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By Andrew B. Bindman, Marian R. Mulkey, and Richard Kronick

COMMENTARY

Beyond The ACA: Paths To Universal Coverage In California

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ABSTRACT California has long sought to achieve universal health insurance coverage for its residents. The state's uninsured population was dramatically reduced as a result of the Affordable Care Act (ACA). However, faced with federal threats to the ACA, California is exploring how it might take greater control over the financing of health care. In 2017 the state Senate passed the Healthy California Act, SB-562, calling for California to adopt a single-payer health care system. The state Assembly did not vote on the bill but held hearings on a range of options to expand coverage. These hearings highlighted the many benefits of unified public financing, whether a single- or multipayer system (which would retain health plans as intermediaries). The hearings also identified significant challenges to pooling financial resources, including the need for federal cooperation and for new state taxes to replace employer and employee payments. For now, California's single-payer legislation is stalled, but the state will establish a task force to pursue unified public financing to achieve universal health insurance. California's 2018 gubernatorial and legislative elections will provide a forum for further health policy debate and, depending on election outcomes, may establish momentum for more sweeping change.

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There is a long-standing debate about the role states can play in ensuring universal health insurance coverage for their residents. The main argument in support of using states to achieve universal coverage is that it allows local experimentation, which can accommodate variation in states' resources, needs, and policy preferences while also limiting the impact that an error in policy could have on the entire US.¹ Progress at the state level faces many challenges as well—most notably, limited fiscal capacity, requirements for balanced budgets, and the need for full federal support for any proposal that would change the operation or financing of Medicare and Medicaid.

Amid shifts in policy priorities under changing federal administrations, the level of energy de-

voted to state versus federal coverage expansion and health reform efforts has fluctuated. Before passage of the Affordable Care Act (ACA) in 2010, many saw state efforts as the most promising way to reverse national trends in the growing numbers of uninsured people.

The passage of the ACA temporarily relieved states of the need to take the lead in expanding health care coverage. However, many states have returned to the issue in the wake of the threat by the administration of President Donald Trump to repeal the ACA. California has been in the vanguard of states pursuing policies to preserve gains in coverage under the ACA, as well as policies that would expand upon them by making coverage available to all residents. One view is that the time is right for the state to assume financial responsibility for the care of all its res-

idents through some version of a single-payer approach. California and other states have explored such an option previously, but no state has yet enacted and implemented a single-payer system.

In this article we describe the conditions that have rekindled a policy debate in California regarding the state's role in financing health care. We describe features of California's health care system that influence the debate as well as the financial, political, and pragmatic barriers California would face in attempting to establish a stand-alone state health system. We conclude with observations about the conditions under which a state-based effort is most likely to succeed, and we offer implications for other states.

California's Coverage Gains And Remaining Gaps

In 2017 California had a population of 39.5 million people and was estimated to spend more than \$400 billion, or about \$10,000 per person, on health care across the state from all sources (exhibit 1).² More than half of this amount came from public sources, of which the largest were Medi-Cal (the state's Medicaid program, which accounted for more than \$100 billion) and Medicare (\$75 billion). Employer-sponsored coverage accounted for the largest share of private health care spending (\$125 billion). In addition, consumers paid \$10 billion in premiums for individual insurance and \$30 billion in out-of-pocket spending.

After the ACA was enacted, California became the first state to establish an ACA-compliant health benefit exchange (Covered California) and expanded eligibility for Medi-Cal to take full advantage of new eligibility opportunities and federal matching funds under the ACA. Covered California has been a leader among ACA exchanges, using standardized benefit packages and an active purchaser model to keep premium growth below the national average.³ Also, Medi-Cal enrollment has nearly doubled under the ACA, reaching 13.3 million in 2017.⁴

More recently, California has asserted leadership in expanding and protecting gains in health insurance coverage. In May 2016 California used state funds to expand Medi-Cal with full benefits and not just on an emergency basis to undocumented children up to age eighteen,⁵ adding an estimated 216,000 children to the Medi-Cal rolls.⁶ To protect coverage gains in the individual market, soon after the Trump administration announced that it would end cost-sharing reductions, California rapidly implemented a surcharge on silver-tier health plans participating in Covered California.⁷ This surcharge triggered

increased premium subsidy support from the federal government, which enabled insurers to recoup the lost reductions at no additional financial cost to consumers. Covered California enrolled over 1.5 million people in each of the 2017 and 2018 open enrollment periods, sustaining participation at levels that compare favorably to those in states that rely on HealthCare.gov, the federally facilitated exchange.⁸

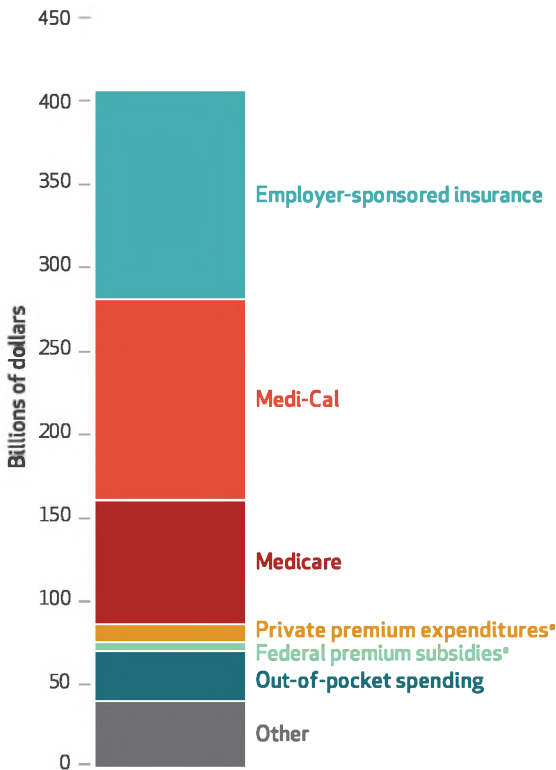
Taken together, these policy choices and implementation steps have reduced the percentage of uninsured Californians from 17 percent in 2013, the year before the implementation of the ACA's major insurance coverage provisions, to 7 percent in 2017.⁹ Despite this progress, approximately three million Californians do not have health insurance coverage (exhibit 2).¹⁰ About 1.8 million Californians are ineligible for public coverage programs because of their immigration status; the vast majority of them would be eligible for either Medi-Cal or premium tax credits in Covered California based on income requirements. More than 700,000 uninsured Californians are eligible for either Medi-Cal or subsidies to purchase coverage in Covered California yet are not enrolled.

California's Universal Coverage Quest

Californian politicians and stakeholders have actively pursued universal coverage for decades.¹¹ Achievements under the ACA gave many a sense of momentum toward that long-held goal. Threats to overturn the ACA reminded California constituencies that gains could be reversed by forces outside their control.

Faced with those threats, in the fall of 2017 the state Senate passed SB-562, the Healthy California Act,¹² which called for California to adopt a single-payer health care system and opened a new chapter in the public debate about the need for a dramatic overhaul of health care. The bill was promoted by the California Nurses Association, which has criticized the ACA for what its members see as the law's prioritization of insurers' profit motives over patients' financial and health needs.

Notwithstanding the enthusiasm of its supporters, leaders in the state Assembly were reluctant to take up SB-562 because it did not include a financial plan, specify design features, or offer any details on how the state could transition to a single-payer system. Assembly Speaker Anthony Rendon appointed a Select Committee on Health Care Delivery Systems and Universal Coverage to identify options for achieving universal coverage and reforming the delivery system in California. All options, including single payer, were open

EXHIBIT 1**California health care expenditures in 2017–18, by source of funds**

SOURCE Authors' analysis of data from California Legislative Analyst's Office. Financing considerations for potential state healthcare policy changes (note 2 in text). **NOTES** "Employer-sponsored insurance" includes premium spending by employers and employees. Medi-Cal is California's Medicaid program. "Out-of-pocket spending" includes copayments, deductibles, and other health care expenses not covered by insurance, but not health insurance premiums. "Other" includes payments by and for military members and veterans, state expenditures for the uninsured, and workers' compensation. *In the individual insurance market, including Covered California.

for discussion. The Select Committee held six hearings in the period October 2017–February 2018. The witnesses at the first five hearings were health policy experts from academic institutions, foundations, and state government. They provided an overview of health care coverage in California; lessons from international models of health care delivery; experiences with cost containment, access to care, and delivery system reform initiatives in other states, along with implementation challenges in achieving universal coverage. The last hearing provided an opportunity for stakeholder groups, including the California Nurses Association, to present proposals for achieving universal coverage.

The authors of this article were retained by the Assembly to summarize the content of the hearings and to assist the Select Committee in iden-

tifying options for a sustainable and affordable universal health care system. We issued a report to the Assembly on March 12, 2018.¹³

Approaches To Achieving Universal Coverage In California

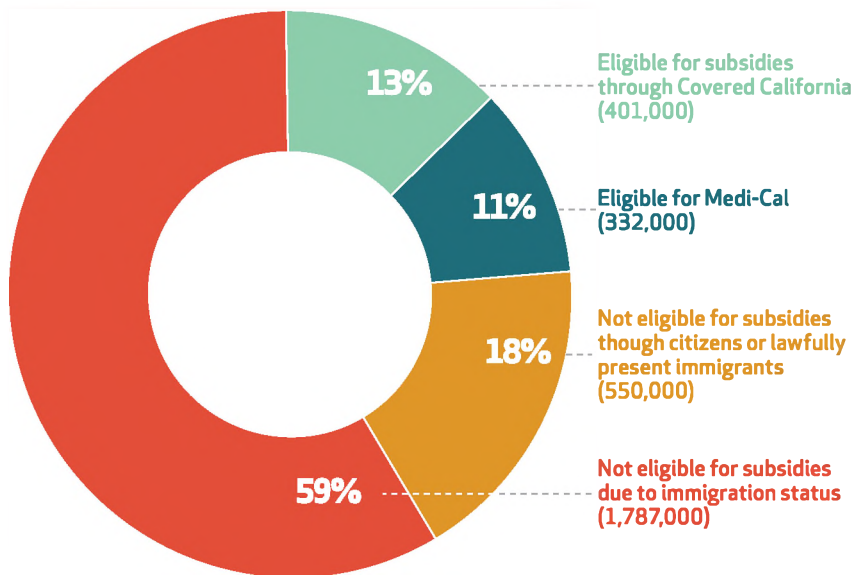
The 2017–18 Select Committee process provided an opportunity to explore coverage expansion policies as well as approaches to streamlining financing and improving care delivery. The question of whether more Californians should be enrolled in coverage was not deeply debated; instead, energy focused on how to achieve that goal. Two main types of approaches to achieving universal coverage were considered: first, incremental approaches that built on the status quo by addressing remaining gaps in coverage; and second, approaches that fundamentally restructured health care coverage and financing, ending Medicare, Medi-Cal, employer-sponsored insurance, Covered California, and the individual market as distinct sources of coverage and providing coverage for all residents of California through some sort of unified system. To a large extent, the hearings focused on the second approach, exploring the rationale and prospects for a bold restructuring of health care. Although this article reflects that emphasis, we note that incremental approaches to expanding coverage are more likely to be enacted and, if they are, would represent a substantial step toward universal coverage in California.

FRAGMENTED CARE Like other states, California has a fragmented financing system, which limits its ability to make progress in solving fundamental problems in its health care delivery system. Among these problems are inequities within and across payers; churning among sources of coverage, with accompanying disruptions in care; high billing and insurance-related administrative costs; inconsistent and often conflicting incentives for providers; and limited ability to engage in health planning or systemwide quality improvement efforts.

UNIFIED PUBLIC FINANCING A system of unified public financing—in which all Californians would receive health care coverage by virtue of residency in the state and the distinctions between Medicare, Medi-Cal, employer-sponsored insurance, and individual market coverage would be eliminated—could provide a solution to many of the problems created by fragmentation. Unified public financing could be either a single-payer system (in which the government made direct payments to hospitals, physicians, and other health care providers) or a multipayer system (in which the government paid health plans to provide coverage on behalf of people

EXHIBIT 2

Estimated uninsured population of California in 2017 younger than age 65, by category



SOURCE Authors' analysis of information from Dietz M et al. Preliminary CalSIM v. 2.0 regional remaining uninsured projections (note 10 in text). **NOTES** The total uninsured population was estimated to be 3,049,000. Subgroups do not total to this amount and percentages do not sum to 100 because of rounding. Medi-Cal is California's Medicaid program. Covered California is the state's health insurance Marketplace.

who selected those plans—which in turn would make payments to providers to furnish health care services).

The distinction between a single-payer system and a system of unified public financing is reflected within the Medicare program. Medicare started as a single payer that made direct payments to providers, but with the advent of Medicare Advantage, many beneficiaries now voluntarily choose health plans that act as intermediaries. As a result, multiple payers reimburse providers, even though Medicare remains a unified publicly financed program. Similarly, many state Medicaid programs, including Medi-Cal, started as single-payer systems but now are multipayer ones that require beneficiaries to use health plans as intermediaries.

A unified publicly financed approach to health care coverage, whether single- or multipayer, would need to pool funds from a variety of payment sources to eliminate the differences among Medicare, Medi-Cal, and employer-sponsored insurance in terms of consumer cost sharing and benefits. A unified publicly financed approach would reduce the considerable administrative burden that today's financing arrangements impose on purchasers, consumers, and providers. Taken together, these changes would almost certainly create a more equitable health care system. Furthermore, they would likely in-

crease efficiency and produce better health outcomes, although these results would depend on how well the system was managed and on mechanisms of accountability.

Many single-payer advocates see health insurers as the primary source of access and cost problems in the health care system. A major advantage of a single-payer system, they argue, is that it can bypass health insurers entirely. However, California is deeply invested in health maintenance organizations (HMOs) and managed care. More than 60 percent of all insured Californians are enrolled in HMOs—which is a higher share than in most other states. Fifty-one percent of people with employer-sponsored insurance, 39 percent of those insured in the individual market, 43 percent of Medicare beneficiaries, and 80 percent of Medi-Cal enrollees are in HMOs.¹⁴ Over eight million Californians are enrolled in Kaiser Permanente alone.¹⁵ It seems likely that a unified publicly financed system in California would follow the patterns established by Medicare and Medi-Cal: publicly financed systems that have chosen not to be single payers but rather to rely on health insurers in an attempt to improve quality and efficiency, albeit in a highly regulated environment.

Barriers To Unified Public Financing

California would need to overcome daunting technical and political challenges if it were to transition to a system of unified public financing, whether single- or multipayer. It would be doubly challenging to accomplish this transition at the state level, in part because political agreement would be needed from two levels of government—state and federal. Concerns about providers fleeing the state or sick people being drawn to the state complicate the technical challenges of establishing a unified publicly financed health care system at the state level. These concerns would be minimized if unified public financing were enacted at the federal level.

Accomplishing such a sweeping transition would require substantial and unprecedented changes in federal and state law as well as decisions regarding many design parameters. To implement such a system, Congress would need to pass legislation to redirect payments away from individual Medicare beneficiaries and providers to whatever state agency was operating California's unified public financing program.

Current federal law might allow federal waivers to redirect federal funds for Medi-Cal and subsidies for individuals in Covered California into a unified state pool, but such waiver requests would be unprecedented. In addition to establishing an initial set of assurances about

payments, determining the rate at which the federal payment to California would grow over time would require political agreement. It is hard to imagine that the current Congress or administration would approve such requests. Even with a hypothetical Democratic Congress and president, such approvals would be far from certain.

At the state level, a move to unified public financing of health care would also face significant political challenges. Very large new state taxes would be required to generate program revenue to replace employer-sponsored insurance funding, support those who are currently uninsured, and cover the administrative costs of operating the program. Given anticipated savings from reduced billing and insurance-related costs and potentially (at least eventually) some reduction in low-value care and in the rate of growth of prices, it seems likely that total spending would be less over time than under the status quo. But even if total health spending declined (or at least did not increase), transforming employer-sponsored funding into public funding would be a massive undertaking.

Other challenges include developing processes to match the rate of spending growth to the rate of revenue growth and to determine the “right” revenue growth rate. Physicians, other providers, and some patients would be concerned that a system of unified public financing would overly constrain spending growth, denying Californians the benefits of outcome-improving technology. On the other side, some would be concerned that as a result of regulatory capture, health spending would increase more quickly than justified by the rate of improvement in outcomes, leading to tax increases that did not produce commensurate increases in value or to squeezing out other government spending.

The Select Committee hearings convened to explore these and other issues did not delve into the details of how new taxes might be constructed to support unified public financing; however, the California Legislative Analyst’s Office provided broad tax alternatives with ballpark estimates.² Assuming that the current amounts being spent by Medicare and Medicaid could be contributed to a unified public financing approach, new taxes would be needed mainly to substitute for the current employer and employee contributions. Because employer and most employee contributions are made with pretax dollars, purchasers of employer-sponsored coverage benefit today from a discount in the form of a federal tax subsidy. Other methods of financing might increase Californians’ federal income tax burden. Based on the Legislative Analyst’s Office estimates, a 3 percent gross receipts tax levied on all sales and services at all stages of

production would generate approximately \$120 billion—an amount similar to that spent in California for employer-sponsored insurance. Alternatively, a similar amount could be generated with a 9 percent payroll tax.

A payroll tax could be applied uniformly to all employers, or the state could consider a firm-specific payroll tax in which the tax rate for each firm approximated the percentage of the payroll that the firm pays for health benefits under the status quo—with a plan to narrow the gap between high- and low-rate firms over time. A firm-specific payroll tax would have the political advantage of creating fewer winners and losers, compared to most other financing approaches, and would also minimize any effect on federal income tax liabilities.

Amendments to the California constitution would be required to implement unified public financing in the state.¹⁶ Proposition 98 requires that a portion of any new taxes, regardless of the stated rationale for them, must be directed to K–14 education. The Gann limit, passed by voters via a 1979 statewide ballot initiative, sets appropriation limits on state budget categories supported by taxes. A new tax to support unified public financing would almost certainly exceed the limit. Therefore, adequate funding for unified public financing would require a majority vote of the state’s population to modify the limit.

Even if an amendment to the California constitution were not required by Proposition 98 and the Gann limit, support from California voters for a system of unified public financing would be important for at least two reasons. First, as we have seen with the Affordable Care Act, opponents of change will likely not concede after a legislative loss and will continue to litigate, both in court and in the court of public opinion. A statewide vote in support of change would not prevent that activity but would reduce its effectiveness. Second, and more important, obtaining the federal legislative changes and administrative approvals needed to implement unified public financing would be challenging, and a statewide expression of support could increase the chances of success.

A Path Forward

At the hearings, Peter Shumlin, a former governor of Vermont, recommended that California establish a public commission to address how provider payment levels would be set and adjusted, as well as whether and how payments and delivery-system arrangements might be allowed to vary based on regional differences and local preferences and need.¹⁷ He also recommended that a commission consider the extent to which

integrated managed care arrangements would be encouraged and the role, if any, for health plans; how the quality of and access to care would be ensured; the extent to which the needs of special populations would be prioritized; and the governance structures and management tools that would be required to ensure accountability and effective oversight.

In the aftermath of the Assembly hearings and the issuing of our report, Speaker Rendon reiterated that the Assembly would not consider SB 562 during the 2017–18 session. While the bill envisions a less complex health care system than the status quo, the process of transitioning to it would be a substantially more disruptive way to expand coverage than building upon the foundation of the current system.

In the desire to increase coverage through actions that are within the state's control, members of the legislature introduced a number of bills focused on short-term incremental strategies to improve coverage, access, and affordability within the context of the current multipayer system. One bill would expand coverage to income-eligible undocumented adults through Medi-Cal.¹⁸ Others would use state funds to lower the cost of purchasing private coverage through Covered California including for those with incomes up to 600 percent of the federal poverty level.¹⁹ These approaches, combined with efforts to increase enrollment among those who are already eligible for Medi-Cal or for subsidies in Covered California, could move California very close to universal coverage.

A 2018–19 budget agreement between Gov. Jerry Brown and the California State Legislature did not provide funding for these proposals, and they are unlikely to advance this year. However, proposals for incremental coverage expansion are expected to be revisited in future years. Further, the 2018–19 budget does fund the establishment of a task force to continue work on unified public financing to achieve universal health care.²⁰ One way to make this difficult task a bit easier would be to leave Medicare funding as is for now and focus instead on unifying all other payment sources. This would reduce the need for federal statutory change yet would be a major step forward in simplifying the state's fragmented financing of health care.

Discussion

Health policy debates often begin with visions of sweeping reform. In the face of practical obstacles and political realities, however, broad ambitions frequently give way to accepting incremental change. The substantial impediments to state-based unified public financing suggest

that California's current policy debate may conform to that model.

Although incremental progress along California's current path may be the most likely future scenario, it is worth considering what might spur the state toward a unified publicly financed health care system. In our view, such a transformation could occur only if it were championed by persistent state leaders at the highest levels, a broad set of stakeholders were compelled to negotiate in good faith, and an informed public was aware of the stakes and invested in the outcome.

STATE CHAMPIONS The recently elected California Senate president pro tempore, Toni Atkins, was a sponsor of SB-562 and is on record in support of a single-payer approach. In the 2018 governor's race, whether and how to achieve universal health care coverage in California has been a subject of voluble debate. The state's current lieutenant governor, Gavin Newsom, who secured the most votes for governor in the state's June primary, has used the phrase "single-payer" to describe his vision for universal coverage. Few details beyond that phrase have been offered to clarify how reforms would be pursued. Depending on how November state and federal elections unfold, California's next governor and the state's legislative leadership may enter 2019 with a perceived mandate to tackle sweeping health reform.

The actions of California's elected leaders will be influenced by national political developments. Many of California's elected leaders view themselves as engaged in active conflict with the Trump administration on a number of policy fronts, including immigration and health care. The Assembly embraced an opportunity to express disagreement with federal policies by voting in May 2018 to expand Medi-Cal benefits to the largest remaining group of uninsured Californians—undocumented adults, many of whom are Latino—if they meet income standards.²¹ Similar full-throated legislative support may emerge in 2019 if a governor who is receptive to unified public financing of health care takes office.

STAKEHOLDER ENGAGEMENT During California's 2017–18 Assembly-led process, many stakeholder groups (for example, the California Medical Association, California Association of Health Plans, hospital and clinic associations, and organizations representing employers) remained largely on the sidelines. Because options were discussed in the abstract, stakeholders had the space to observe rather than engage.

Providers are unlikely to respond uniformly to a proposed transition to unified public financing, either single- or multipayer. Those with a strong bargaining position in negotiations with

fragmented purchasers may feel financially threatened. However, provider groups with less bargaining power may welcome a more level playing field and—particularly if payments are established at or above Medicare payment levels—a shift to unified public financing. The benefits of a simplified, more efficient, and more equitable system may also influence some providers to support change.

Thus far, California's employers have not played a leadership role in reorganizing health care finance. Faced with a specific proposal, however, employers are likely to respond in a variety of ways, based on cost implications and labor force considerations.

Health plans are unlikely to embrace their own elimination under a single-payer proposal. However, depending on the terms of the debate, a continued robust single-payer discussion might encourage health plans or other stakeholders to entertain multipayer unified public financing as a less disruptive alternative.

If a fundamental restructuring of health care financing is to advance in California, some or all of these stakeholders will need to feel enough urgency to join negotiations. A broad review of policy options will not cause deeply invested stakeholders to reexamine their positions, whereas a credible threat to the status quo might.

INFORMED PUBLIC A move to unified public financing would also cause worry for the tens of millions of Californians who now have coverage. Notwithstanding the ferment in Sacramento around single payer, the public has not yet been educated about the implications of eliminating Medicare, Medi-Cal, and employer-sponsored insurance. In addition to cost implications, Californians will want to know if they can retain their provider relationships under the new arrangement.

The case for universal coverage and state-driven health care finance made by the supporters of SB-562 has catalyzed a new round of debate about the appropriate role for state versus federal leadership on health policy. California's 2018 gubernatorial and legislative elections will provide a forum for further health policy debate and, depending on election outcomes, may increase momentum for sweeping change. If the public prioritizes the issue and stakeholders feel compelled to join the debate, California may find itself in a better position than most states to overcome the inertia inherent in the status quo.

Lessons For Other States

The California State Assembly's recent deliberations have implications for efforts in other states

to achieve universal coverage. The process reinforced the limitations of incremental solutions in addressing the complexity, inequity, and cost of health care today. But it also underlined the challenges states would encounter in moving toward unified public financing of health care.

The potential benefits of integrating funds, reducing inequities in access to care, and improving efficiency in care delivery were both the starting point for the Assembly's process and a persistent theme throughout its deliberations. While incremental tactics can be used to extend coverage to more people, fundamental improvements in simplicity and fairness for both consumers and providers will remain out of reach as long as multiple coverage systems are in place.

Accepting that reality, we offer several observations related to moving toward unified public financing. There are no working examples to draw upon at a state level, so any state that dares to be first will face a steep learning curve. A state can take steps on its own to get ready for unified public financing, but it cannot independently implement such a program. For that, a state would need the full and enthusiastic partnership of both the executive and legislative branches of the federal government.

Despite these challenges, state action toward universal coverage and unified public financing is not beyond reach. States can take several steps to make such a transition more feasible. To begin, a state could establish a multiyear process, including a campaign to help the public understand the issues and not just the rhetoric. Political leaders and stakeholders would need to engage in designing not only a better system in the end, but also a responsible transition to the new approach. Data would be needed to increase understanding of the status quo and to support the monitoring and management of a new system.

Conclusion

Implementation of unified public financing in California is technically feasible, but leadership, vision, and persistent public and private commitment—both in California and in Washington, D.C.—are needed to make it happen. Recent deliberations within the California legislature demonstrated both the compelling logic of and the growing emotion associated with movement away from today's unequal, complex, and fragmented health insurance arrangements. It remains to be seen whether the proponents of change can overcome status-quo interests, renegotiate state and federal responsibilities, and set a new course toward universal coverage. ■

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NOTES

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By Ken Jacobs and Laurel Lucia

COMMENTARY

Universal Health Care: Lessons From San Francisco

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ABSTRACT The San Francisco Health Care Security Ordinance is the country's only local law designed to promote universal health care. It provides access to health services for the uninsured while requiring employers to contribute financially toward employees' health care costs. Enrollment in Healthy San Francisco, a program for the uninsured that is one component of the ordinance, fell significantly after the Affordable Care Act extended other types of coverage. Healthy San Francisco continues as a major source of care for undocumented people. Many other California counties have programs that provide at least some nonemergency care to undocumented residents, which demonstrates the versatility of this approach for localities. San Francisco employer contributions also fund medical reimbursement accounts that help insured people pay their health costs, including through a program added in 2016 to make Marketplace insurance more affordable. The city's experiences show that programs to help people pay for private coverage should be simple and include strong outreach and education and that the affordability of Marketplace coverage would be most easily addressed at the state level.

The Affordable Care Act (ACA) significantly increased access to health coverage. Nevertheless, according to Census Bureau data,¹ twenty-seven million Americans remained uninsured in 2016, including three million in California. Nationally, the top reason reported for lacking insurance is cost.² Exclusion from Medicaid and ACA coverage because of immigration status is another leading cause for uninsurance in some states, including California.³ Given the current hostility toward the ACA at the federal level, state and local efforts will likely emerge as the most viable sources of innovation in addressing remaining barriers to coverage in the near term. In this article we examine the experience in San Francisco and highlight lessons for California and other states that seek to further expand health care access.

San Francisco's Universal Health Care Model

Before passage of its Health Care Security Ordinance in 2006, San Francisco had a robust health care infrastructure that included a network of county-administered health clinics, nonprofit community health centers, and a strong public hospital. Another important infrastructure feature was the San Francisco Health Plan, a licensed community health plan established by the City and County of San Francisco to serve as one of two managed care options in the city for enrollees in Medi-Cal (the state Medicaid program). However, care within the safety-net system was not coordinated, and participants faced uncertainty about how much they would need to pay.⁴ San Francisco also had the advantage of a relatively strong tax base as a result of higher-than-average property values and house-

hold incomes.

In 2003 Supervisor Tom Ammiano proposed the creation of an employer health spending requirement in San Francisco, following a failed attempt to pass a similar policy statewide that was strongly supported by San Francisco voters. Mayor Gavin Newsom, who had included expanded health care access in his campaign platform, convened a Universal Healthcare Council made up of health care providers, labor, business, and other community stakeholders to develop a unified health care proposal for the city. The council agreed on a proposal put forth by the San Francisco Department of Public Health to establish a program to provide access to health services for the uninsured. However, it left the more controversial issues of program financing and employer requirements, which faced business opposition, to the Board of Supervisors. Political and public support for the universal coverage model ultimately outweighed business opposition to an employer requirement, and the Health Care Security Ordinance was unanimously approved by the board and signed by Mayor Newsom in August 2006.^{5,6}

The ordinance has several components: a health access program known as Healthy San Francisco (HSF); a minimum health care spending requirement for employers; and a pair of programs funded by employer contributions to help people pay for their health care expenses. Most employers meet the spending requirement by contributing directly to their workers' coverage, but some employers contribute to the SF City Option program, which gives workers access to HSF with discounted fees or contributes to a medical reimbursement account (MRA) that they can use for eligible health expenses. In 2016 the city added a new program under the SF City Option known as SF Covered MRA—which provides premium and cost-sharing assistance to low- and middle-income workers with insurance through Covered California, the state's health care Marketplace. Eligibility requirements for each program are summarized in online appendix exhibit A1.⁷

HEALTHY SAN FRANCISCO HSF, administered by the San Francisco Department of Public Health, built on the safety net to create a coordinated care system for the uninsured.⁴ The program provides access to comprehensive health services for uninsured workers and residents with incomes at or below 500 percent of the federal poverty level (\$125,500 for a family of four in 2018) who are not eligible for other public health insurance options. Before the ACA, this included low-income childless adults, undocumented immigrants, and workers not offered employer-sponsored insurance.

HSF participants receive a comprehensive package of health services that include primary, specialty, mental health, emergency, and hospital care; prescription drugs; and substance abuse treatment. Enrollees receive an identification card to present to providers and a clear schedule of quarterly enrollment and small point-of-service fees.

Enrollees in HSF select a medical home for primary and preventive services. Each medical home has a site designated by the program for specialty and emergency care. As of June 2017, 59 percent of participants were enrolled at county-administered clinics; 33 percent were enrolled at federally qualified health centers or other non-profit community health centers; and 7 percent were in private provider networks, mainly Kaiser Permanente.⁸ Specialty care is provided by San Francisco's public hospital and nonprofit private hospitals.

HSF, however, is not insurance: The health access program covers only care within the network and bears no financial responsibility for emergency care in noncontracted hospitals or any care received outside of the city's boundaries. HSF is also not considered "minimum essential coverage" for purposes of the ACA, which means that HSF participants may owe a penalty for lacking insurance until the ACA individual mandate is eliminated in 2019.

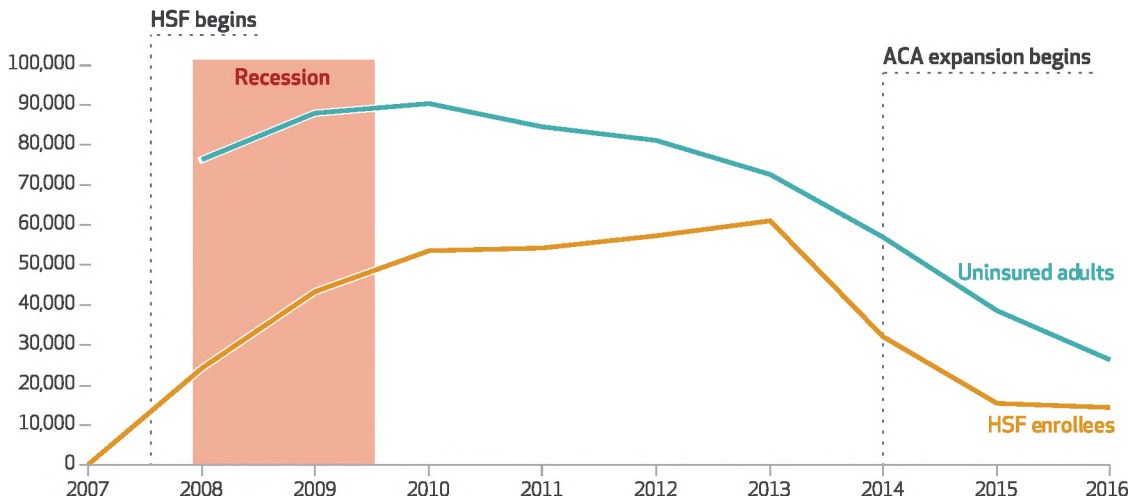
The program is largely funded through the city's General Fund (\$38 million in fiscal year 2016–17). Private nonprofit hospitals and medical homes contributed \$8 million in charity care in the same year. The program received \$2 million from participants in small, sliding-scale quarterly fees. (Participants also pay small, income-based fees to providers at the point of care.) Finally, HSF received \$3 million from employers' payments to comply with the spending requirement.^{8,9}

HSF enrollees who would later become eligible for the ACA Medi-Cal expansion were transitioned to a new "bridge to reform" program funded by the county and federal governments, San Francisco Provides Access to Healthcare (SF PATH), which began in July 2011, and were then automatically enrolled in Medi-Cal in January 2014. At their peak in 2013, the HSF and SF PATH programs combined had 61,002 participants (exhibit 1)—an estimated 84 percent of uninsured San Francisco adults, or 7 percent of the city's total population.¹ (Because HSF is not insurance, many HSF enrollees likely continued to report being uninsured.)

EMPLOYER SPENDING REQUIREMENT AND SF CITY OPTION PROGRAM Another key element of the Health Care Security Ordinance is a minimum health care spending requirement for busi-

EXHIBIT 1

Number of uninsured adults ages 18–64 in San Francisco and of Healthy San Francisco (HSF) enrollees, 2007–16



SOURCE Authors' analysis of data from Census Bureau, American FactFinder: community facts (see note 1 in text); and Healthy SF. Key facts and reports (various fiscal years) (see note 8 in text). **NOTES** The number of uninsured adults in 2007 is not available. HSF enrollment is as of June 30 in each year and includes enrollment in San Francisco Provides Access to Healthcare for fiscal years 2011–12 and 2012–13. Many HSF enrollees likely report being uninsured because HSF is not insurance but rather a health access program.

nesses with twenty or more workers and non-profit employers with fifty or more workers. In 2018 all employers with 100 or more workers are required to spend \$2.83 per hour per worker on health care, which is 75 percent of the average cost of an individual employer-sponsored plan. For-profit firms with 20–99 employees and non-profits with 50–99 employees must spend \$1.89 an hour, representing 50 percent of the cost of an employer plan. The spending requirement is prorated by hours worked by any employee subject to the ordinance. Employers that fail to make the payments may be required to provide restitution to employees and are subject to penalties from the city.

