors are also grateful for comments and suggestions from John Holahan. Rachel Kenney provided editorial assistance.

### **ABOUT THE URBAN INSTITUTE**

The nonprofit Urban Institute is dedicated to elevating the debate on social and economic policy. For nearly five decades, Urban scholars have conducted research and offered evidence-based solutions that improve lives and strengthen communities across a rapidly urbanizing world. Their objective research helps expand opportunities for all, reduce hardship among the most vulnerable, and strengthen the effectiveness of the public sector. For more information specific to the Urban Institute's Health Policy Center, its staff, and its recent research, visit <a href="http://www.urban.org/policy-centers/health-policy-center">http://www.urban.org/policy-centers/health-policy-center</a>.

#### ABOUT THE ROBERT WOOD JOHNSON FOUNDATION

For more than 45 years the Robert Wood Johnson Foundation has worked to improve health and health care. We are working alongside others to build a national Culture of Health that provides everyone in America a fair and just opportunity for health and well-being. For more information, visit <u>www.rwjf.org</u>. Follow the Foundation on Twitter at <u>www.rwjf.org/twitter</u> or on Facebook at <u>www.rwjf.org/facebook</u>.

## NASHP

# While the Supreme Court Appears Likely to Uphold the Affordable Care Act, States Still Face Uncertainty

November 16, 2020 / by Anita Cardwell

Last week, the US Supreme Court heard oral arguments

[https://www.supremecourt.gov/oral\_arguments/argument\_transcripts/2020/19-840\_1a72.pdf] in the case of *California v. Texas* about the constitutionality of the Affordable Care Act's (ACA) individual mandate to purchase health insurance coverage, which some states are challenging because Congress eliminated the tax penalty associated with the mandate.

Based on the justices' questions during oral arguments, many legal analysts consider it unlikely that the entirety of the ACA will be struck down. However, exactly how the Supreme Court will rule cannot be predicted — as evidenced by the court's 2012 decision in *NFIB v. Sebelius* that made the ACA's Medicaid expansion a state option. With a decision not expected until spring 2021, states must operate their health programs under a veil of uncertainty in the coming months and be prepared for a range of possible rulings.

## Background

Spearheaded by Texas, 18 Republican-led states and two individuals are challenging the ACA's constitutionality, and the Trump Administration's Department of Justice (DOJ) is also supporting the challenge. Their main argument centers on a change that was made through the 2017 enactment of the Tax Cuts and Jobs Act (TCJA), which included a provision to reduce the ACA's individual mandate penalty to zero dollars. They contend that because the 2012 Supreme Court case *NFIB v. Sebelius* upheld the constitutionality of the ACA based on Congress' taxing power, now that there is no revenue associated with the mandate penalty, it can no longer be considered a tax and consequently the individual mandate is unconstitutional. The

plaintiffs also argue that because the individual mandate is so crucial to the ACA, the entire law should be ruled unconstitutional.

Defending the ACA is a group of Democratic attorneys general from 21 states and the Democratic-led US House of Representatives.

- For a detailed report on the background and evolution of the case, read the Kaiser Family Foundation's report, <u>Explaining California v. Texas: A Guide to the</u> <u>Case Challenging the ACA [https://www.kff.org/health-reform/issue-</u> <u>brief/explaining-california-v-texas-a-guide-to-the-case-challenging-the-aca/]</u>.
- For information about the potential implications for state health policy if the entire ACA is struck down, read this National Academy for State Health Policy (NASHP) blog, You Can't Unring a Bell Implications for States if the Supreme Court Upends the Affordable Care Act [https://www.nashp.org/you-cant-unring-a-bell-implications-for-states-if-the-supreme-court-upends-the-affordable-care-act/] and view/download this slide deck, <u>A Review of the ACA's Key Provisions and the Potential Implications of the Supreme Court's Overturning the Law [https://www.nashp.org/wp-content/uploads/2020/11/ACA-SCOTUS-11\_2\_20.pdf].
  </u>

## Key Questions before the Supreme Court

- The court must first determine if at least one state or individual plaintiff has standing to bring the lawsuit.
- If they do, then the court will decide whether or not the individual mandate is constitutional and if the justices decide it is, then the ACA will stand.
- If a majority of the court rules that the individual mandate is unconstitutional, then its next decision relates to severability.
  - The court will decide whether the individual mandate can be severed, leaving the rest of the ACA in effect without the mandate.
  - Or, if a majority of justices decide it cannot be severed, then they will determine whether only parts of the law or all of it must be struck down.
     (It also is possible that the Supreme Court could send the issue of severability back to the lower courts to determine.)

## **Key Points from Oral Arguments**

**Do plaintiffs have standing?** A number of the justices' inquiries focused on the question of standing — specifically whether the challengers have a legal right to sue because the mandate as it exists now causes substantial harm to them. The challengers' argument is that the 18 states have standing because of increased costs associated with the mandate, such as when more individuals enroll in Medicaid to comply with it and the administrative costs of filing paperwork needed to meet the ACA's reporting requirements. The two individual plaintiffs contend they have standing because they believe they are obligated to purchase health coverage due to the mandate and incurred costs in doing so.