The vast majority of employers (89 percent) meet the spending requirement by providing health, dental, or vision insurance directly (exhibit 2).¹⁰ Other options for fulfilling the requirement include paying into a health savings or reimbursement account; directly paying health claims; and making payments to the SF City Option program, which is administered by the San Francisco Health Plan on behalf of the San Francisco Department of Public Health.

When the SF City Option was first established, it offered two programs for employees whose employers contributed to it. Employees ages eighteen and older could enroll in HSF at a discounted rate if they were San Francisco residents who had been uninsured for at least ninety days, had incomes at or below 500 percent of poverty, and were not eligible for Medi-Cal or Medicare.

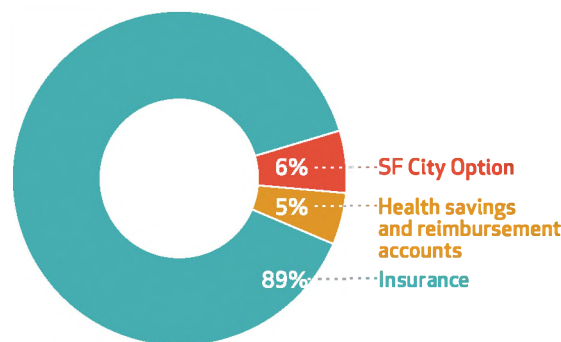
If employees were not eligible for HSF, the San Francisco Health Plan would deposit their employers' contributions into an MRA on employees' behalf. MRAs can be used for a wide range of health expenses, including health insurance premiums, out-of-pocket spending, dental and vision care, therapy, substance abuse counseling, prescription drugs, and over-the-counter medications. From the program's inception to November 2017, \$260 million in health expenses was reimbursed for 190,000 SF Medical Reimbursement Account (SF MRA) participants.¹¹

Employers contribute to the SF City Option as a primary or secondary method of fulfilling the employer spending requirement for a variety of reasons. Many contribute on behalf of part-time workers or others who are ineligible for insurance. This may especially be true for the 63 percent of participating firms with 100 or more employees—many of which have employees outside of San Francisco and might wish to avoid changing companywide eligibility policies. Other employers are in restaurant, retail, and other industries that are traditionally less likely to offer insurance.⁸ Approximately 9 percent of SF City Option participants have employers that appear to be making small contributions to “top off” expenditures for employer-sponsored insurance that do not fully meet the spending requirements.¹²

After passage of the Health Care Security Ordinance, San Francisco was sued by the Golden Gate Restaurant Association, which argued that

EXHIBIT 2

Expenditures reported by San Francisco employers in compliance with the Health Care Security Ordinance, by expenditure type, 2016



SOURCE Analysis by the San Francisco Office of Labor Standards Enforcement of information from the 2016 forms submitted by San Francisco employers in compliance with the ordinance.
NOTES Insurance includes health, dental, and vision insurance. The SF City Option is explained in the text.

the employer spending requirement made an impermissible reference to plans governed by the Employee Retirement Income Security Act (ERISA) of 1974 and was therefore preempted under federal law. The Ninth Circuit Court of Appeals ruled in favor of San Francisco, and the Supreme Court declined to hear the case. The Ninth Circuit noted that the ordinance does not mandate a particular set of benefits, but rather a spending amount. Nor does the ordinance require employers offering ERISA plans to change those plans. Importantly, the SF City Option provides a meaningful alternative for employers who do not provide an ERISA plan.¹³

San Francisco's Universal Health Care Model After The ACA

San Francisco reconvened its Universal Health-care Council in 2013 to evaluate the likely impacts of the Affordable Care Act on the Health Care Security Ordinance. The council determined that the ACA did not present any obstacles for continuing HSF or the employer spending requirement and that HSF was still needed to provide access to care for undocumented people. The council also determined that affordability concerns would remain for some people and employers under the ACA.¹⁴

REMAINING GAPS AFTER COVERAGE EXPANSIONS By 2016, 108,000 of the city's 871,000 residents had enrolled in Medi-Cal or Covered California, the state's Marketplace, under the ACA.¹⁵ Medi-Cal covered low-income childless adults who had gained eligibility under the ACA, and Covered California assisted uninsured

small business employees and self-employed people, among others, with subsidized insurance. The number of uninsured nonelderly adults in San Francisco fell from 72,748 in 2013 to 26,212 in 2016, which reduced the city's uninsurance rate from 12 percent to 4 percent.¹

These coverage gains translated to reduced enrollment in HSF, which fell from 61,002 in 2013 (combined with SF PATH enrollment) to 14,404 in 2016 (exhibit 1).⁸ People who gained eligibility for Medi-Cal under the ACA expansion were no longer eligible for HSF. While uninsured people who are eligible for Covered California are generally still eligible for HSF, many HSF enrollees have switched to private insurance under the ACA. Most of the remaining HSF participants are ineligible for ACA coverage options because of their immigration status. HSF continues to be a major source of access to care for the city's estimated 35,000 undocumented residents.¹⁶

Among San Francisco's 26,212 uninsured residents,¹ undocumented residents are estimated to account for the largest share, followed by people eligible for Covered California who have not enrolled.³ This includes people enrolled in HSF.

AFFORDABILITY AS A BARRIER TO COVERAGE AND CARE Affordability has remained a challenge for many people eligible for Covered California. Under the ACA, some low- and middle-income San Franciscans face potential health expenses that amount to as much as 20–30 percent of their income on premiums for plans on the silver tier and out-of-pocket spending if they have high medical service use.¹² Cost was the top reason for not having insurance among uninsured California citizens ages 19–64 in the 2016 California Health Interview Survey.¹⁷ Approximately four out of ten surveyed California adults with individual-market coverage and incomes at or below 400 percent of poverty had difficulty paying premiums and out-of-pocket expenses, according to Vicki Fung and coauthors.¹⁸

While difficulty affording health insurance is a nationwide concern, San Francisco and other California regions face additional challenges given their higher costs of living. All of California's fifty-eight counties have an affordability gap—that is, some residents earn too much to qualify for Medi-Cal, which requires no premiums, but too little to afford Covered California insurance along with other basic needs—and the gap is especially large in San Francisco.¹⁹

Premium subsidies under the ACA are calculated on a sliding scale based on income as a percentage of poverty. To meet basic needs, a San Francisco family of four living in a rented home would need resources that are 52 percent higher than those required by the typical Ameri-

can family.²⁰ Applying these estimates to the ACA eligibility thresholds, the threshold for ACA premium subsidies of 400 percent of poverty is equivalent to 600 percent of poverty for San Franciscans. If the ACA premium subsidies reflected cost of living, not only would subsidies be extended to a higher income level in high-cost regions, but greater subsidies would be provided at lower income levels as well.

Among the insured, deductibles and out-of-pocket expenses that are high relative to income create barriers to care.²¹ While the ACA provides cost-sharing assistance for low-income enrollees as well as crucial financial protections for individual-market enrollees at all income levels, many Covered California enrollees still face high out-of-pocket expenses. In 2017 one-quarter of enrollees with incomes at or below 400 percent of poverty were in plans on the bronze tier with a \$6,300 annual medical deductible—and paying that amount is well beyond the financial capacity of most families in this income range.²²

SAN FRANCISCO'S PROGRAMS TO HELP WORKERS AFFORD PRIVATE INSURANCE In 2015 the San Francisco Health Commission approved a new premium and cost-sharing assistance program to better coordinate the SF City Option program with the availability of subsidized coverage through Covered California. Under the SF Covered MRA program, implemented in November 2016, funds are deposited into a MRA for enrolled San Francisco residents ages eighteen and older whose employers made two quarterly contributions to the SF City Option within the past six months, who purchased health insurance through Covered California, who had annual incomes at or below 500 percent of poverty, and who were not eligible for Medi-Cal or Medicare.

The subsidies are administered by the San Francisco Health Plan using the existing MRAs within the SF City Option program. This administrative mechanism raised no regulatory or legal concerns, minimized the time needed for implementation, was operationally feasible for insurers, and had a low administrative cost burden. However, a significant drawback is that participants need to pay their premiums in advance and seek reimbursement.

Enrollees in SF Covered MRA receive funds in their account for the year equivalent to 60 percent of their share of the cost of premiums for the second-lowest-cost silver plan after federal subsidies, plus the amount needed to keep the plan deductible below 5 percent of income. Enrollees' subsidy amounts are not based on the size of the payments their employers made to the SF City Option on their behalf. In its first year, the average subsidy was \$2,477.¹¹

Enrollment to date—459 people as of late 2017¹¹—has been lower than projected.¹² Contributing factors to low enrollment may include limited employee awareness of the program, in part because of the long lag time between a worker's date of hire and eligibility to access the program; the complexity of program rules; and a requirement that people enroll in person (Kerry Landry, director of policy and coverage programs, San Francisco Department of Public Health, personal communication, February 22, 2018).

Enrollment potential is limited by the eligibility criteria for the program. Ninety-three percent of the employees in the SF City Option are ineligible for SF Covered MRA because they reside outside the city (41 percent) or live in San Francisco but are enrolled in job-based coverage (33 percent), are eligible for Medi-Cal (11 percent), have incomes above 500 percent of poverty (5 percent), or are ineligible for Covered California because of their immigration status (3 percent).¹²

The SF MRA program continues to help the largest number of workers in the SF City Option pay their health care expenses. As of March 2018 the SF MRA program had 43,615 active participants who had filed at least one claim for reimbursement in the prior year (Landry, personal communication, June 1, 2018). Many additional workers are eligible but have not yet activated an MRA or have opened MRAs but did not file a claim during that period. All of these workers are eligible for reimbursement of eligible health expenses, including the purchase of health insurance. Premiums paid for employer-sponsored and nongroup health insurance constituted 25 percent of reimbursed health care expenditures under the SF MRA program in 2017 (Landry, personal communication, May 28, 2018).

Lessons From San Francisco's Universal Health Care Model

San Francisco has created a largely successful model for providing universal health access through a shared responsibility framework based on contributions from individuals, employers, providers, and the public coffers. The model yields important lessons for other jurisdictions with similar goals, though the best mechanisms for reaching those goals will likely differ since the design of San Francisco's model was based on local conditions and the constraints of operating on a local level.

COUNTIES CAN REDUCE CARE GAPS FOR UNDOCUMENTED IMMIGRANTS San Francisco developed a way to provide universal access to care regardless of immigration status. After many uninsured

San Franciscans gained Medi-Cal and subsidized private coverage under the ACA, HSF now covers primarily people excluded from coverage options because of their immigration status—the largest group of uninsured people in the city and state.³

The program provides an important conceptual example of how to transform an existing health care infrastructure into a coordinated safety-net system. Successful features of the program that could be adopted by other safety-net systems include its medical home model, strong care coordination, investment in information technology, and positive consumer experience.⁴ A 2011 program evaluation by Mathematica Policy Research found that a plurality of participants (40 percent) in HSF reported improved access to care, compared to 36 percent who reported no change.⁵ The authors of the evaluation concluded that the program appears to have led to an increase in primary care service use, along with reductions in emergency department visits and potentially avoidable hospitalizations.

HSF covers a comprehensive set of coordinated health services for all uninsured residents and certain uninsured workers with incomes at or below 500 percent of poverty. Other localities without as robust a safety-net system or as strong a fiscal position as San Francisco has could implement programs that provide access to non-emergency care for undocumented residents, scaled to available resources. In fact, as of 2016, forty-seven of California's fifty-eight counties already had programs that provided at least some basic primary and preventive care services that were open to undocumented immigrants. Comprehensiveness of benefits and eligibility criteria vary greatly by county, depending on available resources and local politics.²³ All of these programs cover care only in designated networks within a specific county.

MEDICAID EXPANSION IS A BETTER OPTION FOR STATES In contrast to localities, states have an option for covering low-income undocumented immigrants that would be more comprehensive and simpler to administer than implementing a program modeled after HSF: expanding eligibility for Medicaid using state funds. In 2016 California used state funds to expand eligibility for comprehensive Medi-Cal coverage to all low-income children regardless of immigration status, as five other states and the District of Columbia have also done.²⁴ State legislation considered in 2018 but which did not pass would have further expanded Medi-Cal to cover all low-income California adults regardless of immigration status. This legislation, if enacted, would have enabled all low-income California residents to access comprehensive health coverage, using ex-

isting administrative structures and provider networks, and would have reduced disparities across counties.

Even if eligibility for Medi-Cal were expanded to all low-income adults, HSF would continue to fill a significant need by providing health care access to people with incomes up to 500 percent of poverty—primarily undocumented residents but also others unable to afford private coverage.

SIMPLICITY AND STRONG OUTREACH ARE NEEDED In combination with the premium and cost-sharing subsidies and the consumer protections under the ACA, San Francisco's employer spending requirement and the SF City Option program help address the second most important cause of uninsurance in the city and state: the inability to afford Marketplace coverage.²²

The majority of workers whose employers participate in the SF City Option continue to be in the SF MRA program, which predated the ACA. SF MRA funds can be used in a variety of ways, including paying for premiums for employer-sponsored or nongroup insurance or covering out-of-pocket spending. SF Covered MRA is a new and unique program that provides subsidies to make premiums and out-of-pocket spending more affordable for eligible workers in the SF City Option program who purchase coverage through Covered California.

The lower-than-expected enrollment in SF Covered MRA suggests that making program eligibility and enrollment simple is critical to implementing programs to improve affordability. In addition to being difficult to understand, SF Covered MRA, unlike the original program, requires in-person enrollment to determine eligibility. San Francisco should consider whether the advantages for those enrolled in the new SF Covered MRA program merit the complexity and administrative costs involved in having a program in addition to the SF MRA program.

Since the beginning of the SF City Option program, 19 percent of employer funds have remained unassigned to any particular program—HSF, SF MRA, or SF Covered MRA. These contributions were made on behalf of workers who never took steps to have their eligibility determined.⁸ The SF City Option program would benefit from further evaluation as to who these workers are and why they are not participating. To ensure maximum and optimal use of all of the San Francisco programs, more outreach and education are needed on program eligibility and benefits, for both participants and employers. Strong, ongoing efforts are needed as individuals' and employers' circumstances change.

ADDRESSING AFFORDABILITY IS SIMPLER FOR STATES States—especially those with their own Marketplaces—have more options than cities do

for administering subsidies. Reimbursing health expenses through an MRA was the simplest and least administratively burdensome implementation option available for San Francisco, but this method can be cumbersome for participants. With greater economies of scale, states could pay premium and out-of-pocket subsidies directly to insurers on behalf of eligible people. This idea was considered in San Francisco but ultimately ruled out because of the cost of implementation for the projected number of enrollees.¹²

State Marketplaces could also opt to determine eligibility for state subsidies in coordination with the existing ACA eligibility determination processes, simplifying the process for consumers and ensuring that all eligible and enrolled people receive the supplemental subsidies. Implementing programs at the state level could also build on existing outreach and education programs, especially in states such as California that already have strong efforts.

Massachusetts and Vermont have already implemented these types of programs in coordination with their state-based Marketplaces, providing state-level subsidies on top of ACA subsidies to further reduce premiums and out-of-pocket expenses for people with incomes at or below 300 percent of poverty. Legislation considered in 2018 in California would have provided state-level premium and cost-sharing subsidies.

EMPLOYER SPENDING REQUIREMENT IS NOT EASILY REPLICABLE San Francisco's employer spending requirement increased access to quality care in the city without causing a shift away from job-based coverage or reducing employment. The requirement was associated with a 10-percentage-point increase in coverage from

workers' employers in San Francisco, after adjustment for firm size and industry, according to an analysis of employer survey data in the period 2007–09 by Carrie Colla and coauthors.²⁵ Sixty-seven percent of surveyed employers reported that they had expanded benefits since 2007. The study found no evidence of employers' dropping coverage in response to the policy or of employment reductions.

The employer spending requirement provides the only source of funding for the SF MRA and SF Covered MRA programs. While the requirement also helps fund HSF, it is no longer a major funding source for that program.

The employer spending requirement successfully withstood a legal challenge, but states looking to follow San Francisco in developing such a requirement should carefully consider constraints posed by ERISA in designing their programs.

Most local governments seeking to implement a similar policy would be more constrained than San Francisco, because its dual status as a city and county gave it greater legal latitude in creating an employer spending requirement than most other local jurisdictions would have.

Conclusion

As San Francisco has shown, state and local governments can build on the ACA to improve access to care and continue moving toward universal health care. Although unique circumstances contributed to the enactment and design of the Health Care Security Ordinance and the SF City Option, San Francisco's experience offers lessons for other local and state governments seeking to advance the goal of universal care. ■

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By Alain C. Enthoven and Laurence C. Baker

POLICY INSIGHT

With Roots In California, Managed Competition Still Aims To Reform Health Care

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ABSTRACT Managed competition is a concept that was born in California and has achieved a measure of acceptance there. As California and the United States as a whole continue to struggle with the challenge of providing high-quality health care at a manageable cost, it is worth asking whether managed competition—with its tools for harnessing market forces—continues to hold promise as a means of improving value in health care, and whether the standard conceptualization of managed competition should be modified in any way. In this article we reflect on four aspects of California's health care ecosystem that provide insights into these questions: integrated delivery systems, patients' choice of health plans, quality measurement, and new health care marketplace architectures such as Covered California and private insurance exchanges. Overall, while California's experience with managed competition has resulted in some challenges and adaptations, it also gives reason to believe that principles of managed competition continue to have the potential to be a powerful force toward creating a more efficient health care system.

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Over the course of several decades, California has been home to efforts to improve health care markets and health care delivery. Many of these efforts are intertwined with the framework of managed competition—a set of principles for the design of health insurance markets intended to promote increased value that has important roots in California. While managed competition, as fully envisioned, has seen only relatively narrow implementation, its core concepts and principles continue to be relevant. In this article we reflect on four areas in which developments in health care markets, particularly in California, provide insight into the principles of managed competition as traditionally conceptualized and their potential to contribute to the availability of lower-cost, higher-quality care. These four areas are the role of integrated delivery systems; patients'

choice of health plans; quality measurement; and new health care marketplace architectures—including private insurance exchanges and Covered California, the state's health insurance Marketplace.

Managed Competition

As envisioned over many years by Alain Enthoven, one of the authors, managed competition is a set of principles that, when implemented in health insurance markets, is intended to create incentives for health care financing and delivery systems to improve the quality of care, increase consumer satisfaction, reduce cost, and produce equitable results and stable markets.¹ Managed competition aims to achieve this by creating a market for health insurance plans that aligns the incentives of providers and insurers with the interests of consumers, with the goals of

achieving better health, better care, and lower cost.

Managed competition is characterized by a few core principles that work together with the aim of creating organized marketplaces. First, individual consumers choose their own plans from among a set of health plans. This differs from the typical scenario in which insurers compete for the business of employers, which choose the plan or plans that will be available for all of their employees. Second, consumers who choose more costly plans pay the full premium difference. That is, if one plan costs \$100 more per month than another plan, consumers choosing the more expensive plan pay the \$100 out of their own pockets. Third, the market in which health plans are offered and chosen is structured to promote competition in terms of price and quality and minimize the potential for market segmentation and adverse risk selection. For example, information about quality of care is collected and made available to consumers. Enrollment is through a neutral broker, rather than directly through insurers, which promotes opportunities for informed shopping and reduces the amount of direct involvement that insurance carriers may have in consumers' choices. Plan contracts are standardized, facilitating comparisons based on price and quality. Insurers offer plans in which members gain access each year to well-defined and identifiable comprehensive care delivery systems (networks). The networks should be nonoverlapping to promote clear choices and should emphasize the alignment of insurer and provider incentives. A risk-adjustment program is used to compensate plans that end up enrolling patients who have greater expected costs than patients who enroll in competing plans. The premise of managed competition is that in the presence of these conditions, powerful market forces will incentivize insurers to develop high-value products.

The managed competition idea was born in California and, though it remains far from the general rule, is now in limited practice there. Several employers have incorporated managed competition principles into their employee benefit plans. For example, the health benefits division of the California Public Employees' Retirement System (CalPERS), with 1.4 million covered lives in fiscal year 2016–17,² offers a good approximation to managed competition, as do the Federal Employees Health Benefits program for federal workers in the state, the University of California System, and Stanford University. Private health insurance exchanges in California also use managed competition principles. Perhaps the most important recent step for managed competition in California has been

through the private health insurance Marketplace, Covered California, which covers about 1.5 million people.³ In all, we estimate that at least 4.3 million Californians get health insurance coverage through a mechanism that incorporates at least some managed competition principles.⁴ This is a useful start, but health care systems in California and elsewhere continue to struggle with cost and quality challenges. Important opportunities remain for managed competition to drive improvements. Several aspects of the California experience provide insights into its ability to do so.

Integrated Delivery Systems

As originally conceptualized, managed competition envisions consumers making choices from among health care delivery systems that are well integrated with insurers and do not have overlapping provider networks. Such a structure would promote insurers' ability to align incentives with those of providers for efficient health care delivery and would facilitate competition among well-defined market alternatives.

Incentive alignment is important for promoting high-value care. Patients naturally have an interest in receiving high-quality care and keeping costs down, and insurers also have an economic incentive to promote the delivery of care with these characteristics, to help them in their efforts to offer attractive insurance plans with lower premiums. The incentives facing providers can sometimes diverge from this—for example, the use of fee-for-service payment, which can incentivize the provision of more, and more expensive, care. Creating situations where the incentives facing providers also favor the provision of higher-quality, lower-cost care—in alignment with the incentives facing insurers—could thus be beneficial for health care delivery. Aligning incentives can be done by organizational integration, in which providers and a health plan work closely enough together that the business success of one party is strongly linked to that of the other. Incentive alignment can also involve changes in the form of payment, such as a shift from fee-for-service to bundled or capitated models.

California is home to Kaiser Permanente, a large, prepaid, multispecialty group practice that closely integrates coverage and care delivery and that has been an important component of existing California managed competition implementations. Kaiser reports that it has about 8.8 million members in California,⁵ and in 2015 it had a 43 percent share of the commercial market (that is, not Medicare or Medicaid) in California.⁶ It has been successful over the years in keeping

costs down and achieving strong quality scores.^{7,8} Its integrated structure—in which its physicians, hospitals, and health plan work exclusively with each other—helps it align the incentives of the insurer and providers,⁹ to which we attribute much of its success. The potential benefits of an integrated structure suggested by observation of Kaiser are part of the reason that managed competition emphasizes the incorporation of plans that closely integrate insurance and health care delivery.

However, many California plans are not integrated to the same extent as Kaiser, and many also have a considerable degree of overlap in their provider networks. As a result, existing implementations of managed competition in California incorporate plans that do not fit the standard definition. This makes it clear that managed competition models are able to function with provider networks that overlap and with systems and arrangements that do not always integrate insurance and health care provision. This raises the question of whether the set of managed competition principles needs to include such types of plans. Perhaps the most appropriate response is to accept the reality of a health insurance market with many different structures in place, encourage consumer choice among available plans, and let the market decide.

We continue to believe that fully integrated plans that effectively align insurer and provider incentives would have inherent advantages in a marketplace characterized by managed competition principles. The competition-enhancing components of managed competition would force plans to seek high value, a necessary component of which would be the creation of efficient provider relationships and networks. Though it is ultimately an empirical question, we suspect that structures that integrate health insurance and health care delivery would have natural advantages and thus be best positioned for success in a managed competition environment. Integration of this sort also seems likely to favor nonoverlapping networks, which would in turn enhance competition.

In this light, we note with interest some recent developments suggesting that the health insurance marketplace is already moving to produce structures that more closely integrate insurance provision and health care delivery systems. For example, Vivity is a new health maintenance organization (HMO) partnership between Anthem Blue Cross and a number of hospitals and provider organizations, including UCLA Health, Cedars-Sinai, Good Samaritan Hospital, Huntington Memorial Hospital, MemorialCare Health System, and Torrance Memorial Medical

Center¹⁰—all prominent names in Southern California health care. Vivity does not have a structure that strongly integrates the insurer and providers, but it moves toward integrated incentives by sharing financial risks and gains among the partners, and it has announced efforts to work toward more integrated care management and the use of electronic medical records,¹¹ as well as of better methods for integrating care across member systems.¹²

Canopy Health, another recent entrant in the California health care marketplace, is an alliance between UCSF Health and John Muir Health. It includes more than 4,000 doctors and seven medical centers in the San Francisco Bay Area, and it may operate both as an accountable care organization, providing a network that insurers can contract to use, and as an HMO.¹³ Different from Vivity, the Canopy model appears to have arisen more strongly from provider efforts and involves a smaller number of provider systems, which may create advantages for getting providers to work well together. This arrangement also affords the opportunity to work with multiple insurers, which could be advantageous for marketing in some ways—but diverse business arrangements could also add complexity and make it more difficult to achieve clear incentive alignment.

A third example is an initiative by Sutter Hospitals, a group of hospitals in Northern California and affiliated medical groups, to operate Sutter Health Plus, a new HMO insurance product whose network will contain Sutter's twenty-one hospitals in Northern California and thirteen medical groups.¹⁴ In contrast to both Vivity and Canopy, this model uses an already well-defined network of physicians and hospitals that have some history of working together, but it will involve the development of new insurance operations.

These three organizations aim to compete on value, and all three try to integrate the incentives of insurers and providers in ways that are worth watching. The organizations go about this differently, which will create different opportunities and challenges. In all of the cases, an important challenge will be driving enough delivery-system change to make a difference for value, in an environment in which the providers and insurers involved also do significant fee-for-service business with competing incentives that will not always clearly reward the provision of high-value care. While the jury is clearly still out on these and related models, the fact that all three of these organizations recognize the value of creating integrated health care systems that align the incentives of health care providers and insurers suggests natural movement in this direction.

Whether managed competition implementations in California deserve any credit, or whether the changes are attributable to broader competition going on throughout the market, is not possible to say. Regardless, managed competition structures will be able to benefit from the development of these types of arrangements, and more use of managed competition could further incentivize their development.

The Importance Of Choice Among Multiple Health Plans

Managed competition emphasizes the importance of having consumers choose from among multiple alternative health insurance plans. The importance of this approach, and the need to seek implementations of managed competition that maintain it, has been confirmed in past California (and national) experiences. The “managed care backlash” of the 1990s had a number of underlying causes, but one was employers’ decision to move patients into arrangements where they had only one choice of insurance plans with a limited provider network.¹⁵ After their employers switched to this arrangement, many people lost insured access to their accustomed doctors who were not in the new contracted network. In contrast, other experiences suggest that offering consumers choices among competing plans can be advantageous. When people choose among multiple options, they can select the one that most closely fits their preferences—even in cases where the available plan choices have limited provider networks. In the 1990s, one of the authors chaired a commission appointed by California’s governor and legislature to study the managed care backlash. This commission found that if people could choose among multiple plans, both patients and doctors were likely to be more satisfied. The resulting “stability” in the marketplace, with fewer fluctuations in plan characteristics and in the choices of health plans and providers available to patients, served as a better environment in which to promote competition.

Measurement And Dissemination Of Information On Quality

Managed competition principles emphasize the availability of transparent information about the attributes of health plans, which enables consumers to make informed choices. It is clear that the health plan marketplace has benefited from improvements in the measurement and dissemination of information on plan quality led by the National Committee for Quality Assurance (NCQA) and others. At the same time, ensuring

that all consumers have easy access to the most relevant set of measures still appears to be a challenge. Implementations of managed competition principles that lack complete quality information risk having consumers make insufficiently informed, and possibly inefficient, choices. For example, a report about the Affordable Care Act (ACA) Marketplaces, including Covered California, suggests that information about plan networks is important to consumers but perhaps not easy enough to get.¹⁶

While this remains a concern, we are encouraged by ongoing efforts to improve measurement and disseminate information. Many of these are national efforts, but we have also taken note of the California-focused efforts of the Integrated Healthcare Association, an organization that has worked on performance measurement and improvement with diverse stakeholders across the state. The association drew upon the work of the NCQA to form evidence-based quality measurement criteria that covered the provision of recommended care, patient satisfaction, and investment in and use of information technology for California plans and provider groups. The association has also advanced the construction and dissemination of information about plan networks with a provider directory—information that has sometimes been difficult to obtain even from health insurers themselves.

The need to compile and disseminate information about plan attributes in a managed competition structure is clear: Insufficient information makes it harder for managed competition structures to succeed. The success of a California organization such as the Integrated Healthcare Association, among others around the country, in creating and leveraging this kind of information is an encouraging sign that the structures needed to support informed consumer choice among health plans will continue to improve.

Covered California And Health Insurance Exchanges

Perhaps the most promising and informative development in California from a managed competition perspective is the implementation and stability of Covered California, the state’s health insurance Marketplace created pursuant to the ACA. This Marketplace may come as close as anything in the state to a market characterized by managed competition principles.

The Marketplace design in the ACA incorporates important managed competition concepts, found in Covered California. Covered California provides for multiple plans from which people choose and has taken steps toward standardizing offerings using a minimum benefit package to

facilitate comparisons and informed choices. When consumers choose more expensive plans, they must pay the incremental premium out of their own pockets. Risk adjustment in the Marketplace design is an attempt to reduce the incentive for plans to seek to attract only more healthy patients.

Some of Covered California's actions that are consistent with managed competition differentiate it from other states' Marketplaces. Covered California has adopted an active purchaser role, in which it works closely with insurers to negotiate characteristics and premiums of the plan options available. It has gone further than some Marketplaces with plan standardization. For example, it requires all plans within a metal tier to offer a common benefit and cost-sharing design, over and above the ACA's requirement of the basic benefit package. This makes it easier for consumers to make "apples to apples" comparisons. Covered California has worked hard to compile useful quality information and present it to consumers.

It appears that Covered California has enjoyed considerable success. About 1.5 million Californians have enrolled in private insurance through Covered California.³ Covered California has maintained a strong set of plans available to participants. Californians shopping on the Marketplace are normally served by multiple plans: 95 percent have a choice among two or more plans, and 80 percent a choice among three or more.¹⁷ This has been made possible in part by the relatively stable risk profile that Covered California has maintained among its insured population. There also have been important signs of health plan innovation, including new network designs.

Covered California's generally positive experience with premiums is encouraging for managed competition. Covered California held its rate increases to 4.2 percent and 4.0 percent over its first two years.¹⁸ In the past two years, increases have been greater, though below those in many other states. These higher rates of increase may reflect national policy changes, such as those in cost-sharing subsidy rules, as much as or more than the performance of Covered California.¹⁹ We are encouraged, but we note that the ability of Covered California to produce insurance-market competition that leads to meaningful and sustained changes in health plan value in the long run is not yet fully clear.

Other efforts to develop exchanges in California offer valuable lessons and contrasts. There are a few small private-sector health insurance exchanges that operate in California, including CaliforniaChoice and offerings from some major national benefit consulting companies (such as

Aon Hewitt, Willis Towers Watson, and Mercer). These exchanges enable employers to offer employees a choice among multiple health plans, as opposed to a narrower set of plans (or even a single plan)—as most employers end up doing when they construct their own benefit offerings. Early projections were very optimistic about the numbers of covered groups and lives, but a 2016 RAND Corporation report noted only modest uptake.²⁰ All indications are that large employers' participation in them is uncommon.²¹

The experience of the private exchanges is a testament to the importance of context. Large employers—which employ the majority of potential enrollees—were slow to participate in private exchanges. Apparent contributors to this slow uptake were inertia in plan offerings and employees' expectations and the related reluctance of employers to convert from defined benefits to defined contributions and from self-insured to insured plans—both of which are common components of a switch to a private exchange. Large employers may prefer self-insurance for several reasons: It helps them avoid possibly costly state benefit mandates and state taxes on premiums, gives them greater flexibility to make changes without having to seek approval of state regulators, and enables them to offer the same coverage to all employees in multiple states. The problem with self-insurance from a managed competition point of view is that it prevents the transfer to providers of risk of the cost of care, which is an important part of the incentive alignment that managed competition aims to achieve. We observe that although some employers have adopted managed competition principles, in a more general sense it may be difficult to implement managed competition on a large scale through structures that incorporate multiple large employers without making more major changes to underlying insurance regulations—such as the employer-provided insurance tax exclusion.

Structures such as Covered California—which operate on a larger scale and outside of normal employer-provided insurance arrangements, and which can thus more easily generate broad participation—may be the right model for broader dissemination of managed competition.

Conclusion

Lessons from California's experiences can help refine the understanding of the relevance and promise of managed competition and, at the same time, provide a good view of the important challenges facing it. On the whole, the model seems to have stood up well. In a changing health care marketplace, it possesses feasibility at its

core, and it seems likely to be able to interact with emerging health plan designs, data collection efforts, and structures such as Covered California and other Marketplaces around the country to help promote higher value in health care. Managed competition has come a long way, nur-

tured by the California environment. Its implementation in the state has contributed important opportunities to learn about its further potential, and we hope that California will continue to provide an environment in which it can succeed. ■

Alain Enthoven and Laurence Baker have both served as consultants to Kaiser Permanente. Baker has also served as a consultant to Blue Shield of California.

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Medicare-for-All and Public Plan Buy-In Proposals: Overview and Key Issues

Tricia Neuman, Karen Pollitz, and Jennifer Tolbert

Introduction

As policymakers debate next steps for expanding health insurance coverage and lowering health costs, some have introduced legislation that would broaden the role of public programs, such as Medicare and Medicaid. During the 115th Congress, eight such proposals were introduced, ranging from bills that would create a new national health insurance program for all U.S. residents, replacing virtually all other sources of public and private insurance (Medicare-for-All), to more incremental approaches that would create a new public plan option, as a supplement to private sources of coverage and public programs.

These [eight legislative proposals](#) differ in ways that have important implications for consumers, health care providers and payers, including employers, states, the federal government, and taxpayers. Key policy differences relate to eligibility, the size and scope of the public plan, covered benefits and cost sharing, premiums, subsidies for premium and cost sharing, cost containment strategies, and the likely interactions with current public programs and private sources of coverage. They also vary in their level of detail; some bills, according to their sponsors, are intended to serve as blueprints for reform, and are expected to include greater specificity over time. Given the timing of the legislative calendar, these bills are unlikely to advance in the current Congressional session; however, they illustrate the range of options that will likely serve as prototypes for legislation that may be introduced in the next session of Congress.

Greatly simplified, these public plan proposals fall into four general categories:

- Two proposals would create Medicare-For-All, a single national health insurance program for all U.S. residents (Senator Sanders, [S. 1804](#); Rep. Ellison, [H.R. 676](#))¹;
- Three proposals would create a new public plan option, based on Medicare, that would be offered to individuals and some or all employers through the ACA marketplace (The Choice Act by Rep. Schakowsky, [H.R. 635](#), and Sen. Whitehouse, [S. 194](#)); The Medicare-X Choice Act by Sen. Bennett, [S. 1970](#), and Rep. Higgins, [H.R.4094](#); and the Choose Medicare Act by Sen. Merkley, [S. 2708](#) and Rep. Richmond, [H.R. 6117](#))
- Two proposals would create a Medicare buy-in option for older individuals not yet eligible for the current Medicare program (Sen. Stabenow, [S. 1742](#); Rep. Higgins, [H.R. 3748](#)); and
- One proposal would create a Medicaid buy-in option that states can elect to offer to individuals through the ACA marketplace. (Sen Schatz, [S. 2001](#) and Rep. Luján, [H.R. 4129](#)).

This policy brief summarizes key features of these proposals, highlights similarities and differences, and discusses key questions, trade-offs and potential implications. Several of these proposals have both a House and Senate sponsor; throughout the document, we refer to the sponsor who first introduced the legislation.

Overview of Current Proposals

MEDICARE-FOR-ALL

Medicare-for-All, an approach championed most recently by Senator Sanders in the Senate and Representative Ellison in the House, represents the most sweeping proposed change to the U.S. health insurance system among these proposals. Once fully implemented, a single, federal, government-administered program would provide coverage to all U.S. residents. Medicare-for-All would replace virtually all other sources of private health coverage (employment-sponsored plans and insurance offered inside and outside ACA marketplaces) and most public programs, including Medicare, Medicaid and CHIP. Medicare-for-All would result in a major shift in the way in which health care is financed in the U.S. -- away from households, employers and states to the federal government and taxpayers.

The new Medicare-For-All program would cover all medically necessary services, with defined categories of benefits to be covered, as well as dental and vision services -- a broader definition of benefits than is currently covered by Medicare or by the ACA essential health benefits. Under the Ellison bill, the new public plan would also cover long-term services and supports (LTSS), whereas under the Sanders bill, Medicaid would continue to provide LTSS. The Sanders bill would have the public plan cover all reproductive health services, including abortion, and would repeal the Hyde Amendment. Under both bills, there would be no premium or cost-sharing requirements, other than limited cost sharing (up to \$200 per year) on prescription drugs to encourage the use of generics under the Sanders bill. The Sanders bill would establish a beneficiary ombudsman program to help consumers with complaints, grievances, and requests for information, and to track and identify for the Secretary of Health and Human Services issues and problems in payment or coverage policies.

Both Medicare-for-All proposals would establish a global budget for health expenditures. In addition, they would create a national fee schedule to make payments to hospitals and other facilities, doctors and other health professionals, and prohibit balance billing. The Sanders bill would establish a fee schedule consistent with Medicare payment rates, and a new process for updating such rates. The Ellison bill would take a somewhat different approach, establishing Medicare payment rates through negotiations between providers and State and regional directors, subject to the approval of the Medicare director. The Sanders bill would leave an option for providers and patients to enter into private contracts instead of using Medicare, while the Ellison bill has no similar provision. The Ellison bill would prohibit participation in Medicare by for-profit hospitals and facilities and by investor-owned provider practices. Both bills would require the Secretary to negotiate drug prices with manufacturers.

The on-budget cost of the new Medicare-for-All program would be partially offset by the elimination of current federal spending obligations for public programs (e.g., Medicare, Medicaid, CHIP), tax

expenditures for employer-sponsored coverage and subsidies for ACA marketplace coverage. Both bills envision administrative savings associated with having one payer, and with having a single, Medicare-for-All fee schedule with lower rates than would otherwise be paid by employers and private insurers. The Ellison bill generally describes new revenue sources to cover additional costs; the Sanders bill, as drafted, does not specify further financing, although other financing options are described in a separate [white paper](#).

The Sanders bill envisions a four-year phase-in period for implementation. During this time, a transitional public plan option, similar to Medicare, would be offered through the marketplace with enhanced income-related subsidies available. Also during the phase-in period, the current Medicare program would be enhanced with a new out-of-pocket limit on annual cost sharing for Medicare-covered services, coverage of dental and vision benefits, and by expediting Medicare coverage for people with disabilities on SSDI by eliminating the 24-month waiting period.

FEDERAL PUBLIC PLAN OPTION

Three proposals would establish a federal public plan option to build upon, rather than replace, the current blend of private insurance and public coverage. In general, the bills aim to address some of the shortcomings in ACA marketplaces by giving individuals and employers a new option that may provide more affordable coverage. Two of these proposals invoke Medicare in naming the public plan (Medicare Part E and Medicare-X); the Schakowsky bill incorporates many of Medicare's features in the public plan, without using its name.

Under all three bills, the public plan option would be offered alongside private insurance through the ACA marketplace to individuals and small employers eligible to purchase coverage there. Two of the bills would also offer the public plan in the individual and small group markets outside of the marketplace. The Merkley bill would further extend eligibility to large employers who could obtain coverage under the public plan on behalf of their employees, while remaining in compliance with ACA requirements. The Merkley bill would allow large employers to buy fully insured large group policies from Medicare Part E, transferring risk to the public program. It would also allow self-insured group plans to retain risk and contract with Medicare Part E for third-party administrative services, such as paying claims and establishing a provider network and fee schedule. The Bennet bill would phase in the public program, beginning in areas with limited competition.

All three bills would make the public plan eligible for marketplace premium and cost-sharing subsidies for eligible individuals. The Merkley bill would expand income eligibility for both premium and cost-sharing subsidies throughout the marketplace and enhance these subsidies for all participants by tying them to Gold-level plans. None of the bills would affect ACA subsidies for small employers.

Under each of the three proposals, the new public plan would cover (at a minimum) all ACA essential health benefits. The Merkley Medicare Part E plan would also cover all Medicare benefits (Parts A, B and D), all reproductive services, and abortion. The Schakowsky and Bennet bills would offer the public plan

at all ACA metal levels and would apply the ACA annual out-of-pocket limit on cost sharing. Under the Merkley bill, the public plan would be offered at the Gold metal tier, and all marketplace subsidies would be tied to the Gold tier (vs. the Silver tier under current law), which would result in reduced cost sharing for most marketplace participants. The Merkley bill would also enhance financial protections under the current Medicare program by adding an out-of-pocket limit on cost sharing, which could affect program spending and premiums.

All three bills would set the public plan premium to cover all costs for covered benefits and require the public plan to follow ACA rating rules. The Merkley bill would also extend ACA rating rules to the large group market, a departure from current law.

Two of the proposals contain new consumer assistance provisions. The Schakowsky bill would establish an office of the ombudsman for the public plan to educate consumers about this coverage option and help them resolve complaints and grievances. The Merkley bill would authorize direct federal spending for marketplace navigator programs (vs current law funding by marketplaces) at funding levels needed to address capacity limitations. The Merkley bill also would require employers that do not offer health benefits to refer their employees to navigators.

All three proposals would require hospitals, physicians and other health care providers participating in Medicare to participate in the new public plan; this would result in a broad network of providers because [the vast majority of all hospitals and physicians participate in the current Medicare program](#). The Schakowsky and Bennet bills would also require Medicaid providers to participate in the public plan which would include pediatricians and others who may be less likely to treat the current Medicare population. Providers would have the ability to opt out of participating in the public plan without penalty under the Schakowsky bill. The three proposals would also require the Secretary to allow other providers to participate in the public plan – an important consideration in providing health coverage for children, and for meeting the needs of individuals with special needs.

All three bills would extend Medicare payment rates, or some variation on those rates, to providers participating in the public plan to help lower the overall cost of the program, which in turn would reduce premiums and out-of-pocket cost sharing for patients. The Schakowsky proposal would have the Secretary negotiate rates with providers, using Medicare payment rates as a back-up, if negotiations are not successful. The Bennet proposals would use Medicare rates for the new Medicare-X plan, and authorize the Secretary to increase rates by up to 25% in rural areas. The Merkley proposal directs the Secretary to negotiate payment rates for Medicare Part E, between Medicare and private insurance plan rates.

None of the public plan option bills specifically prohibits balance billing by physicians and other providers who treat patients enrolled in the public plan; however to the extent that they adopt Medicare payment rates and rules, these bills would appear to apply Medicare limits on balanced billing to the public plan. Under current rules, participating providers agree to accept assignment for all of their Medicare patients,

and are prohibited from balance billing; non-participating providers do not agree to accept assignment for all patients or all services, and may choose to charge patients higher fees, up to a certain limit.

All three bills acknowledge [ongoing public concern about prescription drug costs](#) by authorizing the Secretary to negotiate drug prices for the new public plan; two of the three proposals (Bennet and Merkley) would extend this policy to the current Medicare program. Under current law, [the Secretary is prohibited from negotiating payments with drug manufacturers](#) on behalf of Medicare Part D enrollees. The Merkley proposal is the only one of the three bills to include a failsafe to leverage lower drug prices under Medicare Part E and the current Medicare program. If negotiations are not successful in obtaining an appropriate price as determined by the Secretary, prices would be paid based on the lesser of those paid by the [Veterans Administration](#) or the [federal supply schedule](#). In other respects, the three bills do not change the current Medicare program, other than the limit on out-of-pocket spending added to the current Medicare program under the Merkley proposal.

MEDICARE BUY-IN FOR OLDER ADULTS

Two proposals focus specifically on creating a new Medicare buy-in option for older adults – ages 55-64 in the Stabenow bill and 50-64 in the Higgins bill. These proposals would give eligible individuals the option to buy into Medicare. (This differs from an alternative approach that would simply lower the age of Medicare eligibility from age 65 to age 50 or 55.) The Higgins bill would also allow adults ages 50-64 who are eligible for job-based coverage to elect the Medicare buy-in option, and allow employers to pay Medicare premiums on their behalf – a feature that could expand the number of older working individuals who select the buy-in option.

Under the Stabenow bill, enrollment in the buy-in plan would be managed by Medicare, while under the Higgins bill enrollment in the buy-in plan would be conducted through the marketplace. Both bills would allow marketplace subsidies to apply to the buy-in plan for individuals otherwise eligible for subsidies, so the marketplace would continue to be the place where people apply for financial assistance.

Under both bills, the Medicare buy-in plan would offer Medicare benefits rather than ACA benefits. Under both bills, Medicare cost-sharing standards would apply, with no annual out-of-pocket limit on cost sharing for individuals who enroll in Medicare (unless they enroll in private Medicare Advantage plans (assuming current rules apply) or qualify for cost-sharing subsidies through the marketplace. Both proposals would give buy-in enrollees the option to buy Medicare Advantage plans instead of fee-for-service coverage, and both would require private Medigap policies to be offered on a guaranteed-issue basis to buy-in enrollees. In other words, older adults not yet eligible for the current Medicare program would potentially have access to private marketplace plans, private Medicare Advantage plans, and traditional Medicare (Parts A, B and D) with an option to purchase Medigap – each with different guaranteed benefits, rating rules, premium and cost-sharing subsidies and provider networks.

Under both bills, rating rules for the buy-in plan would be somewhat different from those for marketplace plans. The bills would set the buy-in premium to cover the full cost of benefits provided under Medicare

Parts A, B and D for enrollees, plus administrative expenses. The Stabenow bill would establish a single, national premium while the Higgins bill would apply a geographic adjustment. Neither proposal would adjust buy-in premiums for age, in contrast to current marketplace rules.

Buy-in enrollees would be eligible for ACA-based premium and cost-sharing subsidies. The Higgins bill would also enhance cost-sharing subsidies available through all Silver plans in the marketplace and would extend these subsidies to individuals with income up to 400% of the federal poverty level (FPL). When buy-in enrollees become eligible for the current Medicare program, at age 65, [premium and cost-sharing subsidies](#), and other coverage features, would revert to those applicable to Medicare beneficiaries under current law.

Marketplace premium subsidy amounts would be calculated somewhat differently for buy-in enrollees. Presumably because rating rules would be different than for other private plans, the Medicare buy-in option would not “compete” with other marketplace plans to be the second-lowest-cost Silver plan; rather the Secretary would determine how subsidies would be calculated for buy-in enrollees.

Both proposals would require all Medicare participating providers and facilities to participate in the buy-in plan for older adults; and, to help constrain costs, reimburse [hospitals, physicians](#) and other participating providers using Medicare payment rates, which [typically are lower and less variable](#) than the [rates paid by commercial insurers](#). Using Medicare payment rates would tend to make the buy-in plan more cost competitive relative to private plan options. Though the bills do not address balance billing specifically, by adopting Medicare provider payment rules, it appears that Medicare limits on balance billing would also apply to enrollees in the buy-in plan.

The Higgins proposal would also authorize the Secretary to negotiate lower drug prices for the buy-in population and for the current Medicare program – the only change in the bill that would directly affect the current Medicare program.²

The Higgins bill would make other changes aimed at stabilizing the private individual insurance market. It would establish a federal reinsurance program to help cover high-cost medical claims, and reauthorize the temporary ACA risk corridor program through the year 2020. It also would appropriate \$500 million per year, in 2018 through 2020, for consumer assistance programs to raise awareness about new subsidy and coverage options and help people enroll.

Both bills specify that the buy-in program would be financially separate from the current Medicare program, and that benefits under the current program, and the Medicare trust funds would not be affected. The Higgins proposal establishes a separate trust fund for the purpose of collecting premiums and making payments for services provided to individuals enrolled in the Medicare buy-in plan. The Higgins proposal establishes a separate trust fund for the purpose of collecting premiums and making payments for services provided to individuals enrolled in the Medicare buy-in plan.

STATE PUBLIC PLAN OPTION

The public plan option envisioned under the Schatz bill would build on the Medicaid program rather than Medicare. Under this approach, states would have the option of creating a Medicaid buy-in program that would be offered through the marketplace alongside other private plans.

For states that elect this option, the bill would allow individuals at all income levels to buy into Medicaid, as long as they are not enrolled in other coverage. The Medicaid buy-in option would be offered as a Silver-level plan through the marketplace. Medicaid buy-in enrollees would receive an alternative benefit package (ABP), which includes the ACA essential health benefits, and could be defined by states to include the full Medicaid benefit package.

States may set premiums for the public plan that are “actuarially fair.” States may vary premiums by the same factors as ACA marketplace plans (age, geography, family size and tobacco use). Deductibles and other cost sharing amounts would also be determined by the electing state to be actuarially fair, with an annual out-of-pocket limit on cost sharing (set at \$7,350 in 2018).

The bill does not require that premiums and cost-sharing payments cover the full costs of the buy-in program. Instead, states would receive federal matching payments for any costs for the Medicaid buy-in program that are not covered by premiums and cost-sharing payments. With this flexibility, states could promote enrollment in the public plan by setting premiums lower than commercial plans, and count on the federal government to make up some of the cost; though as under the current Medicaid program, they would be required to finance the state share of these costs. The bill also provides an enhanced 90% federal matching rate for administrative costs associated with the buy-in program.

This proposal would extend current law ACA premium and cost-sharing subsidies to people purchasing Medicaid buy-in coverage. In addition, it would cap premiums for the public plan at 9.5% of family income, which would make the Medicaid buy-in option more affordable than other marketplace plans for people with incomes above 400% FPL, the eligibility threshold for premium tax credits.

The Medicaid buy-in would rely on Medicaid participating providers, including Medicaid managed care organizations (MCOs) to deliver services. In an effort to improve access to care in the Medicaid program, including the buy-in option, the bill would require Medicaid to use Medicare payment rates as a floor for paying primary care providers and would appropriate \$100 billion in grants to states to enhance Medicaid provider payment rates. The grants would be available to all states, not just those establishing a buy-in program.

Additionally, the bill would extend to any state newly adopting the Medicaid expansion the 100% federal funding for three years and the phase-down of federal funding to 90%.

Key Policy Considerations

The eight bills introduced during the 115th Congress are similar in that they would each establish a public program, yet they differ in ways that could have significant implications for consumers, payers, health care professionals, and the federal budget. As of yet, CBO has not formally estimated the effects of these bills on costs or coverage. Below are key questions regarding the policy implications and tradeoffs involved in these various proposals.

1. HOW WOULD THE PROPOSALS PROVIDE AND EXPAND COVERAGE?

These eight proposals span a broad spectrum in terms of eligibility rules that are likely to affect the number of people who would gain coverage and the size of the public program. The two Medicare-for-All proposals would build a single, national public program, replacing all other forms of coverage, to cover all individuals residing in the U.S. The Medicare-for-All bills would adopt a broader definition of eligibility than is used for Medicare, Medicaid or marketplace plans, which limit eligibility based on citizenship and immigration status, potentially benefiting [millions of lawfully present and undocumented immigrants](#).

The three federal public plan proposals would offer a public option to augment the current mix of public and private sources of coverage. Among these three plans, the Merkley proposal would extend eligibility to all U.S. residents, permit large and small employers to offer public plan coverage, and enhance cost-sharing subsidies, all of which could lead to larger public plan enrollment than under the two other public plan proposals. None of the public plan proposals would address the coverage gap that persists in states that have not expanded Medicaid, in which more than [two million adults](#) have incomes too high to qualify for Medicaid eligibility yet below the lower limit of 100% FPL for marketplace premium tax credits.

The two Medicare buy-in proposals for older adults who are not yet eligible for the current Medicare program would likely lead to a smaller public plan than the aforementioned proposals due to age restrictions. Of these two proposals, the Higgins bill could reach a larger number of older adults because it defines eligibility somewhat more broadly (ages 50-64, rather than age 55-64), allows employers to pay premiums for their older employees if they opt in, and enhances premiums and cost-sharing subsidies.

The Medicaid buy-in proposal would make the public plan an option for states. This approach would limit its availability to residents of states that elect to establish a Medicaid buy-in.

2. HOW WOULD THE PROPOSALS AFFECT THE AFFORDABILITY OF COVERAGE FOR CONSUMERS?

While the ACA has made significant inroads in [reducing the number of people without health insurance](#), [affordability challenges](#) have continued, particularly among people with significant health needs. In 2017, more than one-in-four insured non-elderly adults [skipped or delayed care due to costs](#) or had problems paying out-of-pocket medical bills; among the insured in fair to poor health, nearly one-in-three faced such affordability problems. The Medicare-for-All bills take the most comprehensive approach to improving affordability by eliminating premiums and cost-sharing requirements, and adding benefits, such

as dental and vision. However, these costs would ultimately be shifted back to some individuals in the form of higher taxes, meaning some people would end up paying more while others would pay less.

Several of the other bills would address affordability issues in the marketplace by enhancing premium and cost-sharing subsidies for currently eligible individuals, by capping premiums for individuals not eligible for premium tax credits, and, in some cases, by making more people eligible for subsidies. Limits on provider payments (Medicare payment rates) would be expected to put downward pressure on premiums and other costs. Two of the bills would enhance financial protections for individuals by prohibiting balance billing by providers. The others are silent on balance billing, although to the extent those proposals use Medicare or Medicaid provider payment rates, they would appear to incorporate into the public plan limits and prohibitions on balance billing that apply under those programs today.

In addition, one of the bills would address [the financial burden of health care for people covered under the current Medicare program](#) by adding an annual out-of-pocket limit. Virtually all of the proposals aim to make prescription drugs more affordable for people in both the current Medicare program and the new buy-in proposal by giving the Secretary the authority to negotiate lower drug prices.

3. HOW WOULD THE PROPOSALS AFFECT MARKETPLACE COVERAGE?

As of early 2018, more than [14 million](#) people obtained non-group coverage through ACA marketplaces or outside in the individual market. The introduction of a new public plan could change marketplace dynamics and premiums. Premiums for the public plan could be higher or lower than private marketplace plans depending on a number of factors, including the level of fees paid to providers, rating rules, the comparability of benefits, and other features. For example, as noted above, the use of Medicare provider payments in the public plan would put downward pressure on costs, which would likely lead to lower premiums for coverage under the public plan compared to marketplace plans.

At the same time, the methodology used to set premiums could potentially mitigate the cost advantage of the public plan. Premiums for a Medicare buy-in for older adults could conceivably be higher than premiums for marketplace plans for people of a similar age because the risk pool is restricted to older, higher-cost adults. Further, if the public plan uses a uniform, national premium and private insurers set premiums based on local costs, the public plan could be more competitive in high cost areas, and less competitive in low cost areas. To the extent that the rules for setting premiums are not aligned for private plans and the public program, individuals may be more attracted to one over the other, potentially destabilizing the marketplaces.

Several of the public plan option proposals include provisions to stabilize or strengthen marketplaces generally – for example, by enhancing the value of cost-sharing subsidies, establishing new risk-stabilization programs, and/or by enhancing consumer enrollment assistance and outreach.

4. HOW WOULD THE PROPOSALS AFFECT PRIVATE EMPLOYER-SPONSORED HEALTH COVERAGE?

Currently, a majority of the non-elderly U.S. population – [more than 150 million people](#) – have job-based health benefits. The Medicare-for-All bills would replace employment-based (and virtually all other forms of coverage) with the new plan. The other six public plan proposals would retain a role for employer-sponsored coverage, while giving employers access to the public plan to varying degrees. Under one proposal, all employers, including large employer-sponsored plans, could opt to obtain coverage under the public plan on behalf of their employees. Others would allow small (but not large) employers to offer the public plan to their employees by purchasing public plan coverage through the small group market or the SHOP marketplace. One plan would allow employers to pay premiums on behalf of their enrollees who choose to opt into the public plan, a departure from current law.

If employers are able to reduce health costs by offering coverage under the public plan, the public plan could take on a relatively large role as a source of coverage. Employers could realize savings by gaining access to the lower provider payment rates in the public plan. In addition, although none of the bills allow employers to selectively enroll high-cost enrollees in the public plan, employers with higher than average medical costs might realize savings by shifting their employees to the public plan, which in turn could lead to adverse selection and higher costs in the public plan. Most of these bills also would retain current law rules that make people ineligible for subsidies if they are eligible for employer-sponsored coverage that meets minimum standards; this “firewall” would limit the ability of individuals to shift from job-based coverage into the public plan.

5. WOULD THE NEW PUBLIC PLAN OPTIONS BE THE SAME AS THE CURRENT MEDICARE PROGRAM?

Six of the eight bills invoke Medicare’s name for the public plan, likely in part because [Medicare enjoys broad support among the public](#). Yet, the proposed public plans differ from the current Medicare program in several ways, including covered benefits, the methodology used to calculate premiums, and the availability of premium and cost-sharing subsidies. The two Medicare buy-in bills for older adults would adopt current Medicare benefits and cost sharing for the public plan; the two Medicare-for-All bills would cover far more expansive benefits; and the other proposals align either with ACA-required essential health benefits or with a combination of ACA and Medicare benefits.

None of the bills would set premiums for the public plan using the same methodology used in the current Medicare program. In general, the proposals set premiums for public plan enrollees to cover 100% of benefit costs, including administrative expenses. In contrast, premiums for the current Medicare program are not set to cover full program costs. Further, the buy-in bills tend to use premium and cost-sharing subsidies, and eligibility levels, established for the ACA marketplace, rather than those that apply to people covered under the current Medicare program (such as those used for the Medicare Savings Programs or the Part D low-income subsidy program.) To the extent public plan enrollees receive more

generous subsidies, lower-income individuals would face a financial “cliff” when they age onto the current Medicare program.

The Medicare-for-All and public plan proposals tend to track the current Medicare program when it comes to provider participation and in using Medicare provider payment rates to leverage overall savings in health spending (with some variation, as noted below).

6. HOW WOULD THE PROPOSALS AFFECT THE CURRENT MEDICARE PROGRAM?

Six of the eight public plan proposals leave the current Medicare program generally intact, with the notable exception of the Medicare-for-All bills that would replace the current Medicare program with a new and more comprehensive Medicare program. Four of the public plan bills would modify rules pertaining to the Medicare Part D benefit, by allowing the Secretary to negotiate drug prices. One proposal would enhance the current Medicare program by adding an out-of-pocket limit to Medicare Parts A, B and D, which would help align financial protections under the new and existing Medicare programs, but would also lead to higher Medicare spending and higher premiums. The Sanders bill would enhance the current Medicare program during an interim implementation phase, by adding an out-of-pocket limit, covering vision and dental, and by expediting eligibility for people with disabilities.

Several of the public plan buy-in bills include explicit language to protect the Medicare trust funds and Medicare benefits from changes made under the proposal.

7. HOW WOULD THE PROPOSALS AFFECT THE CURRENT MEDICAID AND CHIP PROGRAMS?

The two Medicare-for-All proposals would replace or fundamentally restructure Medicaid’s role in providing health coverage to low-income and other vulnerable populations. The Ellison proposal would eliminate Medicaid entirely while the Sanders bill would retain Medicaid for purposes of providing long-term services and supports. The Sanders bill would impose requirements on states to maintain eligibility standards and expenditures on long-term services and supports at 2017 levels. Both proposals would eliminate the CHIP program.

The remaining bills, including the Medicaid buy-in bill, would leave the Medicaid and CHIP programs intact. The Schatz proposal would address Medicaid provider payment rates and access-to-care issues by requiring states to increase payments to primary care providers and by providing funding for states to increase payments to other providers. However, the one-time allocation of federal grant funds to finance the state share of the payment increase would not likely compensate states for the increased costs associated with the payment rate increase over the long term.

The proposals also mostly do not address the failure of 17 states to adopt the ACA’s Medicaid expansion. One proposal would extend the 100% federal financing to states newly adopting the expansion to

encourage state action, while the two Medicare-for-All bills would federalize coverage for all low-income adults.

8. HOW WOULD THE PROPOSALS ADDRESS THE NEEDS OF SPECIFIC POPULATIONS?

While the bills intend to improve the affordability, and in some cases, the comprehensiveness, of health coverage, in general they vary in how they would address the specific needs of special populations, such as children, women of reproductive age, and people with disabilities and high health care needs,

Children, in particular, have special needs and special providers that serve them. While most of the bills incorporate the ACA's 10 essential health benefits, which include pediatric services and dental and vision services for children, none of the bills define a specific benefit package for children. Except for the two Medicare-for-All proposals, the other bills would retain the Medicaid and CHIP programs and their important role in covering low-income children. However, the special EPSDT protections provided to children through the comprehensive coverage requirements in Medicaid are not extended to children who would gain coverage under Medicare-for-all, the federal public plans, or the Medicaid buy-in plan. The three public plan proposals recognize the importance of including providers that serve children in the plan networks, by requiring participation of both Medicare and Medicaid providers and/or including a process for allowing other providers to participate.

For people with disabilities and high health care needs, the adequacy of health plan provider networks matters can be especially important. [Most marketplace plans](#) today and a [smaller share of job-based plans](#) used closed or narrow provider networks. By contrast, nearly all of the public plan proposals would significantly expand provider networks for their enrollees. Proposals that eliminate or lower out-of-pocket costs, which several of the proposals do, would remove or reduce cost as a barrier to accessing care for those with high health care needs. While most of the proposals would retain Medicaid as the primary payer of long-term services and supports for people with disabilities, one proposal (Ellison) would incorporate these services into the plan's benefit package. It also proposes a payment methodology that emphasizes the provision of long-term services and supports and mental health services in community-based settings, thus significantly expanding access to these services.

Finally, several bills specify that reproductive services, including abortion, should be a covered benefit and some bills (Sanders; Merkley) include explicit language to repeal the Hyde amendment restrictions on public funding for abortion. The [Hyde amendment](#), first adopted more than 40 years ago, prohibits federal funds from being used for abortion, other than in the case of rape, incest or if the pregnancy is determined to endanger the life of the woman. If the Hyde amendment is not repealed and if its restrictions attach to the public plan, then fewer women of reproductive age could have access to abortion services in the future. Numerous efforts to repeal the Hyde amendment have failed in the past.

9. HOW WOULD THE PROPOSALS AFFECT PAYMENTS TO PROVIDERS?

Most of these proposals would result in broader use of Medicare rates – or some similar approach -- to reimburse hospital and medical care. In general, the proposals would adopt a fee schedule for the public plan with the goal of reducing total health spending (and premiums) by reducing high fees paid by commercial insurers relative to Medicare, and, in the case of Medicare-for-All, by eliminating excess administrative costs attributable to having multiple payers, with multiple fee schedules and multiple rules pertaining to coverage. The Medicare-for-All proposals would establish global budgets, under which there would be a fee schedule for providers. The public plan and Medicare buy-in proposals typically adopt Medicare payment rates, or anchor their provider rates to Medicare levels in some fashion, which would tend to be lower than private insurance and higher than Medicaid.

The impact of using Medicare payment rates on provider revenues would vary across the eight proposals, with the greatest effect under the Medicare-for-All proposals. Under the Medicare-for-All plans, the shift toward a payment system that is tied more directly to Medicare rates could significantly lower revenues for hospitals, physicians and other providers. The reduction in payments for private patients would be offset partially by the higher fees paid to providers for Medicaid and previously uninsured patients – a change that would be particularly beneficial to health care professionals who care for those patients. The public plan buy-in proposals would also have an effect on provider revenue, but to a lesser extent, depending on the number of additional patients covered under the new public plan.

The Schatz proposal, which builds on Medicaid rather than Medicare, would increase payments to primary care providers to Medicare rates, and establish a \$100 billion fund to increase Medicaid reimbursement rates generally in order to expand provider participation.

10. WHAT COST CONTAINMENT FEATURES ARE IN THE PROPOSALS?

Despite the recent slowdown in health care spending, health care costs are projected to increase at a [faster pace](#) than general inflation in the future. All of the bills include provisions that would restrain the growth in health care spending in varying ways. The Medicare-for-All bills would establish global budgets for health care. All of the bills would expand the use of Medicare provider payment rates (or a variation of Medicare rates) by applying them to providers participating in the public plan. Where public plans compete with private plans for enrollees, this could create an incentive for commercial insurers to reduce the relatively high and variable fees they currently pay and reduce overall costs. Most proposals would authorize the Secretary to negotiate drug prices for the public plan and for the current Medicare program, recognizing strong public support to address the high cost of pharmaceuticals. In addition, most of the plans would encourage payment and delivery system reforms that aim to improve quality and reduce costs.

11. WHAT ARE THE COSTS AND POTENTIAL TRADE-OFFS?

As noted above, CBO has not yet published estimates of how these proposals would affect health coverage or federal costs. All of the bills contain at least some provisions, such as expansion of current marketplace subsidies, or enhancements to current Medicare or Medicaid programs, that would result in

new federal spending. At the same time, these proposals, to varying degrees, would also result in reductions in out-of-pocket spending for individuals, by broadening eligibility rules, reducing premiums and/or cost-sharing liability, improving benefits, and limiting or eliminating balance billing and – by extension – [surprise medical bills](#). Proposals that significantly reduce patient out-of-pocket spending would tend to increase use of services and overall health spending. Some proposals could also result in significant savings for states and employers. Some of the proposals, notably the two Medicare-for-All bills, would result in a significant redistribution of costs, particularly after taxes are taken into account, which would create winners and losers, and tradeoffs that are likely to arise as the debate moves forward

The Medicare-for-All bills include features to rein in health spending, such as global budgets, a Medicare-like fee schedule, and administrative savings that would derive from having a single payer, but would increase on-budget federal spending by expanding coverage to more people and by enhancing the coverage people get under the public plan. Federal spending would increase as costs are shifted from households, employers and states to the federal government.

The public buy-in plans aim to give individuals and, in some instances, employers a more affordable option, that limit, to varying degrees, the on-budget costs for the federal government. They generally require enrollee premiums to cover 100% of program costs, including administrative expenses. Other features of these proposals, however, would likely impact cost estimates, such as premium and cost-sharing subsidies for public plan enrollees, premium and cost-sharing enhancements for private marketplace enrollees, and benefit enhancements for the current Medicare program.

Under all of the bills, hospitals, physicians and other health care professionals would shoulder some of the cost, assuming the public plan uses Medicare payment rates, rather than the higher rates typically paid by commercial insurers. Commercial insurers themselves could lose revenue depending on the size of the public plan; the impact would be far greater under Medicare-for-All than under some of the public plan options. The introduction of a public plan option could also have adverse effects on private insurance industry profits and jobs, although the Medicare-for-all proposals include provisions to address potential job loss. It is also possible that insurers could gain opportunities under some proposals, such as the Medicare buy-in bills, which would enable insurers to offer Medicare Advantage plans to adults who have not reached age 65. Further, if the Medicare buy-in plan draws higher-cost people away from private marketplace coverage, and premiums for younger enrollees decline (favorable selection), insurers may be able to expand their footprint in the marketplace.

Formal cost estimates, with specified financing, are needed by policymakers to fully assess the cost implications and the magnitude of tradeoffs involved for consumers, who are also taxpayers, and for other payers.

12. HOW WOULD THE PROPOSALS BE FINANCED?

The two Medicare-for-All proposals acknowledge the need for financing to cover the costs of the new program, after taking offsets into account. Senator Sanders released a [white paper](#) discussing financing

options; Rep Ellison's bill lists sources of financing that would be tapped to cover expenses (e.g. increase personal income tax on top 5% of earners). Both proposals envision a major shift in the way in which health care is financed in the U.S., away from households, employers, and states to the federal government (and taxpayers). Such a shift would no doubt create winners and losers, relative to the current system.

As noted above, several of the public plan buy-in proposals would have premiums cover the costs of covered benefits for people who buy into the public plan, although the financing for additional costs (not yet estimated) are not specified. The Schatz Medicaid buy-in bill would finance the public plan with a combination of premiums and other revenues along with federal Medicaid matching payments. How these additional federal costs will be financed is not specified.

Discussion

With health care reemerging as an issue for voters in the mid-term elections, the debate over the role of public programs in our health care system appears to be intensifying. Current proposals offer a range of approaches from those that would transform the existing system by creating a new national, Medicare-for-All plan to more incremental approaches that would offer a new public plan option alongside existing private coverage and public programs. With many details yet to be provided, these proposals raise a number of questions, the answers to which will have important implications for consumers, health care professionals, and health care payers, including employers, states, and the federal government. While these proposals are not expected to advance in their current form, they highlight the range of approaches that will likely emerge in legislation in the new session of Congress following the 2018 elections.

Public polling indicates that proposals to create a national Medicare-for-All plan or to expand Medicare through a public plan option or buy-in receive [favorable ratings](#). However, public opinion is malleable when information is presented in support of or in opposition to the proposals, suggesting that the specifics of how plans are designed and communicated will matter to future public support.

Endnotes

¹ H.R. 676 was introduced originally by Representative Conyers. On March 7, 2018, Representative Ellison received unanimous consent to be considered the first sponsor.

² The Stabenow bill does not include a provision to authorize the Secretary to negotiate lower drug prices; however, Senator Stabenow has co-sponsored other legislation that would do so.