### As noted in SCOTUSBlog's analysis

[https://www.scotusblog.com/2020/11/argument-analysis-aca-seems-likely-tosurvive-but-on-what-ground/] of the oral arguments, the justices appeared somewhat divided on the issue of the challengers' claim of standing, and their discussion centered on the Trump Administration's additional argument that the plaintiffs have standing because they are injured by other parts of the ACA that are directly connected to the mandate. As noted by Justice Elena Kagan, given that Congress often passes legislative packages that cover many different issues, it would be significant "...if you can point to injury with respect to one provision and you can concoct some kind of inseverability argument, then it allows you to challenge anything else in the statute."

Speaking on behalf of the states defending the ACA, California Solicitor General Michael Mongan argued that the two individual plaintiffs lack standing because, without an enforcement mechanism, the mandate no longer compels them to purchase insurance. Regarding whether the 18 state challengers' have standing, Mongan argued they have not demonstrated that they have faced greater costs due to the mandate.

Is the individual mandate constitutional? The state challengers' main argument is that because the Supreme Court's 2012 decision centered on whether the mandate was a valid exercise of Congress' taxing power, with the mandate no longer generating federal revenue, it is now unconstitutional. Also, the challengers argued that the specific language used in the text of the mandate obligates individuals to

purchase coverage, despite the fact there is no longer a penalty for not buying health insurance.

In contrast, the ACA's defenders argued that the mandate is not a command to purchase health coverage, and that because Congress removed the financial penalty associated with the individual mandate, it is "toothless" and effectively inoperative. Mongan noted that Congress has "routinely created inoperative provisions ... And they haven't been viewed as constitutionally problematic because they don't alter legal rights or responsibilities or bind anyone."

Justice Kagan cited the court's 2012 ruling that the mandate was constitutional, and that with the TCJA's removal of the mandate's financial penalty, "…Congress has made the law less coercive…" She added that because of this, it does not seem valid to now deem the mandate unconstitutional.

Is the individual mandate severable from the ACA? The challengers argued that even though there is no enforceable penalty now, the text of the ACA indicates that the individual mandate is inextricably tied to its functioning. Some of the justices appeared to agree with this assessment, noting that in the 2012 case, the ACA's defenders contended that the mandate was essential for ensuring successful operation of the ACA.

In response, the ACA's defenders highlighted the ACA's carrot-and-stick approach noting that even though the financial penalty (the stick) has been nonexistent since 2019, enrollment in the health insurance marketplaces has remained relatively stable, most likely due to the "carrots" (the marketplace subsidies and insurance protections) emerging as more effective than originally anticipated. Additionally, they noted that the Congressional Budget Office (CBO) determined in 2017 that the ACA's insurance markets would continue to function the same regardless of whether Congress chose to reduce the penalty amount to zero or fully eliminate the mandate provision.

Noteworthy because of their potential to side with the court's three liberal-leaning justices, Chief Justice John Roberts and Justice Brett Kavanaugh appeared to question the argument by the challengers that the elimination of the mandate penalty effectively invalidates all of the ACA. They emphasized that it did not seem that Congress intended the entire ACA to fall when it zeroed out the mandate

penalty under the TCJA considering it chose not to repeal the full law at that time. Justice Kavanaugh also commented that the court's prior decisions related to severability could serve as an argument for not striking down the entire ACA if the mandate is found to be unconstitutional, saying, "I tend to agree with you that it's a very straightforward case for severability under our precedents, meaning that we would excise the mandate and leave the rest of the act in place..."

## **Next Steps**

A decision may not come until the end of the court's term in June 2021 and there are a <u>range [https://tradeoffs.org/2020/11/05/oyez-oyez-aca/]</u> of potential outcomes. However, as a *Health Affairs* <u>analysis</u>

[https://www.healthaffairs.org/do/10.1377/hblog20201111.916623/full/] of the oral arguments pointed out, it appears likely that if even if the court decides the individual mandate is unconstitutional, many of the justices' comments related to the severability of the mandate appear to indicate that the court could decide to keep the rest of the ACA in place.

As states await the outcome, <u>state-based marketplaces [https://www.nashp.org/as-</u> <u>scotus-considers-acas-future-state-marketplaces-enroll-consumers-amid-covid-19/]</u> and <u>Medicaid programs [https://www.nashp.org/medicaid-agencies-implement-</u> <u>innovative-outreach-strategies-lessons-from-kentucky-and-virginia/]</u> are focusing on enrolling individuals in coverage, while also continuing to respond to the challenge of increasing COVID-19 cases and preparing for the <u>distribution</u> [https://www.nashp.org/states-race-to-create-covid-19-vaccination-distributionplans/] of an eventual COVID-19 vaccine. The incoming Biden Administration will need to be <u>poised [https://www.nashp.org/the-biden-health-plan-and-states-</u> <u>opportunities-for-collaboration/]</u> to work with states to respond to the implications of the court's ruling if parts or all of the ACA are struck down.

While the Supreme Court Appears Likely to Uphold the Affordable Care Act, States Still Face Uncertainty - The National Academy for St...

## Sign Up for Our Weekly Newsletter

EMAIL

NAME

**MMERGE10** 

STATE

САРТСНА

l'm not a robot	
	reCAPTCHA
	Privacy - Terms

Submit