By Kevin Griffith, David K. Jones, and Benjamin D. Sommers

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Diminishing Insurance Choices In The Affordable Care Act Marketplaces: A County-Based Analysis

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ABSTRACT While the Affordable Care Act has expanded health insurance to millions of Americans through the expansion of eligibility for Medicaid and the health insurance Marketplaces, concerns about Marketplace stability persist—given increasing premiums and multiple insurers exiting selected markets. Yet there has been little investigation of what factors underlie this pattern. We assessed the county-level prevalence of limited insurer participation (defined as having two or fewer distinct participating insurers) in Marketplaces in the period 2014–18. Overall, in 2015 and 2016 rates of insurer participation were largely stable, and approximately 80 percent of counties (containing 93 percent of US residents) had at least three Marketplace insurers. However, these proportions declined sharply starting in 2017, falling to 36 percent of counties and 60 percent of the population in 2018. We also examined county-level factors associated with limited insurer competition and found that it occurred disproportionately in rural counties, those with higher mortality rates, and those where insurers had lower medical loss ratios (that is, potentially higher profit margins), as well as in states where Republicans controlled the executive and legislative branches of government. Decreased competition was less common in states with higher proportions of residents who were Hispanic or ages 45–64 and states that chose to expand Medicaid.

The Affordable Care Act (ACA) increased insurance coverage through expanding eligibility for Medicaid and implementing health insurance Marketplaces, but its future remains uncertain. While prospects for a large-scale repeal of the ACA may have temporarily abated, policy makers have expressed concerns that insurers exiting the Marketplaces may lead to inadequate choices for consumers and higher premiums.^{1–3} These concerns were punctuated by several high-profile insurer exits since 2016, which left some state regulators scrambling to persuade at least one insurer to participate in their ACA Marketplaces.^{4,5} Policy

changes during the administration of President Donald Trump—such as the cancellation of payments to insurers for cost-sharing reductions, temporary freezing of risk-adjustment payments,⁶ removal of the individual mandate,⁷ and the expansion of short-term insurance options⁸—may also increase uncertainty and hasten insurer exits.

While previous studies have described the extent of insurer participation,^{9,10} there has been less research evaluating which regions are most likely to be affected by limited Marketplace options and factors associated with limited options. In this article we assess the frequency of limited Marketplace insurer participation over

time and identify county- and state-level predictors of that outcome.

Study Data And Methods

DATA Data for 2014–18 for this study were obtained from the Robert Wood Johnson Foundation’s Health Insurance Exchange (HIX) Compare database. HIX Compare contains information on nearly every ACA-compliant individual and small-group Marketplace plan offered in all fifty states plus the District of Columbia, as well as most off-Marketplace plans.¹¹ Insurance rating areas follow county lines in most states. However, four states (Alaska, California, Massachusetts, and Nebraska) use rating areas and ZIP codes that can cross county lines. We used data from the Census Bureau and the Missouri Census Data Center’s Geocorr Index to map rating areas, ZIP codes, and counties for these states.¹² For the seven counties that had varying numbers of insurers depending on the ZIP code, we assigned each county the number of insurers that covered the largest population share.

ANALYTIC METHODS We first calculated the number of insurers (one, two, or three or more) participating in ACA Marketplaces by county ($N = 3,142$) for each year in the period 2014–18. We used data from the Centers for Medicare and Medicaid Services (CMS) on medical loss ratios (the amounts of premiums that insurers spend on medical care, separate from administrative and marketing costs) to identify subsidiaries of the same parent company and counted them as one insurer. We then conducted a set of regressions to identify predictors of limited insurance options (that is, having two or fewer insurers that participated in the Marketplace) in 2018. Ideally, consumers in a county would have a large number of insurers available, and the minimum number of competitors needed to prevent oligopolistic competition is unclear. Following the work of Richard Kronick and coauthors,¹³ we assumed that at least three insurers were needed as a precondition for competition based on price and plan quality. We recognize that the “right” threshold likely varies based on each region’s unique characteristics and history, which makes the selection of any threshold somewhat arbitrary. In sensitivity analyses, we tested the robustness of our results using the presence of just one insurer as the definition of limited competition.

Our covariates consisted of a variety of county-level characteristics that could affect insurers’ participation, including demographic characteristics, health spending, mortality, and the state policy environment. From the Health Resources and Services Administration’s Area Health

Resources Files, we obtained data on county-level poverty rates, crude death rates, and per capita Medicare spending. We included rural versus urban status, defined using the Department of Agriculture’s Rural-Urban Continuum Codes.¹⁴ Data on the proportion of nonelderly residents ages 45–64 and the proportions of residents who were black, Hispanic, or Latino were obtained from the Census Bureau.

We included a binary indicator of pre-ACA insurance market concentration from the 2014 Robert Wood Johnson Foundation’s Insurer’s Marketshare Dataset.¹⁵ Markets in which one insurer controlled more than 50 percent of the market were considered concentrated. To identify the potential effect of areas in which premiums may have previously been set at unsustainable levels, we included variables for statewide average premiums (for a person age fifty) from HIX Compare and medical loss ratios from CMS for 2016, the earliest year for which complete data were available.

We also assessed state party control using data from the National Conference of State Legislatures.¹⁶ We defined states as being Republican controlled (with a Republican governor and a legislature controlled by Republicans) or Democrat controlled (with a Democratic governor and a legislature controlled by Democrats), or having a divided government. Variables for key ACA-related policies included whether a state had accepted the Medicaid expansion (with or without a section 1115 waiver),¹⁷ managed its own Marketplace,¹⁸ or placed restrictions on the activities of Marketplace navigators.¹⁹ All continuous dependent variables were standardized into z-scores as a means of comparing the effects of variables measured in different metrics; binary variables were not normalized. A z-score indicates how many standard deviations a particular value is from a variable’s mean. A z-score of less than 0 indicates that a value is less than the mean, while a z-score of more than 0 indicates that a value is higher than the mean.

We estimated linear probability models to explore the unadjusted (bivariate) associations between the aforementioned covariates and outcomes, as well as a multivariate model. Standard errors were clustered by state, and counties were population-weighted to produce nationally representative estimates. As sensitivity analyses, we estimated logistic regression models instead of linear probability models and used alternative data on insurers’ participation from the Henry J. Kaiser Family Foundation.⁹

The study was deemed not to be human subjects research by the Boston University Institutional Review Board.

LIMITATIONS This analysis had several limita-

tions. First was its cross-sectional nature, which meant that it could identify only associations.

Second, the various state policy variables were correlated. We addressed this issue by presenting results of both bivariate and multivariate models. The multivariate model allowed us to assess the associations between each variable and insurers' participation independently, controlling for the policy and other variables.

Third, the HIX Compare data presented a more conservative estimate of the extent of limited insurers' participation on the ACA Marketplaces, compared to previous estimates by CMS or the Kaiser Family Foundation.^{9,10}

Fourth, the HIX Compare data did not contain information on the caps in enrollment that some insurers have in place.

Fifth, insurers' participation was listed at the rating-area level, while some insurers choose to participate in only a subset of counties within a given rating area.

Also, HIX Compare was missing data for 17 percent of counties in 2014 and 8 percent in 2015.

However, a sensitivity analysis using alternative data (more counties but fewer years) from the Kaiser Family Foundation yielded results similar to those in our main analysis.⁹

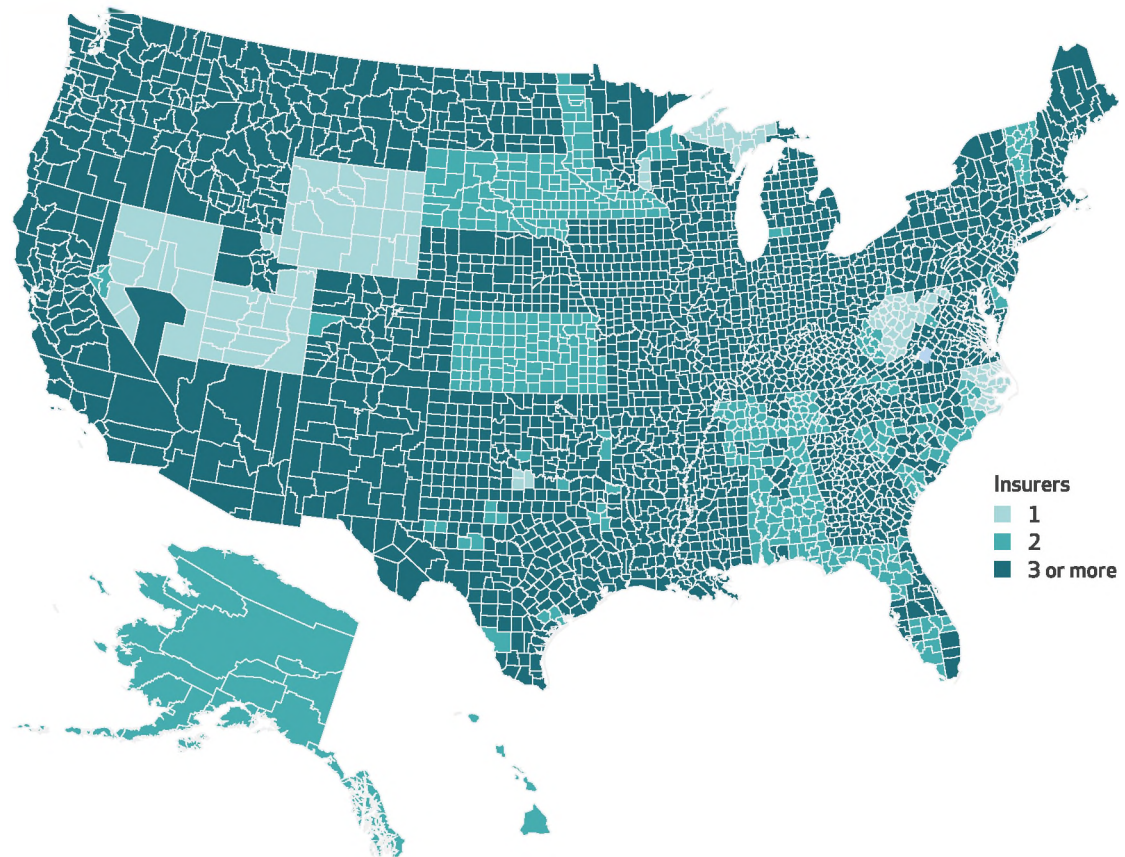
Study Results

Limited competition increased from 21.3 percent of counties in 2016 to 64.4 percent of counties in 2018, representing 8.2 percent and 40.5 percent of the US population in those years, respectively. Counties with only one or two insurers were primarily concentrated in less-populated parts of the Great Plains and southeastern United States (exhibits 1 and 2). All counties had at least one insurer all study years.

In 2016 approximately 79 percent of counties, comprising 92 percent of US residents, had three or more Marketplace insurers (exhibit 3). This dropped to 51 percent of counties and 69 percent of the population in 2017, and to 36 percent of counties and 60 percent of the population in 2018. In 2018 more than one-third of counties,

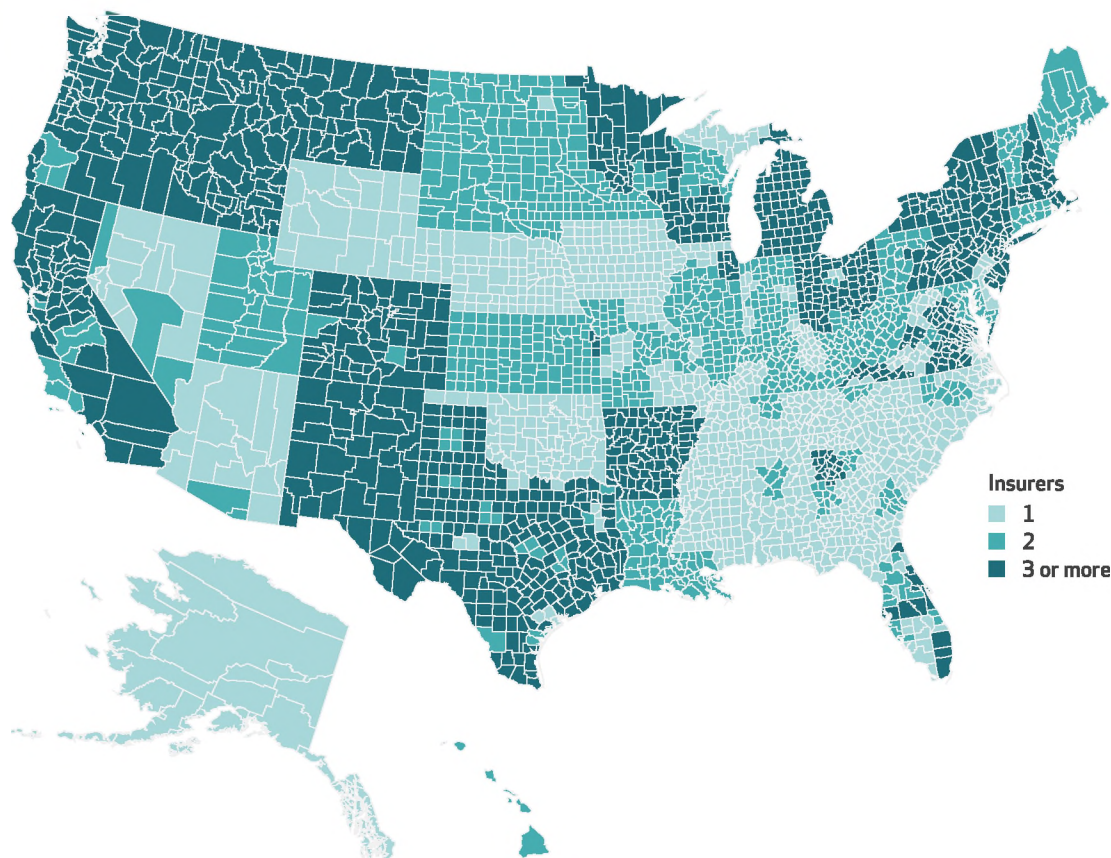
EXHIBIT 1

Marketplace insurer competition, by county, 2016



SOURCE Authors' analysis of data from the Robert Wood Johnson Foundation's Health Insurance Exchange (HIX) Compare database.
NOTE "Marketplace insurers" are those participating in the Affordable Care Act Marketplaces.

Marketplace insurer competition, by county, 2018



SOURCE Authors' analysis of data from the Robert Wood Johnson Foundation's Health Insurance Exchange (HIX) Compare database.
NOTE "Marketplace insurers" are those participating in the Affordable Care Act Marketplaces.

comprising one-fifth of the US population, are served by a single Marketplace insurer.

Exhibit 4 shows regression results for both county- and state-level variables associated with two or fewer insurers in 2018. Continuous variables were rescaled to enable comparisons between variables with different metrics. For example, the amount of change in the percentage of residents in poverty associated with limited insurer participation can be directly compared to the amount of change in Medicare spending, even though the first variable is measured as a percentage and the second in dollars. Corresponding unscaled results are in online appendix exhibit A1.²⁰

In terms of county-level factors associated with having limited competition, in an unadjusted analysis we found that limited insurer participation was more common in counties that were rural (28 percentage points more than in non-rural counties) or had relatively high mortality (16 percentage points per standard deviation [SD]) or percentages of residents in poverty (6

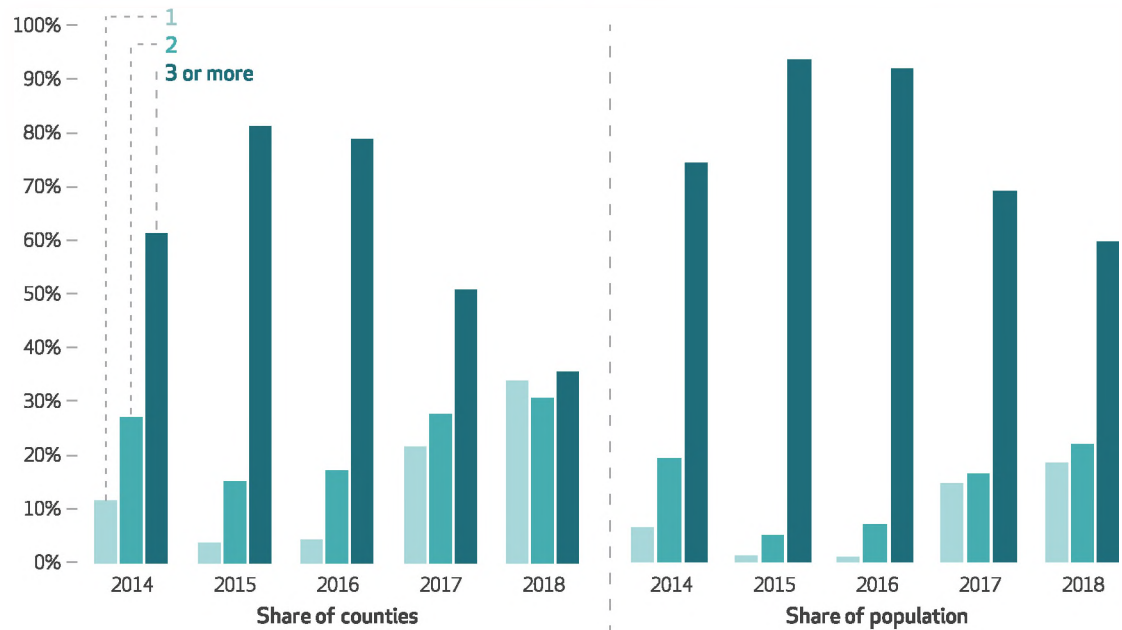
percentage points per SD) (exhibit 4). Limited insurer participation was less common in counties that had relatively large Hispanic/Latino populations (–13 percentage points per SD), insurers with higher average medical loss ratios (–11 percentage points per SD), or high per capita Medicare spending (–10 percentage points per SD).

In the multivariate model we found that four of these six variables remained significantly associated with limited insurer participation and the percentage of residents in middle age (ages 45–65) gained significance, with mortality rate and the percentage of residents in middle age showing the strongest association with limited insurer participation (22 percentage points and –23 percentage points per SD, respectively). Weaker but still significant associations were found for rural status, medical loss ratio, and Hispanic/Latino population (exhibit 4).

Among state policy variables, in an unadjusted analysis we found that limited insurer participation was more than 30 percentage points more

EXHIBIT 3

Shares of US counties and population with one, two, or three or more Marketplace insurers, 2014–18



SOURCE Authors' analysis of data from the Robert Wood Johnson Foundation's Health Insurance Exchange (HIX) Compare database and the Census Bureau. **NOTES** "Marketplace insurers" are those participating in the Affordable Care Act Marketplaces. HIX Compare lacked data for 17 percent of counties in 2014 and 8 percent in 2015.

common in states with Republican-controlled or divided government, compared to states with Democrat-controlled government. Limited insurer participation was 30 percentage points less common in states with state-run Marketplaces, compared to those with federally facilitated Marketplaces, and 26 percentage points less common in states that chose to expand Medicaid.

In the multivariate model we found that only Medicaid expansion (–28 percentage points) retained significance, and it was marginal.

Sensitivity analyses defining counties with limited insurer participation as those having one Marketplace insurer, or using insurer participation data from the Kaiser Family Foundation, produced largely similar multivariate results. However, the medical loss ratio was no longer a significant predictor of limited participation, and state Medicaid expansion had a stronger association with greater participation (appendix exhibits 2 and 3).²⁰

Discussion

Reduced Marketplace competition can lead to higher premiums and reduced consumer choices.^{2,3} We found a sharp increase in the numbers of counties with restricted competition in 2017 and 2018, but a smaller increase in the share of the population living in counties with

restricted competition. This problem is more common in rural areas and those with higher mortality rates, and less common in counties with a higher percentage of residents ages 45–64 and larger Hispanic populations. Limited participation in 2018 was also associated with lower 2016 medical loss ratios, which suggests that insurers may be reluctant to enter even profitable exchanges, and factors other than setting premiums at unsustainably low levels in previous years are driving insurer exits.

Future work is needed to identify potential causal mechanisms behind these associations, since it is unclear why a higher-risk population or lower medical loss ratios should lead to lower insurer participation as opposed to changes in premiums. Additionally, it is unclear if the observed pattern of insurer participation represented a long-run equilibrium or more transient factors such as the fluid policy environment and insurer "panic" over early losses. Future changes in this pattern are likely to reflect the uncertainty of the ACA's risk-adjustment program, given the mixed signals from the Trump administration in July 2018.²¹

Demographic characteristics and the insurer risk pool were not the only factors associated with restricted Marketplace competition. In unadjusted models, we found that Republican-controlled and divided-government states had

Rescaled county- and state-level variables associated with having 2 or fewer Marketplace insurers in 2018

	Mean value	Unadjusted	Adjusted
COUNTY-LEVEL VARIABLES			
Residents in poverty	0.15	0.062*	-0.021
Crude death rate (per 1,000 people)	10.13	0.161***	0.217***
Per capita Medicare spending (hundreds of dollars)	98.25	-0.103***	-0.047
Black	0.13	0.051	-0.014
Hispanic/Latino	0.16	-0.129***	-0.085**
Ages 45-64	0.31	0.020	-0.227***
Rural status	0.21	0.280***	0.132*
STATE POLICY VARIABLES			
Concentrated insurance market	0.61	0.119	-0.046
Average medical loss ratio	0.93	-0.112*	-0.128***
Average insurance premium (hundreds of dollars)	4.91	-0.058	-0.064
State-run Marketplace	0.13	-0.301**	-0.021
Navigator restrictions	0.55	0.076	-0.078
Medicaid expansion status			
Standard expansion	0.31	-0.257*	-0.283*
Waiver expansion	0.17	0.039	0.006
Nonexpansion	0.52	Ref	Ref
State party control			
Republican controlled	0.65	0.328***	-0.079
Divided government	0.27	0.363***	0.232
Democrat controlled	0.09	Ref	Ref

SOURCE Authors' analysis of data from the Robert Wood Johnson Foundation's Health Insurance Exchange (HIX) Compare database, National Conference of State Legislatures, Census Bureau, and Health Resources and Service Administration's Area Health Resource File. **NOTES** The exhibit shows regression results for county- and state-level factors associated with having fewer than two Marketplace insurers participating in the Affordable Care Act Marketplaces in 2018. There were 3,142 counties. Observations were weighted by county population younger than age sixty-five. All continuous independent variables were rescaled to z-scores, with standard errors clustered at the state level. The "mean value" column presents average value variables weighted by population, before rescaling. Estimates of effect for binary variables may be interpreted as percentage-point changes in limited insurer participation compared with the stated reference group (for example, a concentrated versus unconcentrated insurance market). Estimates of effect for rescaled variables may be interpreted as percentage-point changes in limited insurer participation for a one-standard-deviation increase in the variable. Unscaled results are available in appendix exhibit A1 (see note 20 in text). * $p < 0.01$ ** $p < 0.05$ *** $p < 0.01$

more limited insurer participation, which some have attributed to political efforts in those states to destabilize the Marketplaces.^{22,23} In our multivariate model, partisan control of state government was no longer significant, which indicates that the effect of party control of state government was largely mediated by Medicaid expansion. Moreover, nonexpansion status was the strongest predictor of limited Marketplace participation in the multivariate model. Previous work has demonstrated that the largest health insurers in the United States are highly dependent on Medicaid and Medicare for enrollments, revenues, and profits.²⁴ Thus, states' decisions to expand Medicaid may increase the attractiveness of their markets to insurers and could have important spillover effects in the Marketplaces.

These findings suggest that state-level Republican opposition to the ACA may be self-reinforcing, leading to less robust competition in the Marketplace. Idaho serves as an interesting example of the importance of political support. It is the only Republican-controlled state that chose

to run its own ACA Marketplace. Unlike other Republican-controlled states or other states that rejected the Medicaid expansion, in Idaho every county has consistently had at least three insurance companies selling plans in the Marketplace. Insurers and other stakeholders in Idaho describe a willingness to remain engaged because they have deeper relationships with and greater trust in regulators in Boise than they expect they would have with federal leaders if the state relied on Healthcare.gov.²⁵

Overall, our findings reiterate the need for additional research on the increasing challenge of restricted Marketplace competition in some areas of the US and the potential mediating effects of Medicaid expansion. Media reports on the number of counties experiencing limited insurer participation overstate the difficulties²⁶ compared to population-based estimates, but it is clear that the challenge grew in the past two years. With some data sources already suggesting a recent decline in coverage rates nationally during the Trump administration,^{27,28} and new poli-

cy uncertainty going forward because of the elimination of the individual mandate for 2019 and the temporary halting of risk-adjustment payments, it will be important to monitor factors that affect restricted competition in the coming years. ■

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By Leah Zallman, Steffie Woolhandler, Sharon Touw, David U. Himmelstein, and Karen E. Finnegan

Immigrants Pay More In Private Insurance Premiums Than They Receive In Benefits

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ABSTRACT As US policy makers tackle immigration reform, knowing whether immigrants are a burden on the nation's health care system can inform the debate. Previous studies have indicated that immigrants contribute more to Medicare than they receive in benefits but have not examined whether the roughly 50 percent of immigrants with private coverage provide a similar subsidy or even drain health care resources. Using nationally representative data, we found that immigrants accounted for 12.6 percent of premiums paid to private insurers in 2014, but only 9.1 percent of insurer expenditures. Immigrants' annual premiums exceeded their care expenditures by \$1,123 per enrollee (for a total of \$24.7 billion), which offsets a deficit of \$163 per US-born enrollee. Their net subsidy persisted even after ten years of US residence. In 2008–14, the surplus premiums of immigrants totaled \$174.4 billion. These findings suggest that policies curtailing immigration could reduce the numbers of “actuarially desirable” people with private insurance, thereby weakening the risk pool.

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As the US wrestles with immigration policy, documentation of whether immigrants are a burden on the health care system can inform public debate. Concerns have arisen that immigrants harm the US economically, in part by draining health care resources—equivalent to \$11 billion annually for undocumented immigrants, according to President Donald Trump.¹ Several studies have concluded that relative to US natives, immigrants have low health care use and spending^{2–9}—especially undocumented immigrants.^{5,6,8} Because of their relative youth and high labor-force participation, immigrants make substantial payroll-tax contributions to the Medicare Trust Funds but cost Medicare little. Hence, immigrants effectively subsidize the care of US-born Medicare enrollees and prolong the life of the Medicare Trust Funds.^{8,9} Moreover, immigrants who are undocumented or have been documented for less than

five years are generally ineligible for Medicaid, and undocumented immigrants are ineligible for subsidized insurance on the Affordable Care Act Marketplaces.

For many immigrants, non-Marketplace private insurance is the only available option for coverage. A 2009 study found that private insurers' expenditures on behalf of immigrant enrollees were relatively low.² However, because that study did not tabulate immigrants' contributions to private insurance, it remains unclear whether immigrants' premiums fully cover the costs insurers incur for their care—that is, whether privately insured immigrants are cross-subsidized by US-born private insurance enrollees.

To address this question, we used nationally representative data to calculate premium contributions and insurers' expenditures for US natives, all immigrants, and undocumented immigrants, and we determined the net surplus or deficit attributable to each group.

Study Data And Methods

DATA SOURCES We analyzed data from the Medical Expenditure Panel Survey (MEPS) for 2008–14 to assess private insurers' expenditures on behalf of each enrollee and the premium contributions paid by the enrollee or policyholder.¹⁰ Conducted by the Agency for Healthcare Research and Quality, MEPS is a nationally representative survey of the US civilian noninstitutionalized population that provides information on health care spending and households' premium contributions. We linked MEPS data to data from the 2007–13 National Health Interview Surveys (from which the MEPS samples were drawn) to determine citizenship and nativity. In 2014, MEPS included information about 34,875 individuals, with similar numbers in other years.

To determine employer contributions to private insurance premiums, we analyzed data for calendar years 2008–14 from the 2009–15 Annual Social and Economic Supplements to the Current Population Survey (CPS). The CPS is a nationally representative survey conducted by the Census Bureau and the Bureau of Labor Statistics, which included information about 195,000 individuals each year.

Neither survey asks noncitizen respondents about documentation status. To identify immigrants likely to be undocumented, we adapted a method that accurately replicates national estimates of undocumented immigrants when applied to the CPS data.¹¹ In brief, the method uses information on citizenship status, age, country of origin, length of time in the US, occupation requiring government licensure, spouse's citizenship or imputed documentation status, and receipt of public benefits to classify immigrants as documented or undocumented. We applied this methodology to MEPS and CPS data to determine documentation status for all immigrants. (See the Methods section of the appendix for details.)¹²

PREMIUMS, EXPENDITURES, AND SURPLUS We restricted our analyses to people covered by non-Marketplace private insurance, since Marketplace plans differ from other private insurance in important ways and are unavailable to undocumented people. MEPS collects data on all expenditures made by private insurers on respondents' behalf and verifies these expenditures with providers. For each respondent, we tabulated medical expenditures paid for by a private insurer and adjusted the figures to 2014 dollars using the Consumer Price Index for All Urban Consumers.¹³ Additionally, MEPS queries respondents regarding contributions they or their families made toward private insurance premiums, which we refer to as out-of-pocket

premium contributions. We summed such premiums across each family and then divided the sum by the number of privately insured family members to generate an estimated per person out-of-pocket premium contribution. Additional details about these calculations are in the appendix.¹²

We obtained information on employers' annual contributions to employees' private insurance premiums from the CPS. Because the CPS caps (that is, top codes) premium contributions, assigning a value of \$9,997 to any value larger than that,¹⁴ it underestimates the high values. Therefore, we used data from the National Health Expenditure Accounts¹⁵ of the Centers for Medicare and Medicaid Services (CMS) to quantify this underestimate for each year, and we distributed this amount equally among top-coded individuals. As with out-of-pocket premium contributions, we summed employer contributions for each family, divided the sum by the number of privately insured family members, and assigned that amount to each individual. (See the Methods section of the appendix for details.)¹²

Finally, private insurance expenditures, as measured in MEPS, are not expected to precisely sum to insurers' premium receipts for two reasons. First, premiums include insurance overhead, which is not reflected in the payments to providers tabulated in MEPS.¹⁶ Second, very-high-cost patients and services are known to be slightly underrepresented in MEPS.^{17,18} To account for this, we adjusted our populationwide estimates of insurers' expenditures to match the estimates of populationwide premiums in the National Health Expenditure Accounts.

We calculated total expenditures, total premiums, and net contributions for three groups: US natives; all immigrants, documented and undocumented; and subpopulations of immigrants, including undocumented, legal noncitizen, and citizen immigrants. (See the Methods section of the appendix for additional details.)¹² We defined *net contributions* as the difference between premium payments (by employers plus employees/individuals) and insurers' expenditures for care.

STATISTICAL ANALYSES We calculated the mean per capita contribution and expenditures for US natives, immigrants, and subpopulations of immigrants using appropriate sampling weights and procedures that accounted for the complex survey designs. Using a z-test statistic, we compared the mean difference in net contributions between immigrants and US natives. Given the skewed nature of expenditure data, we also ran a weighted two-part model as a sensitivity analysis to determine whether our findings were consistent across different modeling

strategies. This sensitivity analysis yielded results similar to those of our main analyses (see appendix table 2).¹² Finally, we analyzed trends in immigrants' net contribution in the period 2008–13. Changes in the CPS questions regarding insurance coverage did not allow comparisons between 2014 and prior years.¹⁹

The Census Bureau imputes employer contributions in the CPS, based on its analysis of data from the 1977 National Medical Care Expenditure Survey, adjusted for inflation. To assess whether this imputation introduced confounding, we conducted a regression analysis of the CPS's imputed employer contribution. We controlled for immigration status, census region, industry, occupation, size of employer, family versus single plan, and whether the employer paid all or part of the premium. We found that employer contributions did not differ according to immigration status, which suggests that the Census Bureau's imputation procedure did not significantly bias our results.

The Cambridge Health Alliance Institutional Review Board exempted this study from review.

LIMITATIONS Our study had several limitations. First, although our method for imputing immigrants' documentation status has been shown to yield accurate estimates from CPS

data,¹¹ we had to modify the method slightly for use in MEPS, as that survey is missing a few of the data elements used in the algorithm. (See the Methods section of the appendix.)¹²

Second, about 6 percent of MEPS respondents indicated that their insurance plan covered people outside of the household (generally a child or ex-spouse). This would cause us to overestimate per capita premium payments in those households. However, this should be counterbalanced by premium underestimation in other households, since the percentage of respondents reporting coverage of out-of-household family members did not vary by the policyholder's nativity or documentation status.

Third, the Census Bureau's imputation of employers' contribution to health insurance premiums could have introduced errors. However, our regression analysis of this imputed variable, which found no differences by immigration status, suggests that this imputation did not significantly bias our results.

Study Results

POPULATION In 2014, according to the CPS, immigrants constituted 14.6 percent of the population; undocumented immigrants, a subset of this

EXHIBIT 1

Demographic characteristics of respondents to the CPS and MEPS in 2014, by nativity status

Characteristic	CPS (n = 199,024)			MEPS (n = 35,313)		
	All immigrants	Undocumented immigrants	US natives	All immigrants	Undocumented immigrants	US natives
Number (percent) ^a	28,728 (14.6)	7,340 (3.7)	170,096 (85.4)	6,709 (13.4)	2,016 (3.7)	27,857 (86.6)
Age (years)						
0–17	6%	7%	26%	6%	8%	27%
18–39	36	55	28	39	61	28
40–64	44	36	31	42	30	32
65 or older	14	2	15	13	1	14
Male	48	55	49	49	60	49
Race/ethnicity						
White, non-Hispanic	19	11	69	18	9	71
Black, non-Hispanic	8	6	13	7	7	13
Hispanic	47	63	13	49	62	12
Other	25	20	6	26	22	5
Primary health insurance						
Private	52	51	59	47	44	58
Medicare	14	0	16	20	0	18
Medicaid/other government	14	0	17	17	1	17
No insurance	20	49	9	16	55	7
Years in US						
10 or less	29	50	— ^b	23	43	— ^b
More than 10	71	50	— ^b	77	57	— ^b
Citizen	50	0	100	50	0	100

SOURCE Authors' analysis of data from the 2015 Current Population Survey (CPS) and 2014 Medical Expenditure Panel Survey (MEPS). **NOTE** Percentages were weighted to the US population. ^aPercentages do not add up to 100 because unauthorized immigrants are a subset of immigrants. ^bNot applicable.

EXHIBIT 2

Shares of the US population and contributions to and expenditures from private health insurance in 2014 for US natives, all immigrants, and undocumented immigrants

	US population			Contributions			Expenditures		
	Millions of people	95% CI	%	Billions of dollars	95% CI	%	Billions of dollars	95% CI	%
All immigrants	46.2	45.9, 46.6	14.6	88.7	87.0, 90.5	12.6	64.0	63.8, 64.2	9.1
Undocumented immigrants	11.8	11.5, 12.0	3.7	17.1	16.2, 17.9	2.4	9.4	8.4, 10.4	1.3
US natives	269.6	269.2, 269.9	85.4	616.0	610.9, 621.0	87.4	640.7	640.2, 641.3	90.9

SOURCE Authors' analysis of data from the 2015 Current Population Survey and 2014 Medical Expenditure Panel Survey. NOTES Percentages do not add up to 100 because unauthorized immigrants are a subset of immigrants. CI is confidence interval.

group, were 3.7 percent. As expected, respondents to MEPS and respondents to the CPS had virtually identical demographic characteristics (exhibit 1). Using the CPS, we estimated that 52 percent of immigrants and 59 percent of US natives had private insurance. Among those with private insurance, 96 percent had group health coverage (data not shown). Forty-eight percent of immigrants did not have private insurance and were covered by Medicare (14 percent) or Medicaid/other government insurance (14 percent) or had no insurance (20 percent). The small proportion of undocumented immigrants who reported coverage by Medicaid/other government insurance (1 percent in MEPS) likely represents immigrants in states that provide some form of coverage to some undocumented

immigrants.

PREMIUMS, EXPENDITURES, AND NET SURPLUS OR DEFICIT In 2014 immigrants' premiums totaled \$88.7 billion, while private insurers' expenditures for their care totaled \$64.0 billion (exhibit 2). Hence, immigrants (and their employers) paid \$24.7 billion more in premiums than insurers paid for immigrants' care. Premiums for undocumented immigrants totaled \$17.1 billion, while insurers paid only \$9.4 billion for their care, yielding a net surplus of \$7.6 billion. The comparable figures for US natives were \$616.0 billion in premiums and \$640.7 billion in insurers' payments for care.

In percentage terms, immigrants accounted for 12.6 percent of private insurance premiums in 2014 and 9.1 percent of private insurers' expenditures (exhibit 2). Undocumented immigrants accounted for 2.4 percent of premiums but only 1.3 percent of expenditures, while US natives accounted for 87.4 percent of premiums and 90.9 percent of expenditures.

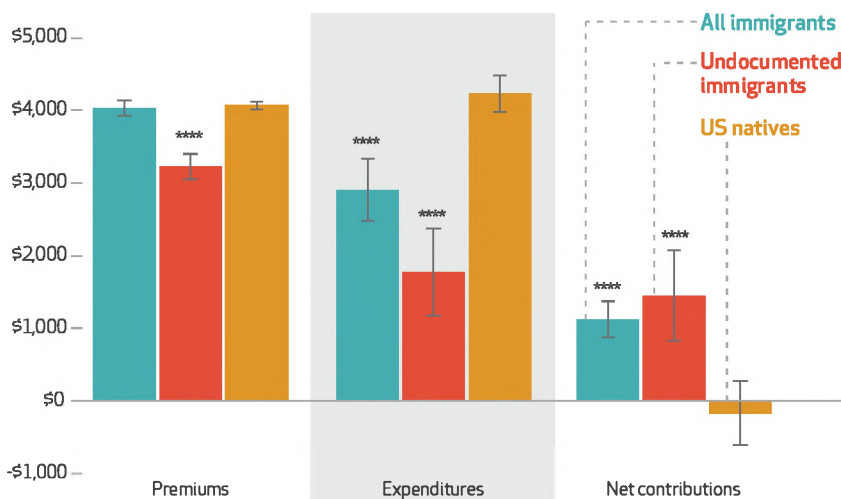
On average, immigrants' premium payments exceeded private insurers' expenditures for their care by \$1,123 per privately insured immigrant (exhibit 3). The comparable figure for undocumented privately insured immigrants was \$1,445. In contrast, US natives generated a net deficit of \$163 per person.

Immigrants' net surplus was due mainly to their lower expenditures, compared to those of US natives (\$2,911 versus \$4,233) (exhibit 3). Insurers' expenditures for the care of undocumented immigrants were particularly low (\$1,781). The average premium contributions of immigrants and US natives were similar (\$4,033 versus \$4,070).

In 2008–14, net contributions by immigrants totaled \$174.4 billion (calculated from data in exhibit 4), and the annual net contribution did not change significantly during that period ($p = 0.31$) (exhibit 4). Recent immigrants (in the US for less than ten years) and established immigrants (in the US for at least ten years) both

EXHIBIT 3

Per capita premiums, adjusted expenditures, and net contributions to private health insurance, by nativity status, 2014



SOURCE Authors' analysis of data from the 2015 Current Population Survey and the 2014 Medical Expenditure Panel Survey. NOTES Net contributions equal premiums minus expenditures. Significance refers to difference from US natives. The whiskers represent 95% confidence intervals. **** $p < 0.001$

contributed net subsidies (\$1,825 and \$981 per year, respectively; $p = 0.09$) (see appendix table 4).¹² Working-age immigrants provided net subsidies that were \$1,640 per person more than those of working-age US natives each year (see appendix table 4).¹²

Discussion

Immigrants contributed far more in premiums for private coverage in 2014 than their insurers paid out for their care, with undocumented immigrants generating the largest per enrollee surplus. This net surplus offset a deficit incurred by US natives and exceeded total insurance industry profits by about \$10 billion that year.²⁰ Our 2014 findings were not anomalous: Immigrants made large net contributions in every year in the period 2008–14, with little change over time.

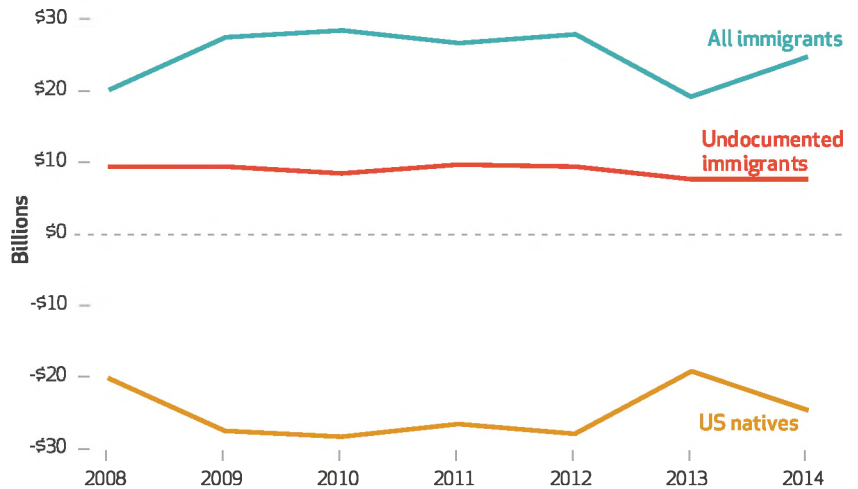
While immigrants' premiums were similar to those for US natives, immigrants incurred much lower expenditures—a disparity that was present in analyses limited to working-age adults. Among immigrants, expenditures increased with duration of time in the US (see appendix table 4),¹² a phenomenon documented previously.^{2,21} This may reflect worsening health habits related to acculturation,^{22,23} increased care-seeking behaviors,²¹ and increased educational standing with time in the US.²¹ However, because premium contributions also increased with time in the US, immigrants made a net contribution to private health insurance regardless of their length of residence in the US.

Much of the debate over the financing of immigrants' medical care has centered on uncompensated care and Medicaid, but a more complete understanding requires an examination of private health insurance and Medicare. Our findings contradict assertions that people born in the US are systematically subsidizing the medical care of immigrants, particularly those who are undocumented. On the contrary, immigrants subsidize US natives in the private health insurance market, just as they are propping up the Medicare Trust Funds.^{8,9}

Despite immigrants' large net contributions to

EXHIBIT 4

Net contributions to private health insurance attributable to immigrants, undocumented immigrants, and US natives, billions of dollars, 2008–14



SOURCE Authors' analysis of data from the 2009–15 Current Population Survey and the 2008–14 Medical Expenditure Panel Survey. **NOTES** Net contributions are explained in the notes to exhibit 3. Test for trend for immigrant contributions: $p = 0.31$.

Medicare and private insurance, providers' practices, as well as laws and regulations, often limit their access to care.^{24–28} Federal civil rights policy requires health care providers to offer free interpretation or language assistance to patients with limited English proficiency²⁹—services that may improve access, patient safety, and patient satisfaction while reducing redundant testing and avoidable hospitalizations.^{2,27} However, neither private insurers nor Medicare pay for medical interpreters, which discourages providers from actually providing translation services.

Immigrants' subsidies to private insurance and Medicare likely reflect their relative youth and good health, as well as the reluctance of many to seek care.⁹ Policies that curtail the flow of immigration to the US are likely to result in a declining number of such “actuarially desirable” persons, which could worsen the private insurance risk pool. ■

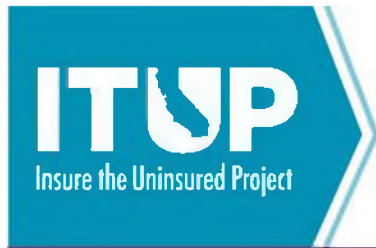
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Proposed Federal Rule on Immigrants and Public Charge

Overview

In late September 2018, the U.S. Department of Homeland Security released a proposed rule to change the factors affecting “public charge” determinations for immigrants to the U.S. The proposed rule represents a dramatic shift in immigration policy and could prevent many low-income immigrants from reuniting with their families in the U.S.

Under federal law, an individual seeking admission to the U.S., or seeking to become a permanent resident (obtain a green card), is “inadmissible” if the individual at the time of application for admission or adjustment of status, is found to be likely at any time to become a “public charge” which includes, among other factors, whether they are likely to rely on public benefits for subsistence in the U.S.

Under the proposed rule, as outlined below, immigration officials must consider specified public health and social services in a public charge determination. Importantly, based on a preliminary review of the proposed rule, the rule does not include as relevant public benefits the Medi-Cal services undocumented immigrants are currently eligible to receive, including federally supported emergency Medi-Cal and state-funded comprehensive Medi-Cal coverage for undocumented children.

This issue brief outlines existing federal law related to public charge and health care programs, the proposed changes, and the specific impacts on immigrant access to health care programs in California.

Current Federal Law on Public Charge and Public Benefits

The Immigration and Nationality Act (INA) identifies groups of immigrants that are ineligible to enter the U.S. or obtain lawful permanent resident (LPR) status if they are determined to be a “public charge.”¹ The INA outlines the minimum factors immigration officials must consider to determine whether an immigrant is likely to become a public charge. As part of a public charge assessment, an immigration officer must consider an applicant’s

- Age;
- Health;
- Family Status;
- Assets, resources, and financial status; and
- Education and skills.

Existing Immigration and Naturalization Service (INS) rules require immigration officers to examine all the applicant’s circumstances and state that the existence or the absence of any one factor cannot result in a finding that an individual is likely to become a public charge. For example, an immigration official could not deny lawful entry to a low-income immigrant as a public charge based solely on income. INS would also need to review the immigrant’s history of employment, resources, education, etc. The existing rule requires the “totality of the individual’s circumstances” to be considered in a prospective evaluation.²

Current Policy on Public Charge and Public Benefits. In 1999, INS issued interim *Field Guidance on Deportability and Inadmissibility on Public Charge Grounds*. This guidance sought to alleviate growing public confusion over the meaning of the term “public charge” and its relationship to the receipt of federal, state, or local public benefits. Under the 1999 policy guidance, INS defined public charge to mean “the likelihood of a foreign national becoming primarily dependent on the government for subsistence.” The guidance listed two public benefits as evidence of an immigrant’s likelihood of becoming a public charge:

1. Receipt of public cash assistance for income maintenance; or
2. Institutionalization for long-term care at government expense.”³

Under the guidance, immigration officers are required to consider past use of these two public benefits, and only these two public benefits, in a public charge determination. Immigration officials must also consider all other circumstances, not just the use of these two public benefits, in determining whether an individual may become a public charge.

Immigrants Excluded from Public Charge Determinations

Under existing law, several groups of immigrants are not subject to public charge determinations, including

- Naturalized citizens,
- Refugees,
- Asylees,
- Survivors of trafficking or domestic violence, and
- Most LPRs.

Summary of the Proposed Rule

The proposed rule adds to the list of public health care programs and benefits that must be considered in a public charge determination.

The proposed rule specifies that cash aid and noncash medical care, housing, and food benefit programs must be considered along with other factors in a public charge determination, including:

- Receipt of public cash assistance for income maintenance;
- Institutionalization for long-term care at government expense;
- Supplemental Nutrition Assistance Program;
- Section 8 Project-Based Rental Assistance;
- *Non-emergency Medicaid; and*
- *Medicare Part D Premium and Cost Sharing Subsidies.*

Under the proposed rule, an immigrant’s reliance on the listed public benefits must meet specific thresholds to impact a public charge determination. For example, an immigrant needs to receive non-emergency Medicaid benefits for more than 12 months in the aggregate within a 36-month period for this to be relevant to a public charge determination.

The proposed rule specifies that the premium and cost sharing subsidies for Medicare Part D (the optional prescription drug benefit in Medicare) are to be included in public charge determinations.

PUBLIC CHARGE PROPOSED RULE

Under Part D, eligible beneficiaries who have limited income can qualify for a related federal program to help pay Medicare Part D premiums and cost sharing.

Public Health Programs Excluded in a Public Charge Determination. The proposed rule *excludes* the following benefits from a public charge determination:

- Direct receipt of public benefits by the child of an immigrant applicant;
- Emergency Medicaid services;
- Services funded by Medicaid but provided under the Individuals with Disabilities Education Act (IDEA), a program providing free and appropriate public education to eligible children with disabilities;
- Medicaid benefits provided to foreign-born children of U.S. parents in the adoption process; and
- Any non-cash benefit (or medical program) that is not listed in the proposed rule.

The proposed rule excludes from a public charge determination public benefits excluded under the 1999 policy guidance, if received before the effective date of the final rule.

Types of Immigrants Affected by the Proposed Rule. The proposed rule primarily impacts undocumented immigrants applying for lawful residency status through the sponsorship of family members. These immigrants are subject to public charge determinations under existing law. In addition, LPRs that leave the U.S. for more than six months and reenter the U.S. may be subject to a public charge determination.

Under the proposed rule, additional groups would be subject to public charge determinations for the first time, including certain non-immigrants seeking to extend their current period of authorized stay in the U.S. or those seeking to transition to another non-immigrant status. For example, an individual authorized to study in the U.S. and then return to their country of origin, if their studies take longer than anticipated, this individual may seek an extension of their stay and would be subject to a public charge determination under the proposed rule.

Impacts of the Proposed Rule. Immigrants subject to public charge determinations are generally ineligible to receive the health benefits that would qualify them as a public charge. Most undocumented immigrants are ineligible for federally-funded Medicaid services; except for emergency Medicaid services. Therefore, it is unlikely the proposed inclusion of non-emergency Medicaid in public charge assessments will have a significant impact on immigrants seeking to legalize their status. Similarly, unauthorized immigrants subject to public charge determinations are not eligible for Medicare Part D.

The proposed rule may apply to LPRs that leave the U.S. for more than six months and then reenter the U.S. For these immigrants, prior enrollment in non-emergency Medicaid and use of low-income subsidy programs in Medicare Part D may be included in a public charge determination. The National Immigration Law Center is reviewing the impact of the proposed rule on the few immigrant categories subject to public charge determinations and who are eligible for federally funded, non-emergency Medicaid, Medicare Part D low-income subsidies, and other impacted programs.

State Funded Medi-Cal Programs. Currently, California provides comprehensive Medi-Cal coverage to low-income undocumented children up to age 19, using primarily state-only funding, offset in part by federal funds used to cover emergency Medi-Cal services for undocumented children. The proposed rule does not allow for the inclusion of Medi-Cal coverage for undocumented children in a public charge

determination for either the parent or the child. First, the proposed rule states that immigration officials will not consider direct receipt of public benefits by the child of an applicant as a factor in a public charge determination. Therefore, Medi-Cal coverage for undocumented, lawfully residing, or U.S. citizen children will not be considered in a parent's public charge determination. Second, the proposed rule states that the term "public charge" would only include receipt of any non-cash benefit specifically listed in the proposed rule. State-funded medical programs are not listed in the proposed rule; therefore, these programs will not be included in a public charge determination.

Under the proposed rule, if California were to expand Medi-Cal using state-only funds to undocumented adults, as proposed in the 2017-18 legislative session, the receipt of Medi-Cal by undocumented adults would not be included in a public charge determination.

Health Status and Private Health Insurance Programs. While health is a factor in public charge determinations under existing law, the proposed rule changes how this factor is considered. Under the proposed rule, immigration officials will consider in a public charge determination any medical condition, including a disability, that effects an immigrant's ability to attend school or work, or otherwise care for him or herself. The proposed rule also adds an evaluation of an immigrant's financial status as part of the evaluation of health and requires officials to evaluate the potential costs of treatment for the medical condition and whether an applicant has the resources to cover the anticipated future medical needs.

As part of an assessment of assets, resources, and financial status, the proposed rule includes, for the first time, private health insurance or the financial resources to pay for medical costs as a heavily weighted positive factor in a public charge determination. Conversely, the lack of private health insurance or the lack of financial resources to pay for medical costs would be a negative factor under the proposed rule.

Next Steps in the Rulemaking Process

After the proposed rule is officially published in the Federal Register, which according to the Department of Homeland Security (DHS) will occur in the next several weeks, the public will have 60 days to provide comments on any part of the proposed rule.

In the rule, the Department of Homeland Security (DHS) has specifically asked the public to comment on the following:

- Mechanisms to administer public charge determinations for immigrant children who receive benefits while under the age of majority. DHS specifically requests comments on whether, and to what extent, past or current receipt of benefits should be weighed in a child's public charge determination, as a potential indicator of likely future receipt of public benefits.
- Whether the Children's Health Insurance Program should be added to the list of non-cash public benefits in the determination of public charge.
- Whether the proposed 12-month threshold applicable to non-cash public benefits, including Medicaid, is an appropriate threshold or whether a different threshold should be assigned if an immigrant receives two or more non-cash public benefits for less than the proposed 12-month threshold.

PUBLIC CHARGE PROPOSED RULE

- Whether receipt of public benefits, other than those included in this rule should be included in a public charge assessment.
- Who should be counted as members of a household, and whose income, assets, and resources should be reviewed in a public charge assessment.

DHS is required to respond to all substantive public comments prior to finalizing the rule.

Several organizations in California, including the National Immigration Law Center, are reviewing the proposed rule and preparing comments. ITUP will add links to resources to this publication as they become available.

¹ Section 212 of the Immigrant and Nationality Act (INA), Title 8 United States Code Section (U.S.C.) 1182.

² Title 8 Code of Federal Regulations (CFR) 245a.3

³ 64 Federal Register 28689, (May 26, 1999)

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Insure the Uninsured Project (ITUP) is a Sacramento-based nonprofit health policy institute that for more than two decades has provided expert analysis and facilitated convenings for California policymakers and decisionmakers focused on health reform.

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Adults' Uninsurance Rates Increased By 2018, Especially In States That Did Not Expand Medicaid—Leaving Gaps In Coverage, Access, And Affordability

Jennifer Haley, Stephen Zuckerman, Michael Karpman, Sharon Long, Lea Bart, Joshua Aarons

SEPTEMBER 26, 2018 DOI: 10.1377/hblog20180924.928969



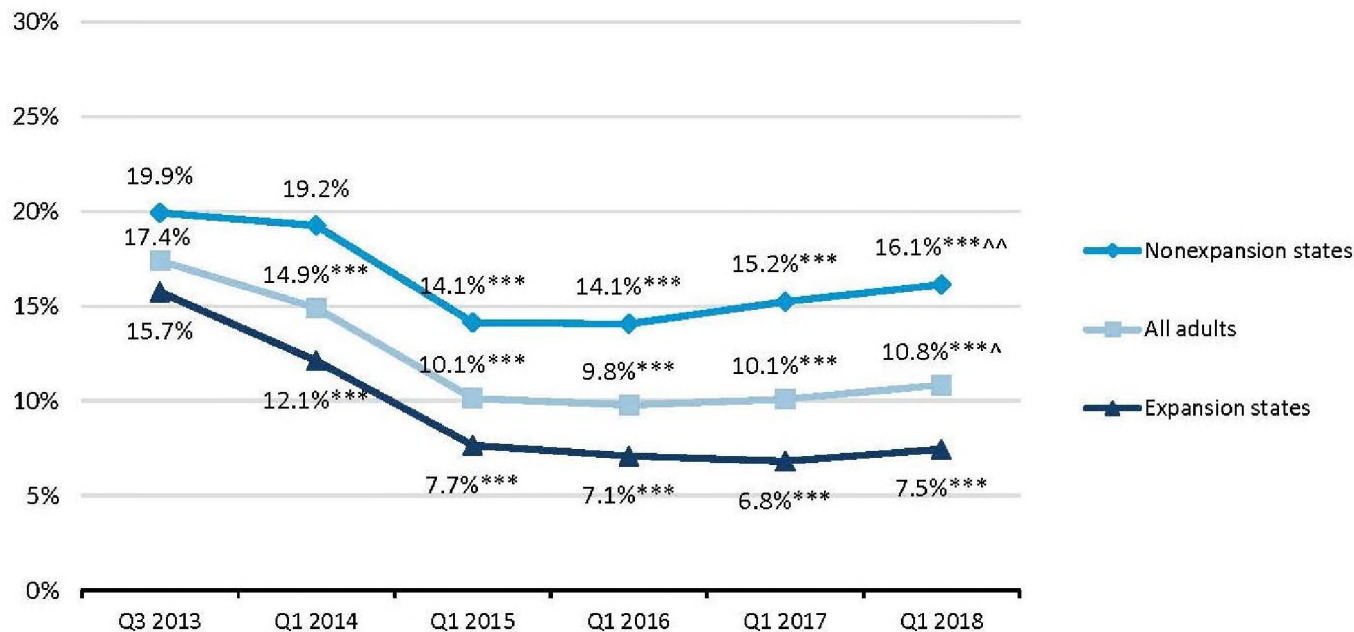
Following implementation of the coverage provisions of the Affordable Care Act (ACA) in 2014, the share of nonelderly adults with health insurance **increased substantially**. This rise in coverage was associated with improvements in health care **access and affordability**. However, evidence from several studies suggests that coverage gains began to **level off** after 2016 and may have started to **reverse direction** in 2017 and 2018. This downward trend may be associated with recent **premium increases** in the nongroup market, **reductions** in outreach and enrollment support for Medicaid and the Marketplace, and public **uncertainty** about the continuation of the ACA's coverage options associated with the debate around repeal efforts. These coverage losses could ultimately affect adults' access to and affordability of health care.

Erosion of the ACA's coverage gains, especially in Medicaid nonexpansion states

Using data from the Urban Institute's Health Reform Monitoring Survey (HRMS), a nationally-representative internet-based survey of adults ages 18-64 based on GfK's KnowledgePanel with a current sample size of approximately 9,500 adults per round, we confirm these coverage losses. After falling from 17.4 percent in the third quarter of 2013, just prior to implementation of key provisions of the ACA, to a low of 9.8 percent in the first quarter of 2016, the uninsurance rate among nonelderly adults began to rise in 2017 and 2018, reaching 10.8 percent in the first quarter of 2018 (Exhibit 1). This is the first statistically significant ($p=0.053$) increase in uninsurance since ACA implementation in 2014 detected by the HRMS.

Exhibit 1: Trends in Uninsurance Among Adults Ages 18 to 64, by 2018 State ACA Medicaid Expansion Status, Quarter 3 2013 to

Quarter 1 2018



Source: Authors' analysis of data from the Health Reform Monitoring Survey (HRMS).

Notes: Estimates are regression-adjusted to account for changing characteristics of the HRMS sample and the economy over time. Q1 estimates reflect interviews conducted in March; Q3 estimates reflect interviews conducted in September. Expansion states are those that expanded Medicaid by March 2018.

//** Estimate differs from estimate for Q3 2013 at the 0.10/0.05/0.01 level, using two-tailed tests.*

^^/^^^ For Q1 2017 and Q1 2018: Estimate differs from estimate for Q1 2016 at the 0.10/0.05/0.01 level, using two-tailed tests.

Furthermore, consistent with other [data sources](#), the erosion of coverage between the first quarter of 2016 and the first quarter of 2018 was larger in states that had not expanded Medicaid by early 2018 than for those that did; uninsurance rose from 14.1 percent to 16.1 percent

over this period in nonexpansion states but was essentially unchanged in expansion states (7.1 percent in the first quarter of 2016 and 7.5 percent in the first quarter of 2018). This further expanded the coverage gap between Medicaid expansion and nonexpansion states that had already grown under the ACA between 2013 and 2016.

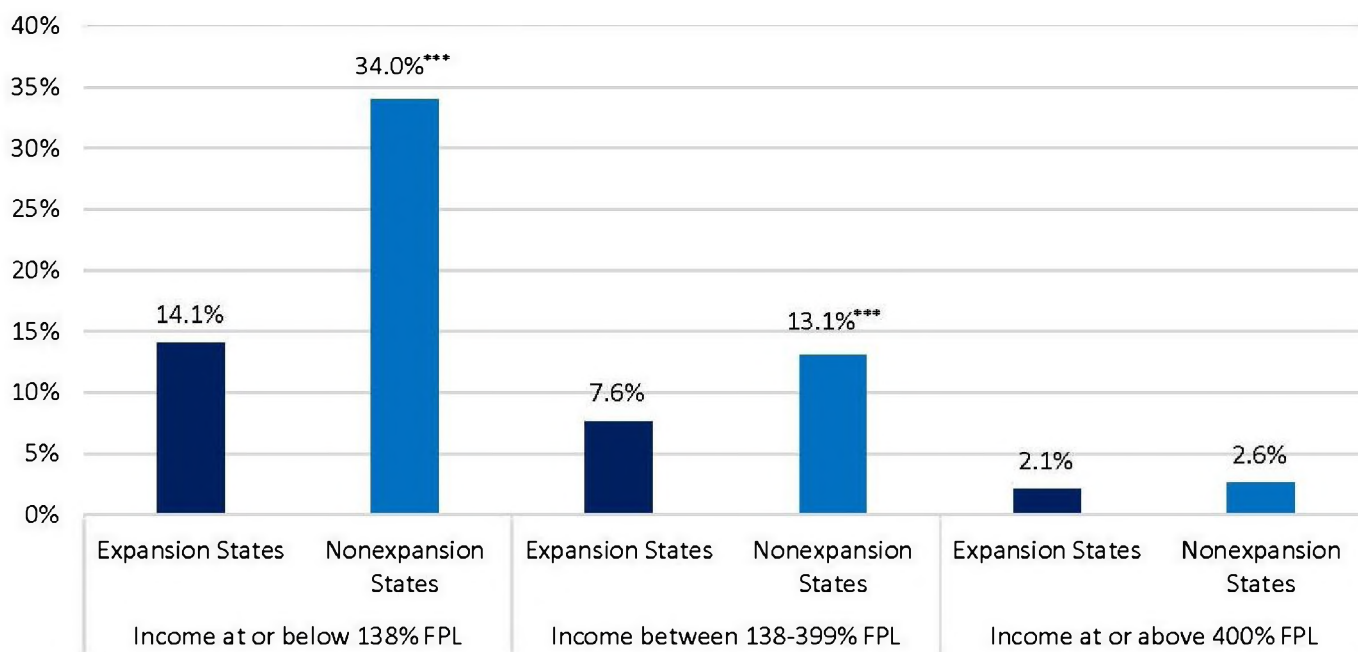
As a result of the greater coverage gains in expansion states since 2013 and the greater coverage losses in nonexpansion states since 2016, the share of the uninsured in nonexpansion states grew between 2013 and 2018. Prior to implementation of the ACA's major coverage provisions in 2014, fewer than half of uninsured adults lived in states that would choose not to expand Medicaid by 2018, but by the first quarter of 2018, nearly 3 in 5 uninsured adults lived in these states (data not shown).

Low- and moderate-income adults remain much more likely to be uninsured in Medicaid nonexpansion states than expansion states

In 2018, adults in nonexpansion states were more than twice as likely to be uninsured as adults in expansion states. This difference was largest among low-income adults with family incomes below 138 percent of the federal poverty level (FPL), the income group targeted by the ACA's Medicaid expansion (Exhibit 2). Uninsurance was over twice as high among low-income adults in nonexpansion states (34.0 percent) compared with expansion states (14.1 percent). While uninsurance rates were similar in expansion and nonexpansion states for higher income adults above 400 percent of FPL, uninsurance was also significantly higher in nonexpansion states for moderate income adults with family incomes between 138 and 399 percent of FPL (7.6 percent in expansion states compared with 13.1 percent in

nonexpansion states). This indicates that gaps in coverage between these state groups may be influenced by differences in Medicaid eligibility (that extends to some adults in this income group), but also likely reflect differences in population characteristics and enrollment in private coverage among adults targeted by the ACA's Marketplace subsidies.

Exhibit 2: Uninsurance Rates Among Adults Ages 18 to 64, by 2018 State ACA Medicaid Expansion Status and Family Income, Quarter 1 2018



Source: Authors' analysis of data from the Health Reform Monitoring Survey (HRMS).

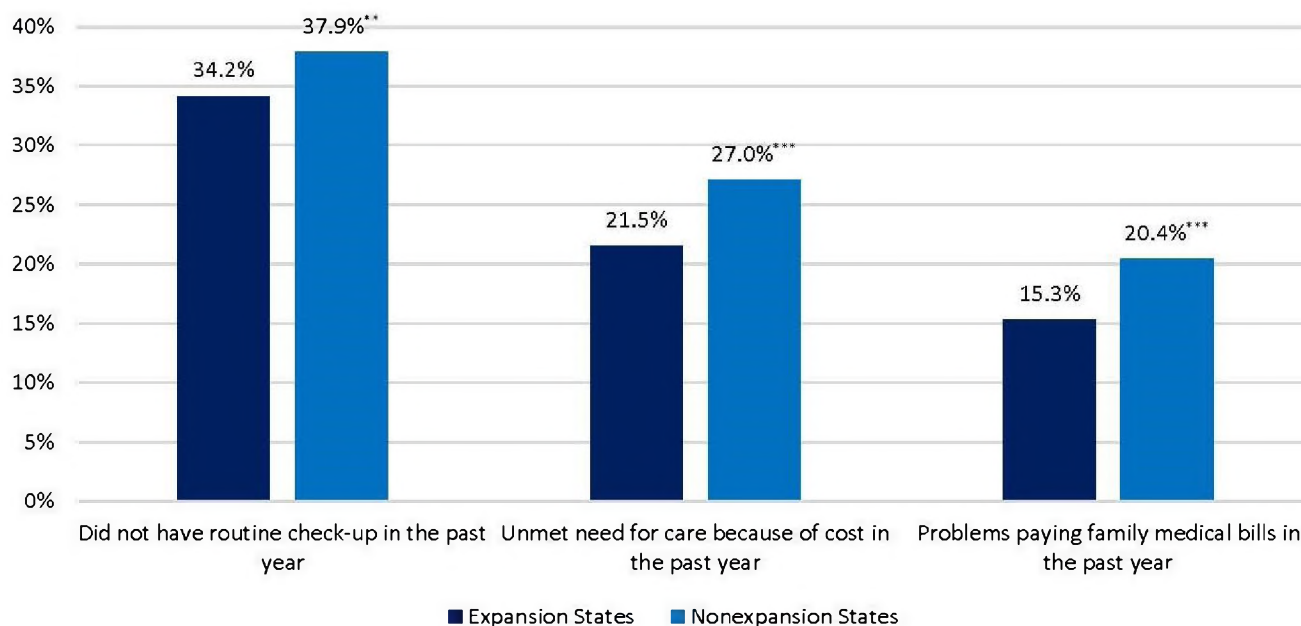
Notes: Expansion states are those that expanded Medicaid by March 2018. FPL is federal poverty level. Estimates are unadjusted.

//** Estimate differs from estimate for expansion states at the 0.10/0.05/0.01 level, using two-tailed tests.*

Differences in coverage have implications for health care access and affordability

In 2018, lower coverage rates in nonexpansion states were associated with higher rates of problems with health care access and affordability, consistent with [patterns](#) in earlier years (Exhibit 3). For instance, in the first quarter of 2018, 37.9 percent of adults in Medicaid nonexpansion states had not had a routine check-up in the prior year, higher than for adults in expansion states (34.2 percent). And 27.0 percent of adults in nonexpansion states had an unmet need for care due to cost during the prior year, while unmet needs remained lower in Medicaid expansion states (21.5 percent). Adults in expansion states were also less likely than adults in nonexpansion states to have had problems paying family medical bills in the prior year (15.3 percent versus 20.4 percent).

Exhibit 3: Health Care Access and Affordability Among Adults Ages 18 to 64, by 2018 State ACA Medicaid Expansion Status, Quarter 1 2018



Source: Authors' analysis of data from the Health Reform Monitoring Survey.

Notes: Expansion states are those that expanded Medicaid by March 2018. Unmet need for care includes any unmet need for medical care, general doctor care, specialist care, medical tests/treatment/follow-up care, mental health care, or prescription drugs. Estimates are unadjusted.

//** Estimate differs from estimate for expansion states at the 0.10/0.05/0.01 level, using two-tailed tests.*

Looking ahead

While rising private health insurance premiums may be contributing to coverage erosion, policy choices such as reductions in funding for outreach and enrollment assistance and public uncertainty about the continuation of ACA coverage options given ongoing efforts to change the law could also be having an effect. Policies such as new state-level Medicaid work requirements could reduce participation in public coverage, and elimination of individual mandate penalties and expanded availability of short-term plans could potentially **reduce coverage levels further**. The Congressional Budget Office **estimates** that while nongroup markets are expected to remain relatively stable, the combined effects of individual mandate penalty elimination in the 2017 tax act and other policy changes will lead to higher nongroup premiums over the coming years, which in turn could lead to more adults going without coverage. According to other HRMS data from the first quarter of 2018 (not reported here), 7.0 percent of privately-insured adults in expansion states and 9.0 percent in expansion states were somewhat or very likely to drop their current coverage in light of the repeal of the individual mandate – indicating the potential for further

coverage declines and broadening of the coverage gap between expansion and nonexpansion states.

Medicaid expansion has played a key role in reducing uninsurance among low-income adults in participating states by giving them low-cost coverage options with minimal or no cost sharing. In addition, it seems to have had other benefits for private insurance markets, such as helping to [lower premiums](#) for Marketplace plans in those states by providing coverage for some high cost users with incomes between 100 and 138 percent of FPL. This suggests that [adoption of the expansion](#) by additional [states](#) (as [Virginia](#) has recently chosen to do) could help slow the growth in uninsurance both by expanding Medicaid coverage and lowering nongroup premiums. In states without the Medicaid expansion, about one-third of low-income adults remain uninsured.

To minimize the impacts of policy changes on health insurance coverage, states may also need to do more to support ACA coverage options, such as replacing the federal coverage mandate as the District of Columbia, New Jersey, and Vermont are doing or boosting outreach and enrollment efforts to reach those eligible for Medicaid and Marketplace subsidies.

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Robert Bowman • 18 days ago

As long as the focus is on insurance coverage, the distractions from real reform will remain in the area of health access. Access is impaired by half enough generalists and general specialists across 50% of the US population. This is because the design for finances results in 15 - 30% less payment. This is made worse by costs of delivery increased for digitalization, MACRA, value based, PCMH that are 50 to 80% higher for each change when measured per physician. Lower stagnant revenue plus higher costs of delivery are made worse by massive increases in the complexity of patients and of delivering care.

The 2621 counties lowest in MD DO NP and PA concentrations of workforce in 2013 with 40.2% of the US population had 40.6% of the uninsured. The problem was never lack of insurance. The problem has always been worst financial design - concentrations of the worst paying public and private plans, high deductible, Veterans, etc.

Generalists and general specialists are 90% of local services in these counties. They are steadily compromised by financial designs that are worst for those small, independent, basic, less organized, not hospital associated, and office services based.

To fix access, it takes a financial design reform - cognitive vs

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Despite Progress Under The ACA, Many New Mothers Lack Insurance Coverage

Stacey McMorro, Genevieve Kenney

SEPTEMBER 19, 2018 DOI: 10.1377/hblog20180917.317923



The issue of postpartum insurance coverage has grown in visibility and policy relevance [given recent national attention](#) to the United States' maternal mortality rate. The US has the highest rate of maternal mortality (that is, [deaths within one year from the end of a pregnancy](#))

of any developed country, and that rate has been rising over the past 15 years. In 2015, the **rate of maternal deaths** per 100,000 live births was 26.4 in the US, compared to rates below 10.0 per 100,000 live births in the UK, Germany, and France, and rates below 5.0 per 100,000 live births in Ireland, Italy, and Finland. Moreover, there are vast racial disparities in maternal mortality in the US, with black women dying in childbirth or shortly thereafter at **more than three times the rate** of white women.

Since the late 1980s, state Medicaid programs have been required to offer insurance coverage to pregnant women with incomes of less than 133 percent of the federal poverty level, and many states have expanded **eligibility** to pregnant women with incomes up to 200 percent of poverty. This means that few low-income women have gone without coverage for their pregnancies or deliveries over the **past three decades**. Medicaid eligibility resulting from pregnancy is temporary, however, and the coverage is usually terminated 60 days after delivery. Given that state Medicaid eligibility thresholds for parents are often well below the threshold for pregnant women, this can leave many new mothers vulnerable to uninsurance and reduced access to postpartum care. For example, a **study** of women who gave birth before the major coverage expansions under the Affordable Care Act (ACA) (2005–13) found that approximately 55 percent of women covered by Medicaid for their delivery were uninsured at some point in the following six months.

Potential Impact Of The ACA

The ACA has extended access to more affordable insurance options for many Americans since 2014, including the expansion of Medicaid eligibility in 32 states (as well as the District of Columbia) and federal subsidies to purchase private coverage in state or federal Marketplaces. Under the ACA, some low-income women losing

eligibility for pregnancy Medicaid coverage have become newly eligible for full Medicaid benefits in the 27 states that expanded Medicaid beyond their [pre-ACA parental eligibility threshold](#), while others have become newly eligible for premium subsidies and cost-sharing reductions for private Marketplace coverage.

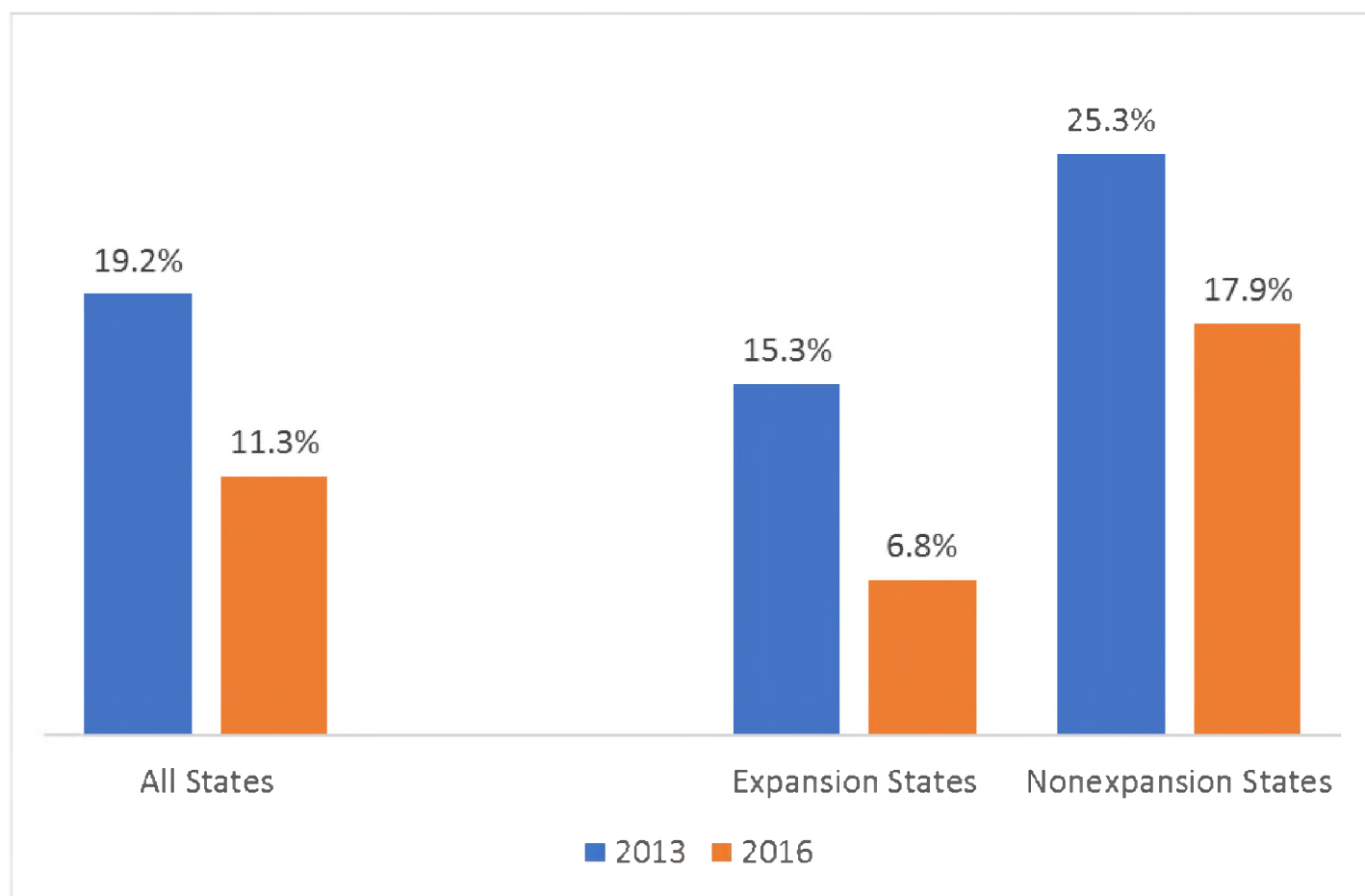
Using data from the American Community Survey (ACS) provided by [IPUMS-USA at the University of Minnesota](#), we examined recent progress on reducing uninsurance among new mothers between 2013 and 2016, following implementation of the ACA Medicaid and Marketplace expansions. Not all changes in coverage over this period should be attributed to these expansions, however, because other ACA provisions and the ongoing economic recovery likely contributed as well. Moreover, differences in uninsurance rates between states that have expanded Medicaid and those that have not cannot necessarily be attributed to the Medicaid expansion since those states differ along several other dimensions that may affect health insurance coverage. Additional analysis will be needed to assess the specific contribution of the ACA Medicaid expansion to the coverage patterns we report here. We also identified states where additional outreach, enrollment, and coverage expansion efforts may be needed to reduce persistent coverage gaps among new mothers.

Big Coverage Gains For New Mothers

We found that the uninsurance rate among women who had given birth in the past year fell by 41.0 percent following implementation of the major ACA coverage provisions, from 19.2 percent in 2013 to 11.3 percent in 2016 (Exhibit 1). The uninsurance rate among new mothers in states that expanded Medicaid under the ACA fell by 56.0 percent, from 15.3 percent in 2013 to 6.8 percent in 2016, while new moms in nonexpansion states experienced a 29.0 percent decline in

uninsurance, from 25.3 percent in 2013 to 17.9 percent in 2016. In both years, new mothers in nonexpansion states were much more likely to be uninsured than new mothers in states that expanded Medicaid under the ACA. By 2016, the uninsurance rate in nonexpansion states was more than twice as high as that in expansion states—17.9 percent versus 6.8 percent.

Exhibit 1: Percentage Of Uninsured Among New Mothers (Ages 19–44), By State Medicaid Expansion Status, 2013 and 2016



Source: Authors' analysis of IPUMS-USA American Community Survey data, 2013 and 2016. Notes: New mothers are women who reported giving birth to a child in the past 12 months. Uninsurance is at the time of the survey and reflects [edits to account for apparent misreporting](#). [Medicaid expansion states](#) are those that expanded by July 2016.

Lots Of Room For Improvement

We estimated state-specific uninsurance rates among new mothers for the 40 states with a sufficient sample of new mothers included in the ACS in 2012–13 and 2015–16 and calculated the change in the uninsurance rate over time for each state. We sorted the results by the state uninsurance rate among new mothers in 2015–16 and noted each state's rank on the uninsurance rate in 2012–13 and 2015–16 with 1 being the lowest and 40 being the highest (Exhibit 2).

We found that, in 20 of the 40 states, more than 1 in 10 new moms were uninsured in 2015–16 (Exhibit 2). Oklahoma, Georgia, and Texas showed the most room for improvement with uninsurance rates of more than 20 percent in 2015–16. Beyond those three states, the 10 states with the next highest uninsurance rates were also nonexpansion states, with between 13 percent and 18 percent of new moms uninsured in 2015–16. These 13 states had Medicaid-eligibility thresholds for parents **ranging from 18 percent of poverty in Alabama and Texas to 67 percent of poverty in South Carolina in 2016**, all less than half of the required threshold of 138 percent of poverty under the ACA expansion. Five expansion states (Arkansas, New Mexico, Nevada, Arizona, and Indiana) had uninsurance rates at or above 10 percent in 2015–16, but all had experienced significant coverage gains from rates above 20 percent in 2012–13. For example, Arkansas, New Mexico, and Nevada experienced coverage gains among new mothers of 16.4, 15.9, and 14.9 percentage points and saw their state ranks on the uninsurance rate improve by 10, 8, and 7 points, respectively.

Exhibit 2: Uninsurance Among New Mothers (Ages 19–44), By State, 2012–13 And 2015–16

	Percent	Percent	State Rank by		Percentage	State expanded by January 2016
	Uninsured 2015-16 (1)	Uninsured 2012-13 (2)	Uninsured Rate 2012-13	Uninsured Rate 2015-16	Point Change Over Time (1) - (2)	
Hawaii	2.2	2.8	1	1	-0.6	X
Massachusetts	2.8	3.4	2	2	-0.6	X
West Virginia	3.2	18.2	19	3	-15.0	X
Minnesota	3.7	9.1	5	4	-5.4	X
Michigan	4.7	14.3	11	5	-9.5	X
Connecticut	5.5	7.3	3	6	-1.8	X
Iowa	6.3	15.6	13	7	-9.3	X
New York	6.3	11.4	6	8	-5.0	X
Wisconsin	6.7	7.6	4	9	-0.9	
Ohio	6.8	11.4	7	10	-4.5	X
Tennessee	7.5	20.4	24	11	-12.9	
Oregon	7.5	17.9	18	12	-10.4	X
Pennsylvania	7.5	14.9	12	13	-7.4	X
Kentucky	7.5	23.2	28	14	-15.7	X
California	7.9	18.7	21	15	-10.7	X
Illinois	8.2	11.7	8	16	-3.5	X
Colorado	8.7	16.1	14	17	-7.4	X
Washington	8.8	18.4	20	18	-9.7	X
Maryland	9.0	14.3	10	19	-5.3	X
New Jersey	9.7	16.4	15	20	-6.7	X
Indiana	10.0	21.4	26	21	-11.4	X
Virginia	10.1	17.0	17	22	-6.9	
Kansas	10.8	21.0	25	23	-10.3	
Arizona	11.2	20.1	22	24	-8.9	X
Nevada	11.5	26.4	32	25	-14.9	X
New Mexico	12.0	27.9	34	26	-15.9	X
Arkansas	12.8	29.3	37	27	-16.4	X
Utah	13.1	13.8	9	28	-0.6	
South Carolina	13.3	23.0	27	29	-9.6	
Missouri	13.8	20.2	23	30	-6.4	
Louisiana	14.4	23.5	29	31	-9.1	
Alabama	14.9	25.4	31	32	-10.5	
North Carolina	15.9	27.0	33	33	-11.1	
Mississippi	16.4	29.5	38	34	-13.2	
Idaho	16.6	24.8	30	35	-8.2	
Nebraska	17.2	16.7	16	36	0.5	
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Florida	18.3	28.1	35	37	-9.8
Oklahoma	21.4	29.2	36	38	-7.9
Georgia	22.4	30.6	39	39	-8.1
Texas	28.5	35.4	40	40	-6.9

Source: Authors' analysis of IPUMS-USA American Community Survey data, 2012–13 and 2015–16. Notes: New mothers are women who reported giving birth to a child in the past 12 months. Uninsurance is at the time of the survey and reflects [edits to account for apparent misreporting of coverage](#). Alaska, Delaware, the District of Columbia, Maine, Montana, New Hampshire, North Dakota, Rhode Island, South Dakota, Vermont, and Wyoming are excluded due to insufficient sample size for new mothers ($n < 300$). States are sorted from lowest to highest 2015–16 uninsurance rate. All changes over time are statistically significant at $p < 0.05$ except Connecticut, Hawaii, Massachusetts, Nebraska, and Wisconsin.

Medicaid Eligibility Appears To Matter

Among the states with 2015–16 uninsurance rates for new mothers below 10 percent, all but two were Medicaid expansion states. Tennessee did not expand Medicaid under the ACA, but new mothers experienced a decline in uninsurance of approximately 13 percentage points between 2012–13 and 2015–16. Importantly, Tennessee extended Medicaid eligibility to all parents with incomes below the poverty level in both periods, so the gains in coverage among new mothers may have come from those already eligible for Medicaid or those newly eligible for Marketplace subsidies. Similarly, Wisconsin's generous parental Medicaid eligibility, at 200 percent of poverty in 2012–13 and 100 percent of poverty in 2015–16, likely contributed to Wisconsin's low uninsurance rates for new mothers in both periods.

Five states (Hawaii, Massachusetts, West Virginia, Minnesota, and Michigan) had uninsurance rates among new mothers below 5 percent in 2015–16. While Massachusetts and Hawaii had very low rates in 2012–13 as well, Minnesota, Michigan, and West Virginia experienced significant gains in coverage among new mothers over this period. Prior to its ACA Medicaid expansion, West Virginia had a very low Medicaid-eligibility threshold for parents at about 30 percent of poverty, which may help to explain the substantial improvement in its state rank on the uninsurance rate among new mothers from 19 in 2012–13 to 3 in 2015–16. Similarly, Kentucky expanded parental Medicaid eligibility from about 57 percent of poverty in 2012–13 to 138 percent in 2015–16 and experienced a notable improvement in its state rank on the uninsurance rate among new mothers from 28 to 14 over this period.

Looking Ahead

In June 2018, the [Mothers and Offspring Mortality and Morbidity Awareness \(MOMMA\) Act](#) was introduced in the US House of Representatives by Rep. Robin Kelly (D-IL). The bill would, among other things, extend pregnancy Medicaid eligibility for a full year following delivery. This proposal recognizes the importance of the “[fourth trimester](#)” for the health and well-being of both mothers and infants, and seeks to eliminate the lack of insurance coverage as one potential contributor to poor maternal and child health outcomes in the postpartum period.

The MOMMA Act would build on elements of the ACA that have likely contributed to recent increases in insurance rates among new mothers. Substantial progress has been made in reducing the uninsurance rate for new mothers in recent years, but more than 400,000 new mothers were uninsured in 2016, which has potentially serious implications for the health and well-being of these mothers and their children. The

estimates presented here suggest a strong association between generous Medicaid eligibility for parents and lower uninsurance rates among new mothers. Thus, extending eligibility for pregnancy-related Medicaid coverage for a full year following delivery, as proposed in the MOMMA Act, is likely to further reduce uninsurance among new mothers. But, on its own, the MOMMA Act cannot provide consistent access to affordable coverage for low-income women of reproductive ages and thereby has limited potential to improve preconception or prenatal coverage and care. A recent study found, however, that comprehensive Medicaid expansions to parents between 1996 and 2011 increased pre-pregnancy insurance coverage among mothers and led to earlier initiation of prenatal care. Thus, while the MOMMA Act is certainly a step in the right direction in achieving further reductions in postpartum uninsurance among new mothers, broad-based coverage expansions such as those under the ACA likely have greater potential to reduce coverage transitions surrounding pregnancy, improve access to preconception, prenatal, and postpartum care, and help to promote healthy pregnancies and healthy children.

Authors' Note

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Medicaid

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By Amanda Frost, Eric Barrette, Kevin Kennedy, and Niall Brennan

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ABSTRACT Using a national sample of health care claims data from the Health Care Cost Institute, we found that total spending per capita (not including premiums) on health services for enrollees in employer-sponsored insurance plans increased by 44 percent from 2007 through 2016 (average annual growth of 4.1 percent). Spending increased across all major categories of health services, although the increases were not uniform across years or categories. Growth rates for total per capita spending generally slowed after 2009 but increased between 2014 and 2016. Spending on outpatient services grew more quickly (average annual growth of 5.7 percent) compared to spending on the other types of services. However, the overall distribution of spending across categories remained largely unchanged. In the context of the dramatic economic and policy events that have taken place since 2007—including the Great Recession, the Affordable Care Act, and numerous medical innovations—this assessment of ten-year spending trends provides insights into how the largest insured population in the US contributes to health care spending growth.

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In 2016, 54 percent of Americans with health insurance were covered by an employer-sponsored insurance plan.¹ Not only do enrollees in employer coverage account for the majority of the population with either public or private insurance, but they also generate the majority of spending on health care. Health care spending by private health insurance plans totaled more than \$1.12 trillion in 2016, far exceeding Medicare spending (\$672 billion).^{2,3} Moreover, federal subsidies for employer-sponsored insurance, which take the form of excluded premium contributions from income and payroll taxes, were estimated to be \$268 billion in 2016—comparable to federal spending on Medicaid for non-elderly people.⁴ Despite the size of the population with employer coverage and the magnitude of its spending, discussions of health care spending often focus on public programs—Medicare

and Medicaid—or on the cost of private health insurance premiums, in part because claims data for employer coverage enrollees have not been widely available for study.

In this study we used such claims data to examine growth in health care spending for the population with employer coverage over the ten-year period 2007–16. We found that total per enrollee spending on health care goods and services increased by 44 percent over that decade—an average annual increase of 4.1 percent, which is nearly twice as fast as the average annual increase of 2.3 percent in inflation-adjusted total spending. In the period 2000–07, the average annual increase in total health care spending per employer coverage enrollee was 8.3 percent, based on information about this spending in the National Health Expenditure Accounts (NHEA) data.³ The growth rates we observed in our analysis were generally slower,

but they have been increasing year over year since 2013. A better understanding of the sources of spending growth among the population with employer-sponsored insurance is important for policy makers, employers, insurers, patients, and providers. Our examination highlights factors that contribute to both the growth in and high levels of health care spending in the US.

Our study characterized changes in spending for the population with employer-sponsored insurance from 2007 through 2016 in the aggregate and by health care service category. We posed four questions: How did per capita spending for employer coverage change over time and relative to spending for other insured populations? How did spending by service category change over time? Did the distribution of spending across service categories change between 2007 and 2016? Did the level and distribution of enrollees' out-of-pocket spending on the categories change between 2007 and 2016?

We answered these questions using measures of per capita health care spending constructed from a national, multipayer claims data set, which includes actual amounts paid for services by both payers and enrollees. The data set does not include any information about premium payments. Annual reporting of five-year trends in spending, utilization, and prices for the population with employer coverage using these data has consistently shown spending and price increases but found fluctuations (including decreases) in utilization rates.⁵ During our study period (2007–16), the US health care system was affected by a deep economic recession, significant legislative and policy changes stemming from the Affordable Care Act (ACA), related changes in payment and delivery methods, and numerous medical innovations (including improved drug regimens for hepatitis C, generic Lipitor, and innovative surgical techniques such as advances in robotic surgeries). These changes likely altered the size and composition of the covered population, which had begun declining before the ACA's adoption and implementation and continued to decline through 2013, after which it began to increase each year.^{6,7} While there is evidence that these policy and economic forces also directly affected trends in overall national health care spending, less is known about the specific trends in health care spending growth among the population with employer coverage over this ten-year period.^{8,9} We hope that a better understanding of the factors contributing to this growth will inform policy solutions to address the high and rising levels of US health care spending.

Study Data And Methods

DATA SOURCES We used the Health Care Cost Institute's (HCCI's) private health insurance claims data for our analyses. This source includes health insurance claims data from Aetna, Humana, and UnitedHealthcare for the years 2007–16 and from Kaiser Permanente for the years 2012–16.^{10,11} Containing information on people from all fifty states and the District of Columbia, it accounts for more than 25 percent of the total population with employer-sponsored insurance each year (approximately forty million annual enrollees). To make the sample nationally representative, we constructed the analytic data set for this study from HCCI's claims data by weighting spending and employer coverage enrollment by age, sex, and geography. The methods used to construct the analytic data set are described in detail in publicly available HCCI documentation.¹² The study sample included people younger than age sixty-five who were insured by an employer plan. We analyzed total and out-of-pocket spending per capita per year by dividing each year's spending by the annual enrolled population.¹³

All spending measures, unless otherwise noted, were measured on a per capita basis for the population with employer-sponsored insurance and include total per capita spending (from both payers and enrollees) on all health care services. Spending was also separated into four major service categories: inpatient hospital, outpatient facility, professional services, and prescription drugs.¹⁴ Each of these categories was further separated into more detailed service subcategories for some analyses.¹⁵ Spending on prescription drugs did not include any discounts, rebates, or coupons. Out-of-pocket per capita spending captured payments by enrollees in the form of copayments, coinsurance, and deductibles. The spending measures did not include premium payments or payments made if no claim was filed (for example, for over-the-counter medications) and did not account for balance billing, so they may underestimate total out-of-pocket spending. To facilitate comparisons of spending levels over the study period, we also adjusted per capita spending for inflation to 2016 levels, using the Consumer Price Index.¹⁶ (For a list of the inflation factors used in this analysis, see online appendix exhibit A1, and for both the nominal spending levels for total and out-of-pocket spending per capita and the inflation adjustor used in the analyses, see appendix exhibits A1 and A2.)¹⁷

LIMITATIONS Our study provides a valuable perspective on one of the largest components of national health care spending, but it had limitations. First, the HCCI data set is a sample from

Our data show that the out-of-pocket spending burden has shifted away from prescriptions and to medical services.

four national insurers, but it is not necessarily representative of the population with employer-sponsored insurance at all subnational levels or of the members of that population covered by other insurers. We do not believe that this precludes drawing high-level conclusions about spending trends for the population with employer coverage. Given the large percentage of this population included in our data set each year, the data provide reasonable approximations of average levels of their spending and utilization. Furthermore, estimates of national spending for this population from the data set are consistent with other estimates.¹⁸

A second limitation is the inclusion of spending only for health care services and prescription drugs. Health insurance premiums—the contributions of both employers and employees—are a large health care expenditure that our study did not account for directly. However, this study's purpose was not to estimate total health expenditures for the employer coverage population, because other reliable sources do so.^{5,19} To our knowledge, there are few data sources besides ours with the same granularity of spending data at the service category level for a national population with employer coverage.²⁰ Moreover, premiums are related to underlying health care expenditures in that premiums need to cover the costs of care and the administration of the insurance benefits. Thus, results from our study may also provide some context for considerations of the levels of and growth in premiums.

Third, our analysis of spending growth did not control for changes in the mix of services within or across categories and thus did not isolate the role of price changes in spending growth. Recent research—some using HCCI data—has begun to create a new base of evidence about the commercially insured population, identifying the effects of prices on spending levels and growth.^{5,21,22} Changes in the average cost per service could reflect rising prices, changes in the mix of ser-

vices, or improvements in technology, and distinguishing those effects from one another was beyond the scope of our analysis.

Finally, our focus on only the population with employer-sponsored insurance explicitly excluded approximately half of the US population and a substantial portion of total national health expenditures. We acknowledge this as a limitation in terms of creating a complete picture of national health care spending. However, research on this population lags behind research on the Medicare population and aggregate national health expenditure reporting. Our analyses add to the overall body of literature on US health care spending and the contribution of the population with employer-sponsored insurance to spending growth.

Study Results

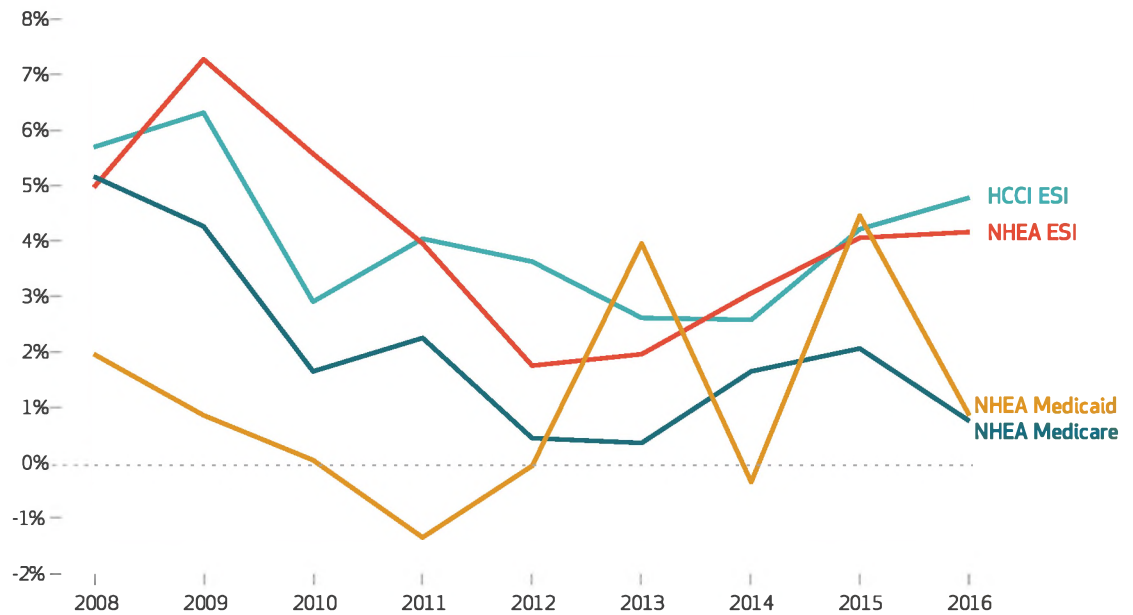
CHANGES IN SPENDING PER CAPITA, 2007–16

Using HCCI data, we found that nominal per capita spending for the population with employer-sponsored insurance increased from \$3,752 in 2007 to \$5,394 in 2016 (see appendix exhibit A1)¹⁷—a 44 percent increase over the study period (or 23 percent after adjusting for general price inflation) and an average annual growth rate of 4.1 percent (data not shown). Annual spending growth varied from a low of 2.6 percent in 2014 to a high of 6.3 percent in 2009 (exhibit 1). Faster spending growth between 2007 and 2009 (6.0 percent, on average) gave way to much slower growth between 2010 and 2014 (3.2 percent, on average) (data not shown). In the last two years of the study period—2015 and 2016—growth accelerated to an average of 4.4 percent, which is closer to the growth observed before the Great Recession.³ Patterns in the annual growth of total health service per capita spending for the population with employer coverage were similar to per capita spending growth in other insured populations during our study period. The per capita spending growth rates reported in the NHEA estimates for Medicare, Medicaid, and employer-sponsored insurance populations exhibit similar patterns of slower growth between 2010 and 2014 and faster growth from 2007 to 2009 and 2015–2016.⁴

Notably, the rates of growth in spending for the population covered by employer-sponsored insurance that we calculated using only spending for health care services are similar to the rates of overall spending growth for this population in the NHEA data, which include premium payments and other insurer administrative costs. This suggests that measuring trends in health services use using a national claims data set is a reliable way to assess overall spending

EXHIBIT 1

Annual growth in per capita health care spending, by insurance type, 2007-16



SOURCE Authors' analysis of data from the National Health Expenditure Accounts (NHEA) and data from the Health Care Cost Institute (HCCI). **NOTES** Prescription drugs that could not be characterized as either brand-name or generic are excluded from HCCI's per capita spending data. ESI is employer-sponsored insurance.

trends for the population covered by employer-sponsored insurance. The claims data also make it possible to assess trends within more detailed service subcategories to understand what services may contribute the most to spending levels and growth.

Similar to the annual changes in total per capita spending, the annual growth rates for the four major service categories we examined were generally lower between 2010 and 2013 compared to the previous three-year period (exhibit 2). Over the last three years of the study period, spending growth rates for the medical service categories increased each year. However, the growth rates for those categories were lower in 2016 than they had been in 2008. For prescription drugs, spending growth remained relatively low through 2013 but then spiked, with the annual growth rate increasing to more than 11 percent in 2015 before falling to 6 percent in 2016. This increase corresponds with the introduction of costly hepatitis C drugs (for example, Sovaldi and Olysio), as noted by other studies.^{5,23}

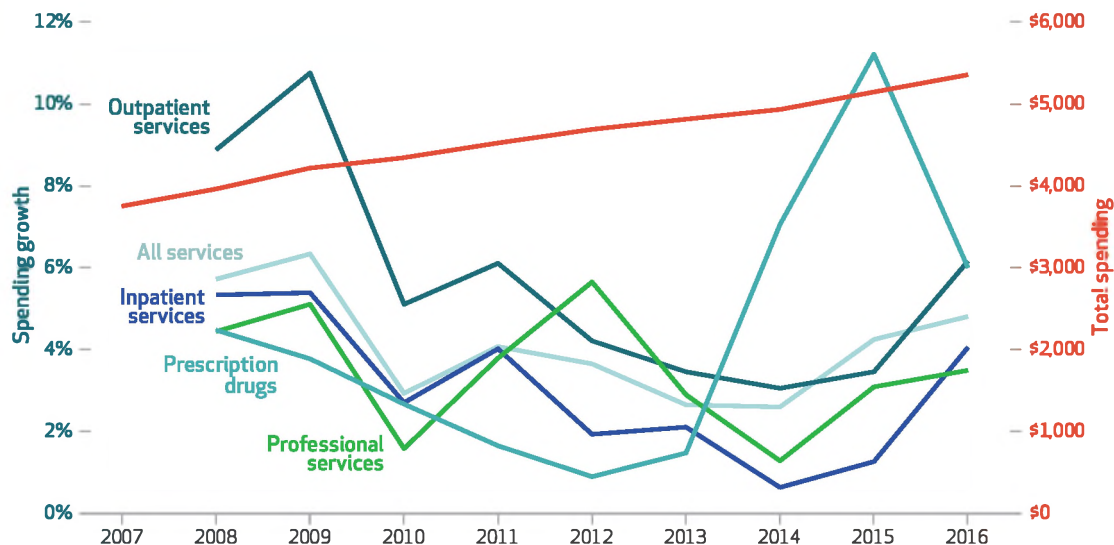
Positive annual growth rates meant that nominal per capita spending in each category increased each year and ended higher in 2016 than in 2007 for all categories. (For the nominal per capita spending levels used to calculate the spending distributions and annual growth rates, see appendix exhibit A1.)¹⁷ Outpatient and pro-

fessional services accounted for the majority of total spending in both 2007 (60 percent combined) and 2016 (62 percent combined) and the bulk of the increase in total spending over that period (65 percent of the total) (data not shown). The largest increase in spending over this period was for outpatient services, which grew by 64 percent (40 percent after adjusting for inflation). As with total per capita spending, annual per capita growth rates for outpatient services varied, from a low of 3.1 percent in 2014 to a high of 10.8 percent in 2009 (exhibit 2), with an average annual growth of 5.7 percent (data not shown). Professional services accounted for the largest share of total per capita spending in both 2007 (36 percent) and 2016 (34 percent). Per capita spending for professional services increased by 36 percent (16 percent after adjusting for inflation) during the study period, for a 3.5 percent average annual growth rate.

Inpatient per capita spending accounted for 21 percent and 19 percent of total per capita spending in 2007 and 2016, respectively. Spending growth for this service category over the study period was substantially less than for other categories, as evidenced by the reduction in its share of overall spending over time. Average annual growth in inpatient spending during this period was 3.1 percent, and the cumulative in-

EXHIBIT 2

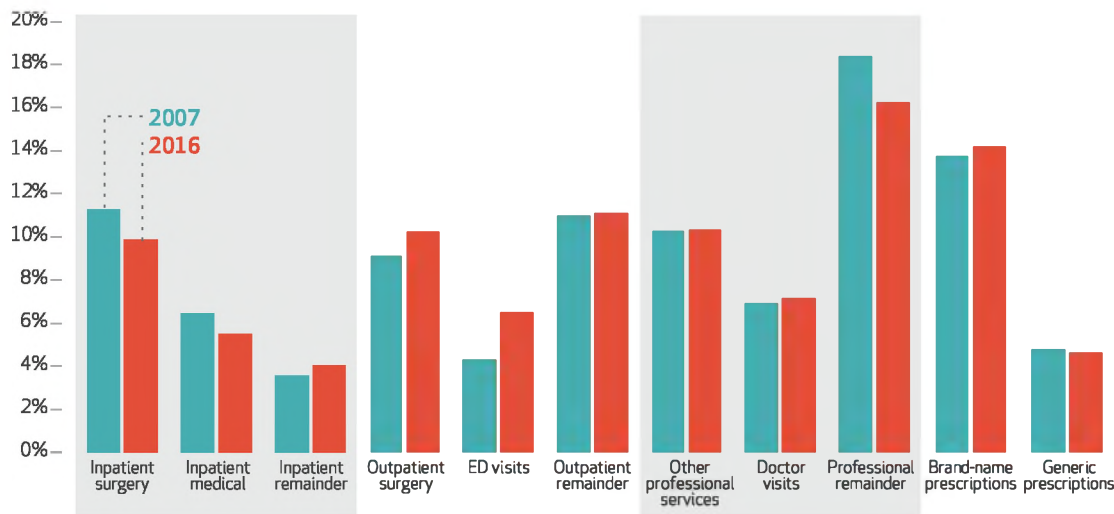
Per capita health care spending and annual spending growth by service category, 2007-16



SOURCE Authors' analysis of data from the Health Care Cost Institute. **NOTE** Prescription drugs that could not be characterized as either brand-name or generic are excluded from this analysis.

EXHIBIT 3

Distribution of per capita spending for people with employer-sponsored insurance, by service subcategory, 2007 and 2016



SOURCE Authors' analysis of data from the Health Care Cost Institute. **NOTES** All dollars are inflation adjusted to 2016. Unadjusted total per capita spending in 2007 was \$3,752, adjusted 2007 spending was \$4,389, and 2016 spending was \$5,394. Spending includes amounts paid out of pocket by individuals. We identified types of spending using the following information. Inpatient surgery: surgery and transplant diagnosis-related group (DRG) codes. Inpatient medical: DRG codes for medical admission. Inpatient remainder: DRG codes for mental health, substance use, labor and delivery, and neonatal. Outpatient surgery: relevant revenue codes and *Current Procedural Terminology* (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes. Emergency department (ED) visits: relevant revenue codes and CPT and HCPCS codes. Outpatient remainder: all other outpatient services including observation visits, ambulance services, and durable medical equipment. Other professional services: various CPT and HCPCS codes (including those for cardiovascular, consultations, immunizations, inpatient visits, ophthalmology, and physical medicine). Doctor visits: all CPT codes for office and preventive visits to all provider types. Professional remainder: various CPT and HCPCS codes (including those for administered drugs, anesthesia, pathology and laboratory services, radiology, and surgery procedures). Brand-name prescriptions: National Drug Codes (NDC) with a brand patent in the year observed. Generic prescriptions: NDC codes without a brand patent in the year observed. Prescription drugs that could not be characterized as either brand-name or generic were excluded from this analysis. For a detailed description of the coding of these subcategories, see Health Care Cost Institute. 2016 health care cost and utilization report: analytic methodology (note 10 in text).

crease over the study period was 31 percent (12 percent after adjusting for inflation).

DISTRIBUTION OF SPENDING We found little change in the distribution of spending for the population with employer-sponsored insurance across service subcategories during our study period (exhibit 3). Of the total per capita spending increase from 2007 through 2016, 48 percent came from three subcategories: brand-name prescriptions, emergency department (ED) visits, and outpatient surgery (data not shown). The largest dollar increase in per capita spending (in both nominal and inflation-adjusted dollars) was for brand-name prescriptions (\$165 after adjustment for inflation). However, the share of total spending devoted to brand-name prescriptions increased by less than 1 percentage point. The largest percentage increase in spending was on ED visits (85 percent after adjustment for inflation), for which the share of spending increased by 2.2 percentage points.

Total spending did not become substantially more concentrated among the categories with the highest spending per capita. Spending on the top four highest subcategories in each year accounted for 54 percent of spending in 2007 and 53 percent of spending in 2016, with outpatient surgery replacing inpatient surgery in the top four in 2016. The share of spending on inpatient surgery admissions declined by 1.4 percentage points, while outpatient surgery increased by 1.2 percentage points. Although the distribution

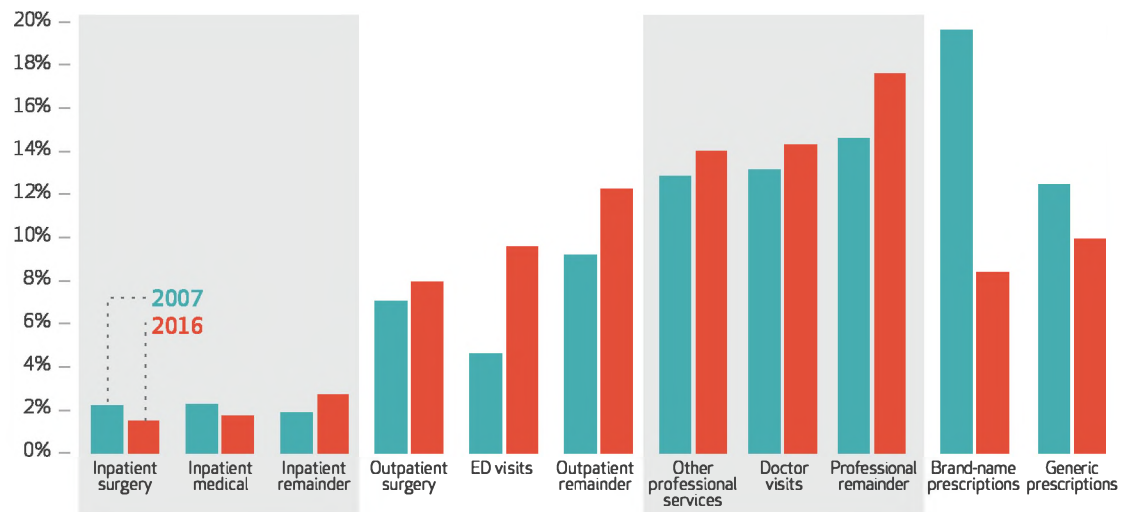
of spending changed only modestly during the study period, the shares of spending on inpatient surgery and medical care declined, while the shares for each of the outpatient subcategories increased.

ENROLLEES' OUT-OF-POCKET SPENDING A final consideration is the impact of spending growth on out-of-pocket spending among the population with employer-sponsored insurance. Similar to total health care spending, the total per capita amount that enrollees spent out of pocket increased by 43 percent between 2007 and 2016 (22 percent after adjusting for inflation) (data not shown). The overall share of spending that enrollees paid out of pocket did not change substantially, accounting for about 16 percent of total spending in both 2007 and 2016. (For the nominal out-of-pocket per capita spending levels used to calculate the spending distributions, see appendix exhibit A2.)¹⁷ However, unlike the distribution of total spending (exhibit 3), the distribution of out-of-pocket spending across service subcategories did shift over time (exhibit 4).

Between 2007 and 2016, the share of out-of-pocket spending accounted for by outpatient and professional services increased both overall and across each of their component detailed service subcategories, with the largest increase for ED visits (which grew by 5 percentage points). These shifts were accompanied by a decline in out-of-pocket spending on prescription drugs (both brand-name and generic), which accounted for

EXHIBIT 4

Distribution of per capita out-of-pocket spending for people with employer-sponsored insurance, by service subcategory, 2007 and 2016



SOURCE Authors' analysis of data from the Health Care Cost Institute. **NOTES** All dollars are inflation adjusted to 2016. Unadjusted out-of-pocket per capita spending in 2007 was \$592, adjusted 2007 spending was \$692, and 2016 spending was \$846. Prescription drugs that could not be characterized as either brand-name or generic are excluded from this analysis. Identification of subcategories is explained in the notes to exhibit 3.

It will be essential to continue to study the composition of health care spending for the population with employer-sponsored insurance.

32 percent of that spending in 2007 but only 18 percent in 2016. This decline occurred across the entire decade and may be contrary to current public opinion on out-of-pocket prescription drug spending. However, the savings from lower out-of-pocket spending on drugs were offset by increases in the spending on the medical service categories (for example, ED visits and professional remainder). As a result, total per capita out-of-pocket spending increased by nearly the same percentage as total spending (22.2 percent versus 22.9 percent, respectively, after adjusting for inflation; data not shown). While the total share of spending paid out of pocket has changed little over the past decade (remaining at around 16 percent), out-of-pocket spending per capita has increased each year. Our data show that the out-of-pocket spending burden has shifted away from prescriptions and to medical services. This shift is likely due to a myriad of factors, including benefit design changes, patterns of service use, price increases, and new technology and innovations.

As we observed in the distribution of total spending, the share of out-of-pocket spending on inpatient medical and surgery subcategories decreased, but the net decreases in their shares were small. The shifts in the distribution of out-of-pocket spending likely reflect changes in the patterns of service use, not just changes in cost-sharing requirements. Other research found steady declines during our study period in the use of most types of inpatient admissions and brand-name prescriptions, along with overall net increases over time in the use of both outpatient and professional services.^{5,21}

Discussion

Numerous changes across all aspects of the health care system took place during the decade

we studied (2007–16), and these changes likely affected spending for enrollees in employer-sponsored insurance. One major factor was the Great Recession, which halted economic growth for several years. Other changes reflect continuing trends in the health care sector, such as the introduction of new drugs and medical technology, the continuing shift in hospital care from inpatient to outpatient settings, and the increasing takeup of high-deductible health plans. Many changes were also related to the implementation of the ACA. Although that law was expected to directly affect Medicare and Medicaid more than employer-sponsored insurance, changes in Medicare or Medicaid policy may have indirectly affected spending for the population with employer coverage. Moreover, ACA-related initiatives involving payment and care delivery (such as accountable care organizations and episode-based payments) have been adopted by private-sector insurers.

There are three key takeaway lessons from our findings about the health care spending for the population with employer-sponsored insurance that have implications for the analysis of spending trends and development of policies to address the high and rising levels of health care spending in the US. First, the slowdown in spending that we observed in 2009 was evident across all major categories of services, which suggests that the recession affected all aspects of the health care system. Multiple studies have investigated the causes of the slowdown,^{24–26} but further research is needed to understand how those causes and any other factors are related to the recent increases in spending growth rates.

Second, the uptick in spending growth occurred across all categories of services.⁵ More research is needed to understand how much of this growth can be attributed directly to price effects, as opposed to factors such as changes in the mix of services used, new technologies, or population demographics and health. Such research would provide a foundation for developing and implementing health policy reforms that could increase the value in the health care system and slow spending growth.

Third, although total out-of-pocket spending for enrollees in employer-sponsored insurance increased faster than general price inflation, it remained nearly unchanged as a share of total per capita spending in employer plans. Given the rise of enrollment in high-deductible health plans over the past decade, this result is somewhat surprising and indicates another area where more research is needed. According to a recent survey, the share of workers enrolled in high-deductible employer plans grew from 5 percent in 2007 to 29 percent in 2016.²⁷ Further

investigation into the complex relationships between benefit design and out-of-pocket spending is needed.

Our analysis builds and expands on decades of health services research by using commercial claims data for a more detailed study of observed health care spending trends than was previously possible.^{5,8} Yet more research is still needed, so that the base of knowledge about the largest US insured population continues to expand. Our key takeaway lessons highlight a path forward for research on the population with employer-sponsored insurance by identifying new questions and potential areas of focus where future research can have the greatest impact.

Conclusion

Looking back on the past decade of spending for the population with employer-sponsored insurance, we found that although spending increased annually, the growth rates were highest in 2008 and 2009, were generally lower for all categories of services during 2010–13, and have

rebounded in more recent years (2014–16). We also found that because growth patterns were similar across categories, the distribution of total spending across types of services remained largely unchanged. Also, although the overall share of health spending paid out of pocket by enrollees did not change, the distribution of out-of-pocket spending shifted somewhat from prescription drugs to outpatient and professional services.

The proportion of the US gross domestic product accounted for by health care expenditures is projected to grow to 19.7 percent in the next decade, and spending by private insurance plans will account for about 30 percent of that total.²⁸ It will be essential to continue to study the composition of health care spending for the population with employer-sponsored insurance, which has historically received less attention in part because access to claims data has been limited. Continued tracking of trends and a better understanding of the factors contributing to growth will, we hope, lead to the most appropriate and effective policy responses. ■

The authors acknowledge the Health Care Cost Institute's data contributors—Aetna, Humana, Kaiser Permanente, and UnitedHealthcare—in providing the claims data analyzed in this study. [Published online September 19, 2018.]

NOTES

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- 11 This study used two analytic data sets previously constructed by HCCI: one for information from 2007–11 data that was used for and is described in the 2012 *Health Care Cost and Utilization Report* (note 10), and another for information from 2012–16 that was used for and is described in the 2016 *Health Care Cost and Utilization*

- Report* (note 5). There are small population weighting differences between the two data sets, although the same basic methodological process was applied to both to create the spending metrics. Most importantly, the 2007–11 data do not include claims from Kaiser Permanente.
- 12 Health Care Cost Institute. 2016 health care cost and utilization report: analytic methodology: 2016V1.0 [Internet]. Washington (DC): HCCI; 2018 Jan 23 [cited 2018 Aug 15]. Available from: <http://www.healthcostinstitute.org/wp-content/uploads/2018/01/HCCI-2016-Methodology-v1.0-1.23.18.pdf>
 - 13 The annual enrolled population was calculated by summing the total number of enrolled member months within a year and dividing by twelve, which resulted in average person-years.
 - 14 Prescriptions that could not be identified as either brand-name or generic drugs were placed in a detailed category called ungroupable prescriptions. Spending on this category accounted for less than 1 percent of total spending in every year. Ungroupable prescriptions are not included in any of the analyses.
 - 15 The eleven detailed service subcategories are inpatient medical, inpatient surgery, and inpatient remainder; outpatient surgery, emergency department (ED) visits, and outpatient remainder; doctor visits, other professional services, and professional remainder; and brand-name prescriptions and generic prescriptions.
 - 16 The inflation adjustment was calculated using the Consumer Price Index for All Urban Consumers for all items. The inflation rate was multiplied by all 2007 dollars in our study, and the products are 2007 dollars adjusted for inflation. See Federal Reserve Bank of St. Louis. Consumer Price Index for All Urban Consumers: all items [Internet]. St. Louis (MO): FRED; [updated 2018 Aug 10; cited 2018 Aug 15]. Available from: <https://fred.stlouisfed.org/series/CPIAUCSL>
 - 17 To access the appendix, click on the Details tab of the article online.
 - 18 The National Health Expenditure Accounts estimate health care spending for the employer coverage population overall and decomposed by type of spending (see note 3). When spending on direct health care services from the accounts is compared to spending on direct health care services in the HCCI data, the numbers are substantively similar.
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Plans to change federal Medi-Cal funding could force some California counties to slash health coverage

September 18, 2018

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The number of Californians who gained health insurance grew by 3 million people after the Affordable Care Act expanded Medi-Cal coverage in 2014 and 2015. But anticipated federal funding changes could over time force counties to shoulder more of the cost of paying for health care, or cut back enrollment and programs, according to a study

([/publications/search/pages/detail.aspx?PubID=1771](#)) by the UCLA Center for Health Policy Research ([/](#)).

Read The Policy Brief

View: Rise in Medi-Cal Enrollment Corresponded to Increases in California County Health Spending During ACA Implementation
([/publications/search/pages/detail.aspx?PubID=1771](#))

Nearly one-third of the state's 33 million people under the age of 65 are enrolled in the health insurance program for low-income and disabled residents known in California as Medi-Cal (or Medicaid in the rest of the United States). However, the percentage of Californians enrolled in the program varies greatly by county, as does the amount of money each county is spending on health care after that expansion, according to the study.

If the federal government acts to cap Medicaid funding to states, California counties such as San Bernardino, San Joaquin, Riverside, Placer, Mendocino, Monterey, Fresno and the Northern/Sierra region could see public health care take a bigger bite of their budgets.

Under the current version of Medi-Cal, anyone who qualifies is guaranteed benefits, and the program grows in response to increases in enrollment and health care costs. That would change under a block grant.

"The counties that had a big increase in enrollment will have a tougher time sustaining the same level of coverage because under a capped block grant, funding is at a set level," said Shana Alex Charles ([/about/staff/pages/detail.aspx?StaffID=81](#)), faculty associate at the center and the study's lead author. "If you have an economic downturn and more people need Medi-Cal for health coverage, many counties will have to make a hard choice: the financial health of their county or the physical and mental health of their Medi-Cal beneficiaries."

The study, which uses data from the California Health Interview Survey and the California State Controller's Office, contains maps as well as Medi-Cal enrollment and expenditure figures for 44 counties or county groups on:

- **The percentage of residents under 65 who were enrolled during 2014-15:** Fresno County had the highest proportion, 49 percent; Marin County the lowest, 10 percent.
- **The percentage point change in enrollment from 2012 to 2014-2015:** San Joaquin County had the highest increase, 22 percent; Madera and Yolo counties the largest declines, each down 5 percent.
- **Per capita expenditures in 2015:** Humboldt County had highest expense, \$387 per capita; Yuba County the lowest, \$79 per capita.

- **The percent change in public health expenditures per capita from 2012 to 2015:** Riverside County had largest increase at 39 percent; Yuba County the biggest decline, down 12 percent.

Read the study: *Rise in Medi-Cal Enrollment Corresponded to Increases in California County Health Spending During ACA Implementation* (</publications/search/pages/detail.aspx?PubID=1771>)

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September 2018

Rise in Medi-Cal Enrollment Corresponded to Increases in California County Health Spending During ACA Implementation

Shana Alex Charles, Francis Nepomuceno, and Gerald F. Kominski

SUMMARY: As Medi-Cal enrollment expanded during the early years of ACA expansion (2014 and 2015), county health department spending in California also swelled. For most counties and regions in the state, the two measures tracked closely. However, exceptions in Northern California (with high enrollment and

low spending growth) and Central California (low enrollment but high spending growth) show that other factors may also have had an effect. Importantly, if Medi-Cal is turned into a capped block-grant program at the federal level, counties would be heavily impacted and could be left with budget shortages.

“The levels of {Medi-Cal} coverage, as well as the gains in coverage, were not distributed uniformly statewide.”

Following the expansion of Medi-Cal through the Patient Protection and Affordable Care Act of 2010 (ACA), California’s counties moved swiftly to increase enrollment in the program by more than 3 million nonelderly adults and children by the end of 2015.¹ Statewide, enrollment in Medi-Cal reached nearly one-third of the population (31.1 percent) by 2015.¹ But the levels of coverage, as well as the gains in coverage, were not distributed uniformly statewide (Exhibit 1). San Joaquin County had the largest increase in enrollment (22 percent), as well as one of the largest increases in total county health expenditures (25 percent; Exhibit 1).

Often, the greatest increases in Medi-Cal enrollment corresponded to increased public health department expenditures, as seen in Riverside, Placer, Mendocino, Monterey, and Fresno counties (Exhibit 1). County health department spending trends for the Northern/Sierra region and San Bernardino County, two areas with similar levels of Medi-Cal enrollment post-ACA, illustrate the linkages between public investment and enrollment.

Northern Californian counties (i.e., Del Norte, Siskiyou, Lassen, etc.) retained their consistently high enrollment in the program, with 31 percent of their combined population enrolled in Medi-Cal in 2015 (Exhibits 1 and 2). However, this actually reflected a slight decline in enrollment in these counties from the pre-ACA expansion period (-3 percent; Exhibits 1 and 3). In contrast, San Bernardino County had enrollment levels similar to those of the Northern California counties in 2015 (35 percent; Exhibits 1 and 2), but this was the result of rapid growth in the program (+15 percent; Exhibits 1 and 3).

Surprisingly, these trends did not necessarily track with the overall level of county health department expenditures. When the per capita amount of dollars spent on all county health department functions was assessed using data from the California State Controller’s Office, the Northern Region counties emerged as some of the highest per capita spenders in California, while spending in more populous San Bernardino County was among the lowest in the state (Exhibit 4).

Exhibit 1

Medi-Cal Enrollment and Per Capita County Health Department Spending by County, California, 2015

County	% Enrolled in Medi-Cal in 2014/2015	Change in Medi-Cal Enrollment from 2012 to 2014/2015	Per Capita Expenditures 2015	% Increase in Per Capita Expenditures from 2012 to 2015
Alameda	22%	3%	\$319	14%
Butte	35%	13%	\$305	-6%
Contra Costa	20%	7%	\$214	6%
El Dorado	25%	8%	\$152	1%
Fresno	49%	11%	\$201	24%
Humboldt	29%	-2%	\$387	11%
Imperial	47%	9%	\$336	28%
Kern	41%	8%	\$168	1%
Kings	48%	9%	\$204	8%
Lake	43%	16%	\$271	16%
Los Angeles	32%	8%	\$293	14%
Madera	44%	-5%	\$156	18%
Marin	10%	4%	\$292	-3%
Mendocino	38%	15%	\$337	24%
Merced	43%	18%	\$210	27%
Monterey	33%	11%	\$349	25%
Napa	27%	18%	\$335	5%
Nevada	16%	2%	\$261	11%
Orange	24%	12%	\$122	5%
Placer	19%	11%	\$155	29%
Riverside	33%	12%	\$199	39%
Sacramento	28%	11%	\$292	0%
San Benito	36%	7%	\$176	8%
San Bernardino	35%	15%	\$163	22%
San Diego	27%	13%	\$157	7%
San Francisco	21%	6%	N/A	N/A
San Joaquin	42%	22%	\$192	25%
San Luis Obispo	17%	9%	\$271	15%
San Mateo	23%	13%	\$310	17%
Santa Barbara	20%	3%	\$295	24%
Santa Clara	21%	9%	\$265	21%
Santa Cruz	28%	12%	\$362	9%
Shasta	34%	19%	\$275	7%
Solano	24%	5%	\$253	10%
Sonoma	21%	5%	\$257	12%
Stanislaus	34%	6%	\$163	20%
Sutter	40%	17%	\$347	-4%
Tulare	44%	13%	\$209	17%
Ventura	21%	7%	\$225	5%
Yolo	19%	-5%	\$172	23%
Yuba	43%	11%	\$79	-12%
Del Norte, Siskiyou, Lassen, Trinity, Modoc, Plumas, Sierra	31%	-3%	\$382	2%
Tehama, Glenn, Colusa	39%	12%	\$313	5%
Tuolumne, Calaveras, Amador, Inyo, Mariposa, Mono, Alpine	28%	12%	\$304	4%

Source: 2012, 2014, and 2015 California Health Interview Surveys; 2012 and 2015 California State Controller data

N/A: "not available"

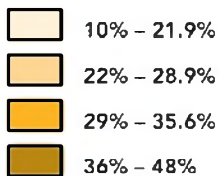
Note: Total county health department expenditures include public health, mental health, health care, and other department initiatives.

Percent Enrollment in Medi-Cal by County Among Nonelderly Adults and Children, Ages 0-64, California, 2014-2015

Exhibit 2



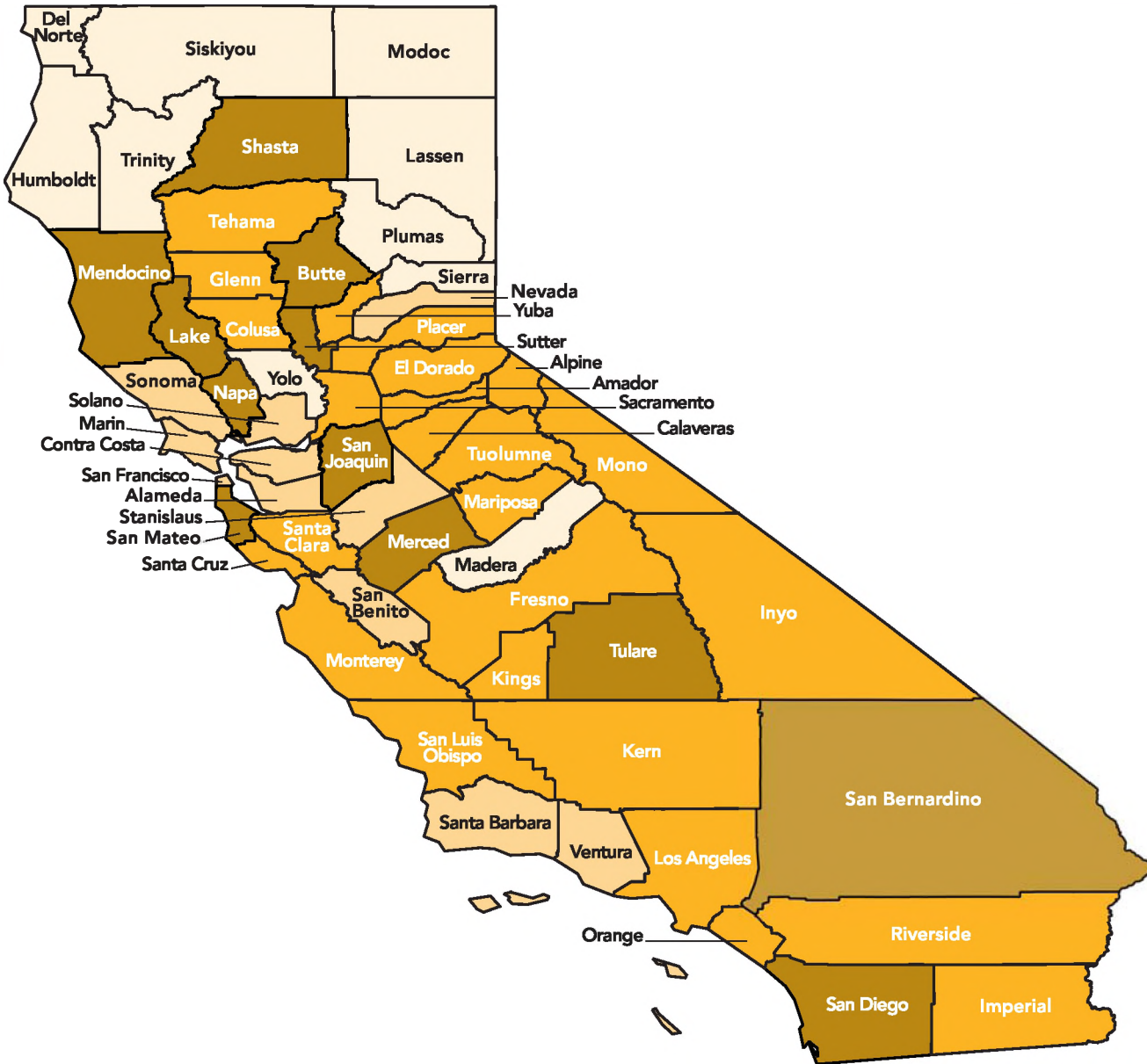
Percentage of Population Enrolled in Medi-Cal in 2014-2015



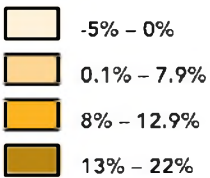
Source: 2014 and 2015 California Health Interview Surveys

Exhibit 3

Change in Percent Enrollment in Medi-Cal by County Among Nonelderly Adults and Children, Ages 0-64, California, 2012 to 2015



Percent Enrollment Change from 2012 to 2015



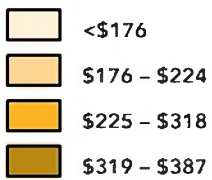
Source: 2012 and 2015 California Health Interview Surveys

Public Health Spending per Capita, Ages 0-64, by County Health Department, California, 2015

Exhibit 4



2015 Per Capita Spending



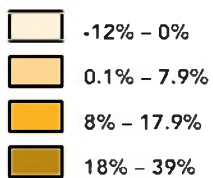
Source: 2015 California Health Interview Survey (population estimate) and California State Controller's Office (county health department spending)

Exhibit 5

Percent Change in Public Health Spending per Capita, Ages 0-64, by County Health Department, California, 2012 to 2015



Percentage of Increase in Health Expenditures from 2012-2015



Source: 2012 and 2015 California Health Interview Surveys (population estimates) and California State Controller's Office (county health department spending)

However, when examining the change in county health department spending from 2012 (pre-ACA Medi-Cal expansion) to 2015 (post-ACA Medi-Cal expansion), a different picture emerges. The Northern California counties maintained roughly the same level of spending per capita (Exhibit 5), which corresponded to the decrease in enrollment in Medi-Cal overall as a percentage of the population. San Bernardino County increased its public health expenditures by 22 percent, although the overall level still remained low compared to the rest of the state (Exhibits 1 and 5). However, some exceptions to this pattern can be seen in the data. Butte County, which had nearly as much of a percent increase in enrollment as San Bernardino County, decreased its total expenditures overall. Madera and Yolo counties, in contrast, had decreased enrollment but fairly large increases in spending.

California counties have moved forward with enrollment efforts on the ground, expanding both the number of Medi-Cal enrollees and overall health expenditures by county health departments. That progress may be threatened by cuts to Medicaid at the federal level, most notably by the possible transformation of the program into a capped block grant. This could, over time, strangle investment in Medicaid growth and erode the gains that California has made until now.

Data Source and Methods

This policy brief presents county-level data (using the 44 strata of counties and county groups) from the 2014 and 2015 California Health Interview Surveys (CHIS), as compared to the 2012 CHIS. Health insurance coverage uses a “current point-in-time” variable to assess type or lack of coverage at the time of the CHIS interview. For more information on the CHIS instrument, including funding for the survey, please see www.chis.ucla.edu. In order to provide stable estimates for the small counties, health insurance rates were pooled between 2014 and 2015. County health department expenditure data were obtained from the California State Controller’s Office.

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Endnote

- 1 Becker T. 2017. *Number of Uninsured in California Remained at Record Low in 2016*. Los Angeles, CA: UCLA Center for Health Policy Research.

“Cuts to Medicaid at the federal level ... could, over time, strangle investment in Medicaid growth and erode the gains that California has made.”

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Thirty-three states and the District of Columbia have expanded Medicaid since 2014. As experience with Medicaid expansion grows, states and independent researchers are generating studies that evaluate its impacts at both the state and national levels. This resource highlights articles published since January 2018 that report on those impacts, organized by health access and outcomes, economic impacts, and coverage impacts. For additional expansion resources, visit shvs.org.

Health Access and Outcomes

In this section, we review studies that show the impact of Medicaid expansion on access to and the use of health care services, including the use of preventive care, prescriptions, and earlier treatment for certain health conditions, as well as improved health outcomes, such as reductions in infant mortality.

Medicaid Expansion and Infant Mortality in the United States

The infant mortality rate declined in Medicaid expansion states (5.9 to 5.6 deaths per 1,000 live births) from 2014 to 2016; the rate rose in non-expansion states (6.4 to 6.5 deaths per 1,000 live births) during the same time period. In examining declines by race/ethnicity, declines were most striking among African American infants. The infant mortality rate decline in African American infants in Medicaid expansion states was more than twice the decline in African American infants in non-Medicaid expansion states.

Bhatt C and Beck-Sague C, "Medicaid expansion and infant mortality in the United States." *Am J Public Health*. 2018; 108(4): e1–e3. <http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2017.304218>. Published April 2018. Accessed August 27, 2018.

Racial/Ethnic Differential Effects of Medicaid Expansion on Health Care Access

Among low-income, nonelderly adults, Medicaid expansion was associated with gains in health insurance coverage, enrollees having personal doctors, and affordability. The expansion had differential effects among racial/ethnic groups, with Hispanics seeing the fewest benefits.

Yue D, Rasmussen P, and Ponce N, "Racial/ethnic differential effects of Medicaid expansion on health care access," *Health Serv Res*. 2018, abstract only. <http://onlinelibrary.wiley.com/doi/10.1111/1475-6773.12834/abstract>. Published February 2018. Accessed August 27, 2018.

Association of the Affordable Care Act Medicaid Expansion with Access to and Quality of Care for Surgical Conditions

Medicaid expansion was associated with a 7.5 percentage point increase in insurance coverage for patients with one of five common surgical conditions; earlier presentation of common diagnoses; and earlier obtainment of care in the disease course, with an increased probability of patients receiving optimal care for those conditions.

Loehrer A, Chang DC, Scott JW, et al., "Association of the Affordable Care Act Medicaid expansion with access to and quality of care for surgical conditions," *JAMA Surg*. 2018; 153(3), abstract only. <https://jamanetwork.com/journals/jamasurgery/article-abstract/2670459?redirect=true>. Published March 2018. Accessed August 27, 2018.

Community Health Centers: Growing Importance in a Changing Health Care System

In Medicaid expansion states, community health centers were found to have higher average revenue than community health centers in non-expansion states, with Medicaid serving as a more important source of revenue in expansion states. That higher revenue translates into expansion state health centers serving a higher average number of patients. These health centers were also more likely to provide substance use disorder services, mental health services, and vision care services than health centers in non-expansion states.

Rosenbaum S, et al., "Community health centers: Growing importance in a changing health care system," *Henry J. Kaiser Family Foundation*. 2018. <https://www.kff.org/report-section/community-health-centers-growing-importance-in-a-changing-health-care-system-issue-brief/>. Published March 2018. Accessed August 27, 2018.

The Effects of Medicaid Expansion Under the ACA: A Systematic Review

Expansion was associated with increases in: insurance coverage among potentially eligible individuals; primary care, mental health and preventive visit service use; and quality of care related to improved glucose monitoring for patients with diabetes, better controlled hypertension, improved rates of prostate cancer screening, and higher rates of Pap testing.

This study analyzed 77 published studies. In addition to increases in service use and quality of care, it also found that Medicaid expansion was associated with increases in coverage and Medicaid expenditures, and improved hospital financial performance.

Mazurenko O, et al., "The effects of Medicaid expansion under the ACA: A systematic review," *Health Affairs*. 2018; 37(6), abstract only. <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.1491>. Published June 2018. Accessed August 27, 2018.

The Role of Health Insurance on Treatment for Opioid Use Disorders: Evidence From the Affordable Care Act Medicaid Expansion

Opioid admissions to specialty treatment facilities increased 18 percent in expansion states, most of which involved outpatient medication-assisted treatment (MAT). Medicaid opioid admissions increased 113 percent without crowding out non-Medicaid admissions. These effects were largest in expansion states with comprehensive MAT coverage.

Meinhofer A and Witman A, "The role of health insurance on treatment for opioid use disorders: Evidence from the Affordable Care Act Medicaid expansion," *J Health Econ*. 2018; 60:177–197, abstract only. <https://www.sciencedirect.com/science/article/abs/pii/S0167629617311530>. Published July 2018. Accessed August 27, 2018.

Medicaid Eligibility Expansions May Address Gaps in Access to Diabetes Medications

Medicaid expansion was associated with 30 additional diabetes prescriptions filled per 1,000 population among adults ages 20 to 64 in 2014 and 2015, relative to experience in states that did not expand Medicaid eligibility. Overall, prescription fills for insulin and for newer medications (e.g., rapid- and long-acting insulin analogues) increased 40 percent and 39 percent respectively among Medicaid adults in expansion states.

Myerson R, Lu T, Tonnu-Mihara I, and Huang E, "Medicaid eligibility expansions may address gaps in access to diabetes medications," *Health Affairs*. 2018; 37(8), abstract only. <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2018.0154>. Published August 2018. Accessed August 27, 2018.

2018 Ohio Medicaid Group VIII Assessment: A Follow-Up to the 2016 Ohio Medicaid Group VIII Assessment

Among Ohio's Medicaid expansion enrollees, use of primary care as a usual source of care increased from 71.2 percent in 2016 to 78.7 percent in 2018. Emergency department utilization decreased by nearly 17 percent after two years of continuous enrollment in Medicaid expansion. The percentage of expansion enrollees with a primary opioid use disorder diagnosis receiving treatment increased from 93.8 percent in 2015 to 95.6 percent in 2017. Ohio's expansion enrollees also were more than three times as likely to report that their physical and mental health had improved since enrolling in Medicaid.

In addition to impacts on health access and outcomes, the study also reported that more than 80 percent of employed Medicaid expansion enrollees reported that Medicaid made it easier to work, while 60 percent of unemployed expansion enrollees reported that Medicaid made it easier to look for work. The study also reported that the uninsured rate among Ohio's adults fell by 50 percent after Ohio expanded Medicaid.

"2018 Ohio Medicaid Group VIII assessment: A follow-up to the 2016 Ohio Medicaid Group VIII assessment," *Ohio Department of Medicaid*. 2018. <http://medicaid.ohio.gov/Portals/0/Resources/Reports/Annual/Group-VIII-Final-Report.pdf>. Published August 2018. Accessed August 27, 2018.

Association of Access to Family Planning Services with Medicaid Expansion Among Female Enrollees in Michigan

More than one-third of low-income women of reproductive age in Michigan reported increased access to birth control and family planning services after enrollment in the Healthy Michigan Plan, Michigan's Section 1115 Medicaid Expansion waiver program.

Moniz MH, et al. "Association of access to family planning services with Medicaid expansion among female enrollees in Michigan," *JAMA Network Open*. 2018; 1(4). <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2698636>. Published August 31, 2018. Accessed September 4, 2018.

Economic Impacts

The studies that follow review the impact of Medicaid expansion on state budgets, including resulting budget savings and additional revenue; job creation and increased employment; and hospital closures.

Understanding the Relationship Between Medicaid Expansions and Hospital Closures

Medicaid expansion was associated with substantially lower likelihoods of hospital closures, particularly in rural markets and counties with large numbers of uninsured adults before Medicaid expansion.

Lindrooth R, Perrillon M, Hardy R, and Tung G, "Understanding the relationship between Medicaid expansions and hospital closures," *Health Affairs*. 2018; 37(1), abstract only <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.0976>. Published January 2018. Accessed August 27, 2018.

Medicaid Expansion and the Louisiana Economy

As of March 2018, Medicaid expansion has created nearly 19,200 jobs, enhanced state revenues by more than \$100 million, and enhanced local revenues by nearly \$75 million across Louisiana and political subdivisions.

Richardson JA, Llorens JJ, and Heidelberg RL, "Medicaid expansion and the Louisiana economy," *LSU*. 2018. <http://gov.louisiana.gov/assets/MedicaidExpansion/MedicaidExpansionStudy.pdf>. Published March 2018. Accessed August 27, 2018.

Medicaid Expansion: How It Affects Montana's State Budget, Economy, and Residents

Montana's state budget savings through state fiscal year 2017 exceeded \$36 million as a result of Medicaid expansion. Medicaid expansion also helped to reduce hospitals' uncompensated care costs by more than \$100 million in 2016.

In addition to economic impacts, this study found that over 65,000 expansion adults accessed preventive services in calendar years 2016 through 2017.

Manatt Health, "Medicaid expansion: How it affects Montana's state budget, economy, and residents," *Montana Healthcare Foundation*. 2018. https://mthcf.org/wp-content/uploads/2018/06/Manatt-MedEx_FINAL_6.1.18.pdf. Published June 2018. Accessed August 27, 2018.

Coverage Impacts

Here we highlight studies that look at the impact of Medicaid expansion on rates of uninsurance among low-income adults generally and specifically with respect to low-income women of reproductive age and individuals with substance use disorders.

Medicaid Versus Marketplace Coverage for Near-Poor Adults: Effects on Out-Of-Pocket Spending and Coverage

For adults with family incomes of 100 percent to 138 percent of the federal poverty level, Medicaid expansion was associated with a 4.5 percentage point reduction in the probability of being uninsured as well as reduced out-of-pocket spending. Relative to marketplace coverage, Medicaid expansion reduced average total out-of-pocket spending by \$344, and compared to marketplace coverage in non-expansion states, Medicaid expansion was associated with a 4.1 percentage point reduction in the probability of having a high out-of-pocket premium spending burden (i.e., spending more than 10% of income), and a 7.7 percentage point reduction in the probability of having any out-of-pocket spending.

Blavin F, Karpman M, Kenney G, and Sommers B, "Medicaid versus Marketplace coverage for near-poor adults: Effects on out-of-pocket spending and coverage," *Health Affairs*. 2018; 37(2), abstract only <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.1166>. Published January 2018. Accessed August 27, 2018.

Impacts of the Affordable Care Act's Medicaid Expansion on Women of Reproductive Age: Differences by Parental Status and State Policies

Medicaid expansion decreased uninsurance among low-income women of reproductive age (19 to 44 years old) by 13.2 percentage points. The greatest effects were experienced by women without dependent children and women residing in states with relatively lower pre-ACA Medicaid eligibility levels, or with no family planning waiver before the ACA.

Johnston E, Strahan A, Joski P, Dunlop A, and Adams EK, "Impacts of the Affordable Care Act's Medicaid expansion on women of reproductive age: Differences by parental status and state policies," *Women's Health Issues*. 2018; 28(2):122–129. [http://www.whijournal.com/article/S1049-3867\(17\)30242-6/pdf](http://www.whijournal.com/article/S1049-3867(17)30242-6/pdf). Published February 2018. Accessed August 27, 2018.

Medicaid Expansion Dramatically Increased Coverage for People with Opioid-Use Disorders, Latest Data Show

The share of hospitalizations in which patients with opioid-use disorders (OUDs) were uninsured fell dramatically in states that expanded Medicaid (13.4% in 2013 versus 2.9% in 2015) as many uninsured people coping with OUDs gained coverage through Medicaid expansion. Opioid-related hospitalizations were higher in expansion than non-expansion states as early as 2011 and have been growing at roughly the same rate in expansion and non-expansion states since expansion took effect, rebutting the claim that Medicaid expansion has contributed to the opioid crisis.

Broaddus M, Bailey P, and Aron-Dine A, “Medicaid expansion dramatically increased coverage for people with opioid-use disorders, latest data show,” *Center on Budget and Policy Priorities*. 2018. <https://www.cbpp.org/research/health/medicaid-expansion-dramatically-increased-coverage-for-people-with-opioid-use>. Published February 2018. Accessed August 27, 2018.

ACA Medicaid Expansion: Benefit for Women with Gynecologic Cancers

A greater percentage of women with gynecologic cancers (i.e., cervical, uterine or ovarian cancer) were uninsured in non-expansion states compared to expansion states (11.5% versus 5.6%). Overall, the number of uninsured dropped by 56 percent in states that participated in Medicaid expansion and by 14 percent in those that did not. The benefits of Medicaid expansion were most dramatic among African American patients, who saw a 65 percent decline in uninsured status in Medicaid expansion states versus a 13 percent relative decrease in non-expansion states.

Furlow B, “ACA Medicaid expansion: Benefit for women with gynecologic cancers,” *SGO*. 2018. <http://www.cancernetwork.com/sgo/aca-medicaid-expansion-benefit-women-gynecologic-cancers>. Published March 2018. Accessed August 27, 2018.

Louisiana Health Insurance Survey, 2017

Medicaid expansion has contributed to a drop in the uninsured rate among nonelderly adults in Louisiana. In 2017, the uninsured rate among this population was 11.4 percent, compared to 22.7 percent in 2015. Among Medicaid-eligible children, 2.6 percent remain uninsured.

Barnes SR, Henderson M, Terrell D, and Virgets S, “Louisiana health insurance survey, 2017,” *LSU*. 2018. <http://ldh.la.gov/assets/media/2017-Louisiana-Health-Insurance-Survey-Report.pdf>. Published August 2018. Accessed August 27, 2018.

Impact of Medicaid Expansion on Coverage and Treatment of Low-Income Adults with Substance Use Disorders

The percentage of low-income expansion state residents with substance use disorders who were uninsured decreased from 34.4 percent in 2012–2013 to 20.4 percent in 2014–2015, while the corresponding decrease among residents of non-expansion states was from 45.2 percent to 38.6 percent. There was no corresponding increase in overall substance use disorder treatment in either expansion or non-expansion states.

Olfson M, Wall M, Barry CL, Mauro C, and Mojtabai R, “Impact of Medicaid expansion on coverage and treatment of low-income adults with substance use disorders,” *Health Affairs*. 2018; 37(8), abstract only. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.0124>. Published August 2018. Accessed August 27, 2018.

Comparison of Insurance Status and Diagnosis Stage among Patients with Newly Diagnosed Cancer Before vs After Implementation of the Patient Protection and Affordable Care Act

Almost all states experienced a reduction in the percentage of uninsured patients in 2014, with greater decreases in expansion than non-expansion states. In states that expanded Medicaid, individuals were diagnosed with cancer at a slightly earlier stage for most cancer types.

Han X, Yabroff KR, Ward E, Brawley OW, and Jemal A, "Comparison of insurance status and diagnosis stage among patients with newly diagnosed cancer before vs after implementation of the Patient Protection and Affordable Care Act," *J Clin Oncol*. 2018. <https://jamanetwork.com/journals/jamaoncology/article-abstract/2697226>. Published online August 23, 2018. Accessed September 5, 2018.

Association of State Medicaid Expansion with Rate of Uninsured Hospitalizations for Major Cardiovascular Events, 2009–2014

States that expanded Medicaid saw a 5.8 percentage point decrease in the proportion of uninsured hospitalizations for major cardiovascular events compared with non-expansion states. Expansion states also had an 8.4 percentage point increase in the proportion of Medicaid hospitalizations after Medicaid expansion relative to non-expansion states.

Akhabue E, Pool LR, Yancy CW, et al. "Association of state Medicaid expansion with rate of uninsured hospitalizations for major cardiovascular events, 2009–2014," *JAMA Network Open*. 2018; 1(4). <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2698077>. Published August 24, 2018. Accessed September 4, 2018.

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Newsroom

FOR IMMEDIATE RELEASE: THURSDAY, SEPTEMBER 13, 2018

New American Community Survey Statistics for Income, Poverty and Health Insurance Available for States and Local Areas

SEPTEMBER 13, 2018

RELEASE NUMBER CB18-145

Statistics for More Than 40 Demographic and Economic Topics Provide Detailed Profiles of Communities Nationwide

SEPT. 13, 2018 — The U.S. Census Bureau today released its most detailed look at America’s people, places and economy with new statistics on income, poverty, health insurance and more than 40 other topics from the American Community Survey (ACS).

Many large metropolitan areas saw an increase in income and a decrease in poverty rates between 2016 and 2017. During that same period, the health insurance coverage rate was 91.4 percent for the civilian noninstitutionalized population living inside metropolitan areas and 90.3 percent for the population

living outside metropolitan areas. Today's release provides statistics for U.S. communities with populations of 65,000 or more.

“The American Community Survey provides a wide range of important statistics about all communities in the United States,” Census Bureau Social, Economic and Housing Statistics Division Chief David Waddington said. “It gives communities the current information they need to plan investments and services. Retailers, homebuilders, fire departments, and town and city planners are among the many private- and public-sector decision-makers who count on these annual statistics.”

Below are some of the local-level income, poverty and health insurance statistics from the ACS that complement the national-level statistics released on Wednesday, Sept. 12, 2018. These national-level statistics are from the Census Bureau's Current Population Survey (CPS). The CPS is the leading source for national-level data on income, poverty and health insurance, while the ACS is the leading source for community and local-level data.

Income

- Real median household income in the United States increased 2.6 percent between 2016 and 2017. The 2017 U.S. median household income was \$60,336.
- The 2017 median household income was the highest measured by the ACS since it was fully implemented in 2005.
- Median household income was lower than the U.S. median in 29 states and higher in 18 states and the District of Columbia. Nebraska, Oregon and Wyoming had median incomes not statistically different from the U.S. median. Visit the news graphic to see where the rest of the states fall.
- Median household income increased in 17 of the 25 most populous metropolitan areas between 2016 and 2017. None of these 25 metropolitan areas experienced a statistically significant decrease. Changes for eight of these 25 metropolitan areas were not statistically significant.

Income Inequality

- Income inequality, as measured by the Gini index, was essentially unchanged from 2016 to 2017. The Gini index for the United States in the 2017 ACS (0.482) was not statistically different from the 2016 ACS estimate. The Gini index is a standard economic measure of income inequality. A score of 0.0 is perfect equality in income distribution. A score of 1.0 indicates total inequality where one household has all of the income.
- Five states (California, Connecticut, Florida, Louisiana and New York), the District of Columbia and Puerto Rico had Gini indices higher than the United States. Ten were not statistically different from the U.S. Gini index; the remaining 35 were lower.
- Most states experienced no statistical change in income inequality from 2016 to 2017. Income inequality increased in four states: Alaska, Delaware, Massachusetts and Pennsylvania. Income inequality decreased in two states: Alabama and California.

Poverty

- Between 2016 and 2017, poverty rates declined in 20 states and the District of Columbia. The poverty rate increased in two states: Delaware and West Virginia. Delaware saw its rate increase from 11.7 percent to 13.6 percent and the rate for West Virginia rose from 17.9 percent to 19.1 percent.
- States with poverty rates of 18.0 percent or higher were Louisiana, Mississippi, New Mexico and West Virginia.
- Thirteen states had poverty rates of 11.0 percent or lower. Visit the news graphic to see the 2017 poverty rates for all 50 states and the District of Columbia.

- In 13 of the 25 most populous metropolitan areas, the poverty rate declined between 2016 and 2017. The poverty rate declined for the third consecutive year in eight of these 13 metropolitan areas.

Health Insurance

- Between 2016 and 2017, the health insurance coverage rate decreased by 0.2 percentage points for the civilian noninstitutionalized population living inside metropolitan areas. There was no statistically significant change in the health insurance coverage rate for the population living outside metropolitan areas during this period.
- In 2017, the Boston metropolitan area had the highest health insurance coverage rate (97.0 percent) among the 25 most populous metropolitan areas. The Houston metropolitan area had the lowest rate (81.8 percent). Visit the news graphic to see coverage rates for the 25 most populous metropolitan areas.
- Between 2016 and 2017, the percentage of people covered by health insurance increased in four of the 25 most populous metropolitan areas. Increases in the rate of coverage ranged from 0.4 percentage points to 1.0 percentage points. In addition, six metro areas had decreases in the percentage of people covered by health insurance. Decreases in the rate of coverage ranged from 0.4 percentage points to 0.9 percentage points. The remaining 15 most populous metro areas showed no significant change.
- Between 2013 and 2017, the Los Angeles, Miami and Riverside metropolitan areas experienced the largest increases in the rate of health insurance coverage among the 25 most populous metropolitan areas. Their rates of health insurance coverage increased by 9 percentage points or more.
- National and state-level health insurance data from the CPS and ACS were released earlier this week.

For more information on the topics included in the ACS, ranging from educational attainment to computer use to commuting, please visit [census.gov](https://www.census.gov). To access the full set of statistics released today, please visit [American FactFinder](https://www.americanfactfinder.gov).

Additional Topics and Findings Released Today From the ACS

New Data Dissemination Preview Platform

The Census Bureau is currently working to streamline online data dissemination to be more customer-driven and user-friendly by creating one centralized and standardized platform to underlie searches on census.gov. Beginning Sept. 13, some 2017 ACS statistics, including detailed tables, data profiles, subject tables and comparison profiles, will be available on the preview site at data.census.gov, in parallel with the data released on American FactFinder. We encourage you to take a look and provide your thoughts on our work in progress at cedsci.feedback@census.gov.

New Data Visualization Tools

The Census Bureau's ACS Digital Data Wheel allows users to explore and compare social, economic, housing, and demographic and economic characteristics from all states, U.S. congressional districts and metropolitan statistical areas.

The second visualization, "What can you learn from the American Community Survey?" answers commonly asked demographic and socio-economic questions

using ACS data. Users can visually explore characteristics of states, U.S. congressional districts and metropolitan statistical areas with an interactive map.

Additional Annual Releases

In the upcoming months the Census Bureau will release additional ACS data, including 2017 ACS supplemental tables and ACS five-year statistics (2013-2017).

These statistics would not be possible without the participation of the randomly selected households throughout the country that participated in the ACS.

###

Note: Statistics from sample surveys are subject to sampling and nonsampling error. All comparisons made in the reports have been tested and found to be statistically significant at the 90 percent confidence level, unless otherwise noted. Please consult the tables for specific margins of error. For more information, go

to <https://www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>.

Changes in survey design from year-to-year can affect results. For more information on changes affecting the 2017 statistics, see

<https://www.census.gov/programs-surveys/acs/news/data-releases/2017.html>.

For guidance on comparing 2017 American Community Survey statistics with previous years and the 2010 Census, see <https://www.census.gov/programs-surveys/acs/guidance/comparing-acs-data.html>.

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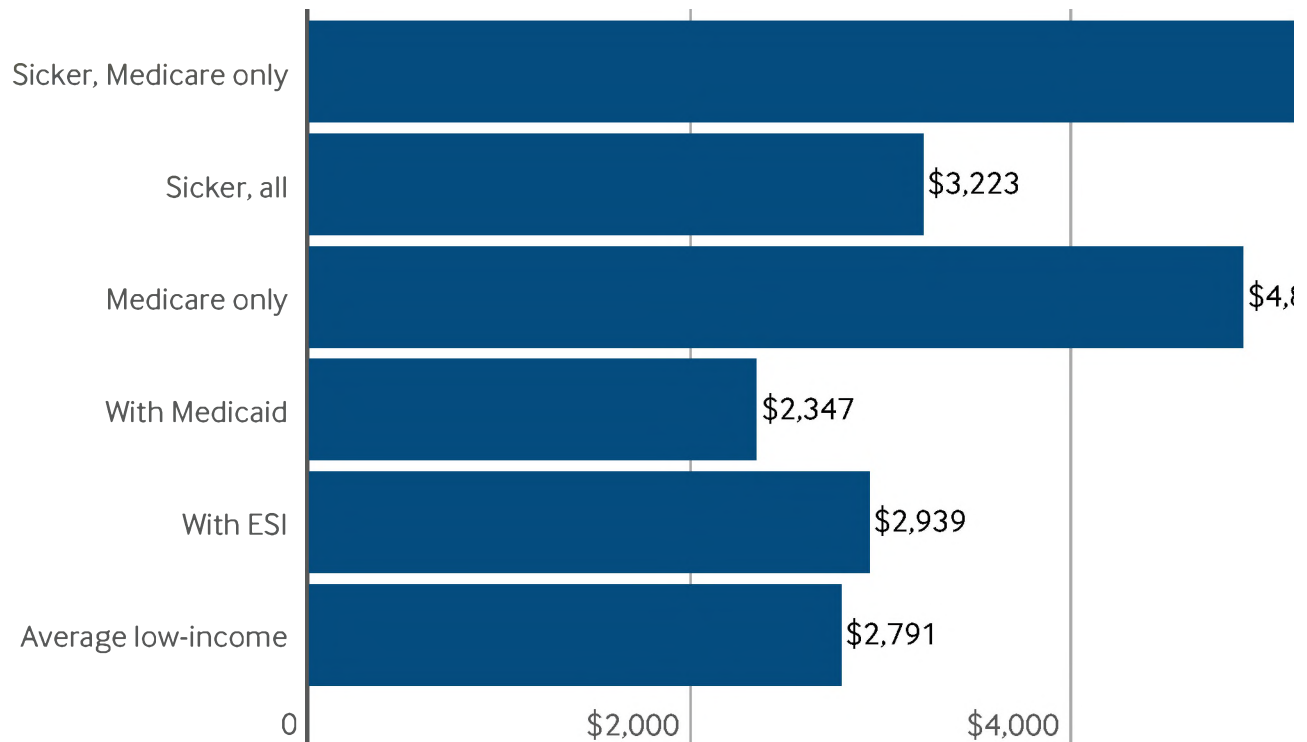
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Average Annual Out-of-Pocket Costs for Medical Care by Coverage and Health: Beneficiaries with Incomes <200% Poverty

September 12, 2018

Exhibit 3

Average Annual Out-of-Pocket Costs for Medical Care: Beneficiaries with Incomes <200% Poverty



 [Download data](#)

Data: Roger C. Lipitz Center analysis of 2012 Medicare Current Beneficiary Survey projected to 2016.

Notes: ESI = employer-sponsored insurance. Sicker refers to someone who has cognitive or physical function conditions.

Source: Cathy Schoen et al., [A Policy Option to Enhance Access and Affordability for Medicare's Low-Income](#) (Sept. 2018).

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Health Insurance Coverage in the United States: 2017

Current Population Reports

By Edward R. Berchick, Emily Hood, and Jessica C. Barnett

Issued September 2018

P60-264



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Health Insurance Coverage in the United States: 2017

Issued September 2018

P60-264



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Health Insurance Coverage in the United States: 2017

Introduction

Health insurance is a means for financing a person's health care expenses. While the majority of people have private health insurance, primarily through an employer, many others obtain coverage through programs offered by the government. Other individuals do not have health insurance coverage at all (see the text box "What Is Health Insurance Coverage?").

Over time, changes in the rate of health insurance coverage and the distribution of coverage types may reflect economic trends, shifts in the demographic composition of the population, and policy changes that affect access to care. Several such

policy changes occurred in 2014, when many provisions of the Patient Protection and Affordable Care Act went into effect (see the text box "Health Insurance Coverage and the Affordable Care Act").

This report presents statistics on health insurance coverage in the United States in 2017, changes in health insurance coverage rates between 2016 and 2017, as well as changes in health insurance coverage rates between 2013 and 2017.¹ The statistics in this report are based on information collected in two surveys conducted by the U.S. Census Bureau, the Current Population Survey Annual

¹ For a discussion of measuring change over time with the CPS ASEC, see Appendix B.

Social and Economic Supplement (CPS ASEC) and the American Community Survey (ACS) (see the text box "Two Measures of Health Insurance Coverage"). Throughout the report, unless otherwise noted, estimates come from the CPS ASEC.

Highlights

- In 2017, 8.8 percent of people, or 28.5 million, did not have health insurance at any point during the year. The uninsured rate and number of uninsured in 2017 were not statistically different from 2016 (8.8 percent or 28.1 million) (Figure 1 and Table 1).²
- The percentage of people with health insurance coverage for all or part of 2017 was 91.2 percent, not statistically different from the rate in 2016 (91.2 percent). Between 2016 and 2017, the number of people with health insurance coverage increased by 2.3 million, up to 294.6 million (Table 1).
- In 2017, private health insurance coverage continued to be more prevalent than government coverage, at 67.2 percent and 37.7 percent, respectively.³ Of the subtypes of health insurance coverage, employer-based insurance was the most common, covering 56.0 percent of the population for some or all of the calendar year, followed by Medicaid (19.3 percent), Medicare (17.2 percent),

² For a discussion of the quality of the CPS ASEC health insurance coverage estimates, see Appendix B.

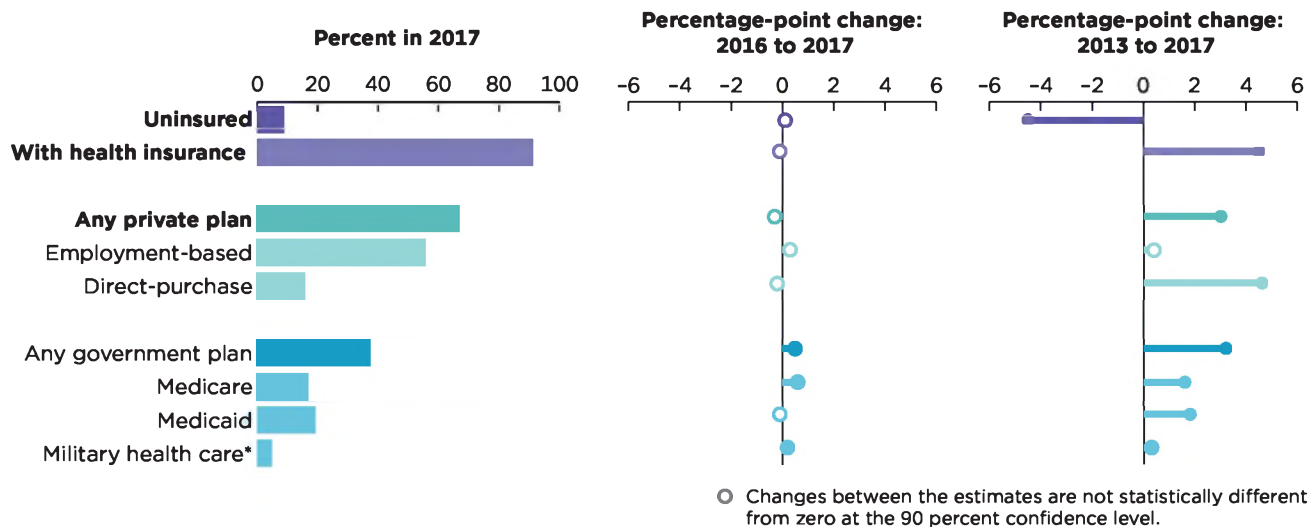
³ Some people may have more than one coverage type during the calendar year.

What Is Health Insurance Coverage?

Health insurance coverage in the Current Population Survey Annual Social and Economic Supplement (CPS ASEC) refers to comprehensive coverage during the calendar year.* For reporting purposes, the Census Bureau broadly classifies health insurance coverage as private insurance or government insurance. The CPS ASEC defines private health insurance as a plan provided through an employer or a union and coverage purchased directly by an individual from an insurance company or through an exchange. Government insurance coverage includes federal programs, such as Medicare, Medicaid, the Children's Health Insurance Program (CHIP), individual state health plans, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military. In the CPS ASEC, people were considered "insured" if they were covered by any type of health insurance for part or all of the previous calendar year. They were considered uninsured if, for the entire year, they were not covered by any type of health insurance. Additionally, people were considered uninsured if they only had coverage through the Indian Health Service (IHS), as IHS coverage is not considered comprehensive. For more information, see Appendix A, "Estimates of Health Insurance Coverage."

* Comprehensive health insurance covers basic healthcare needs. This definition excludes single service plans, such as accident, disability, dental, vision, or prescription medicine plans.

Figure 1.
Percentage of People by Type of Health Insurance Coverage and Change From 2013 to 2017
 (Population as of March of the following year)



* Military health care includes TRICARE and CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military.

Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions in the Current Population Survey, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2014, 2017, and 2018 Annual Social and Economic Supplements.

direct-purchase coverage (16.0 percent), and military coverage (4.8 percent) (Table 1 and Figure 1).

- Between 2016 and 2017, the rate of Medicare coverage increased by 0.6 percentage points to cover 17.2 percent of people for part or all of 2017 (up from 16.7

percent in 2016) (Table 1 and Figure 1).^{4, 5}

- The military coverage rate increased by 0.2 percentage points to 4.8 percent during this time. Coverage rates for employment-based coverage, direct-purchase coverage, and

⁴ This increase was partly due to growth in the number of people aged 65 and over. The population 65 years and older did not have a statistically significant change in the Medicare coverage rate between 2016 and 2017. However, the percentage of the U.S. population 65 years and older increased between 2016 and 2017.

⁵ Throughout this report, details may not sum to totals because of rounding.

Medicaid did not statistically change between 2016 and 2017.

- In 2017, the percentage of uninsured children under the age of 19 (5.4 percent) was not statistically different from the percentage in 2016 (Table 2).⁶
- For children under the age of 19 in poverty, the uninsured rate (7.8 percent) was higher than for children not in poverty (4.9 percent) (Figure 6).

⁶ Throughout this report, the term "children" is used to refer to people under age 19, regardless of marital status or householder status.

- Between 2016 and 2017, the uninsured rate did not statistically change for any race or Hispanic origin group (Table 5).⁷
- In 2017, non-Hispanic Whites had the lowest uninsured rate among race and Hispanic-origin groups (6.3 percent). The uninsured rates

⁷ Federal surveys give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group, such as Asian, may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian, regardless of whether they also reported another race (the race-alone-or-in-combination concept). The body of this report (text, figures, and tables) shows data using the first approach (race alone). Use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches.

In this report, the term “non-Hispanic White” refers to people who are not Hispanic and who reported White and no other race. The Census Bureau uses non-Hispanic Whites as the comparison group for other race groups and Hispanics. Since Hispanics may be any race, data in this report for Hispanics overlap with data for race groups. Being Hispanic was reported by 15.4 percent of White householders who reported only one race, 4.8 percent of Black householders who reported only one race, and 2.2 percent of Asian householders who reported only one race.

Data users should exercise caution when interpreting aggregate results for the Hispanic population or for race groups because these populations consist of many distinct groups that differ in socioeconomic characteristics, culture, and nativity. For further information, see <www.census.gov/cps>.

for Blacks and Asians were 10.6 percent and 7.3 percent, respectively. Hispanics had the highest uninsured rate (16.1 percent) (Table 5).

- Between 2016 and 2017, the percentage of people without health insurance coverage at the time of interview decreased in three states and increased in 14 states (Table 6 and Figure 8).⁸

Estimates of Health Insurance Coverage

This report classifies health insurance coverage into three different groups: overall coverage, private coverage, and government coverage. Private coverage includes health insurance provided through an employer or union and coverage purchased directly by an individual from an insurance company or through an exchange.⁹ Government coverage includes federal programs, such as Medicare, Medicaid, the

⁸ Estimates are from the 2016 and 2017 American Community Survey, 1-year estimates. For more information, see the text box “Two Measures of Health Insurance Coverage.”

⁹ Exchanges include coverage purchased through the federal Health Insurance Marketplace, as well as other state-based marketplaces, and include both subsidized and unsubsidized plans.

Children’s Health Insurance Program (CHIP), individual state health plans, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military. Individuals are considered to be uninsured if they did not have health insurance coverage at any point during the calendar year (see the text box “What Is Health Insurance Coverage?”).

In 2017, most people (91.2 percent) had health insurance coverage at some point during the calendar year (Table 1 and Figure 1). More people had private health insurance (67.2 percent) than government coverage (37.7 percent).¹⁰

Employer-based insurance was the most common subtype of health insurance in the civilian, noninstitutionalized population (56.0 percent), followed by Medicaid (19.3 percent), Medicare (17.2 percent), direct-purchase insurance (16.0 percent), and military health care (4.8 percent) (Table 1).

¹⁰ Some people may have more than one coverage type during the calendar year (see section on “Multiple Coverage Types”).

Health Insurance Coverage and the Affordable Care Act

Since the passage of the Patient Protection and Affordable Care Act (ACA) in 2010, several of its provisions have gone into effect at different times. For example, in 2010, the Young Adult Provision enabled adults under the age of 26 to remain as dependents on their parents’ health insurance plans. Many more of the main provisions went into effect on January 1, 2014, including the expansion of Medicaid eligibility and the establishment of health insurance marketplaces (e.g., healthcare.gov).

In 2014, people under the age of 65, particularly adults aged 19 to 64, may have become eligible for coverage options under the ACA. Based on family income, some people may have qualified for subsidies or tax credits to help pay for premiums associated with health insurance plans. In addition, the population with lower income may have become eligible for Medicaid coverage if they resided in one of the 31 states (or the District of Columbia) that expanded Medicaid eligibility on or before January 1, 2017. Twenty-four states and the District of Columbia expanded Medicaid eligibility by January 1, 2014. Between then and January 1, 2015, three additional states—Michigan, New Hampshire, and Pennsylvania—had expanded Medicaid eligibility. By January 1, 2016, three more states—Alaska, Indiana, and Montana—expanded Medicaid eligibility. One more state—Louisiana—expanded Medicaid eligibility by January 1, 2017.*

* For a list of the states and their Medicaid expansion status as of January 1, 2017, see Table 6: Percentage of People Without Health Insurance Coverage by State: 2013, 2016, and 2017.

Table 1.

Coverage Numbers and Rates by Type of Health Insurance: 2013, 2016, and 2017

(Numbers in thousands, margins of error in thousands or percentage points as appropriate. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Coverage type	2013				2016				2017				Change in number		Change in rate	
	Number	Margin of error ¹ (±)	Rate	Margin of error ¹ (±)	Number	Margin of error ¹ (±)	Rate	Margin of error ¹ (±)	Number	Margin of error ¹ (±)	Rate	Margin of error ¹ (±)	2017 less 2016	2017 less 2013	2017 less 2016	2017 less 2013
Total	313,401	109	X	X	320,372	96	X	X	323,156	123	X	X	X	X	X	X
Any health plan	271,606	636	86.7	0.2	292,320	541	91.2	0.2	294,613	662	91.2	0.2	*2,293	*23,007	-0.1	*4.5
Any private plan ^{2, 3}	201,038	1,140	64.1	0.4	216,203	1,145	67.5	0.4	217,007	1,158	67.2	0.4	804	*15,969	-0.3	*3.0
Employment-based ²	174,418	1,160	55.7	0.4	178,455	1,130	55.7	0.4	181,036	1,241	56.0	0.4	*2,582	*6,618	0.3	0.4
Direct-purchase ²	35,755	615	11.4	0.2	51,961	874	16.2	0.3	51,821	1,008	16.0	0.3	-140	*16,066	-0.2	*4.6
Any government plan ^{2, 4}	108,287	1,115	34.6	0.4	119,361	1,018	37.3	0.3	121,965	1,086	37.7	0.3	*2,604	*13,678	*0.5	*3.2
Medicare ²	49,020	377	15.6	0.1	53,372	396	16.7	0.1	55,623	351	17.2	0.1	*2,251	*6,603	*0.6	*1.6
Medicaid ²	54,919	969	17.5	0.3	62,303	931	19.4	0.3	62,492	1,007	19.3	0.3	188	*7,573	-0.1	*1.8
Military health care ^{2, 5}	14,016	595	4.5	0.2	14,638	575	4.6	0.2	15,532	769	4.8	0.2	*893	*1,516	*0.2	*0.3
Uninsured ⁶	41,795	614	13.3	0.2	28,052	519	8.8	0.2	28,543	634	8.8	0.2	492	*-13,252	0.1	*-4.5

X Not applicable

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

¹ A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at <www2.census.gov/library/publications/2018/demo/p60-264sa.pdf>.

² The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military.

⁵ Military health care includes TRICARE and CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military.

⁶ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

Source: U.S. Census Bureau, Current Population Survey, 2014, 2017, and 2018 Annual Social and Economic Supplements

Two Measures of Health Insurance Coverage

This report includes two types of health insurance coverage measures: health insurance coverage during the previous calendar year and health insurance coverage at the time of the interview.

The first measure, health insurance coverage at any time during the previous calendar year, is collected with the Current Population Survey Annual Social and Economic Supplement (CPS ASEC). The CPS is the longest-running survey conducted by the U.S. Census Bureau. The key purpose of the CPS ASEC is to provide timely and detailed estimates of economic well-being, of which health insurance coverage is an important part. The Census Bureau conducts the CPS ASEC annually between February and April, and the resulting measure of health insurance coverage reflects an individual's coverage status during the previous calendar year.

The second measure, health insurance coverage at the time of the interview, is collected with the American Community Survey (ACS). The ACS is an ongoing survey that collects comprehensive information on social, economic, and housing topics. Due to its large sample size, the ACS provides estimates at many levels of geography and for smaller population groups. The Census Bureau conducts the ACS throughout the year, and the resulting measure of health coverage reflects an annual average of current health insurance coverage status.

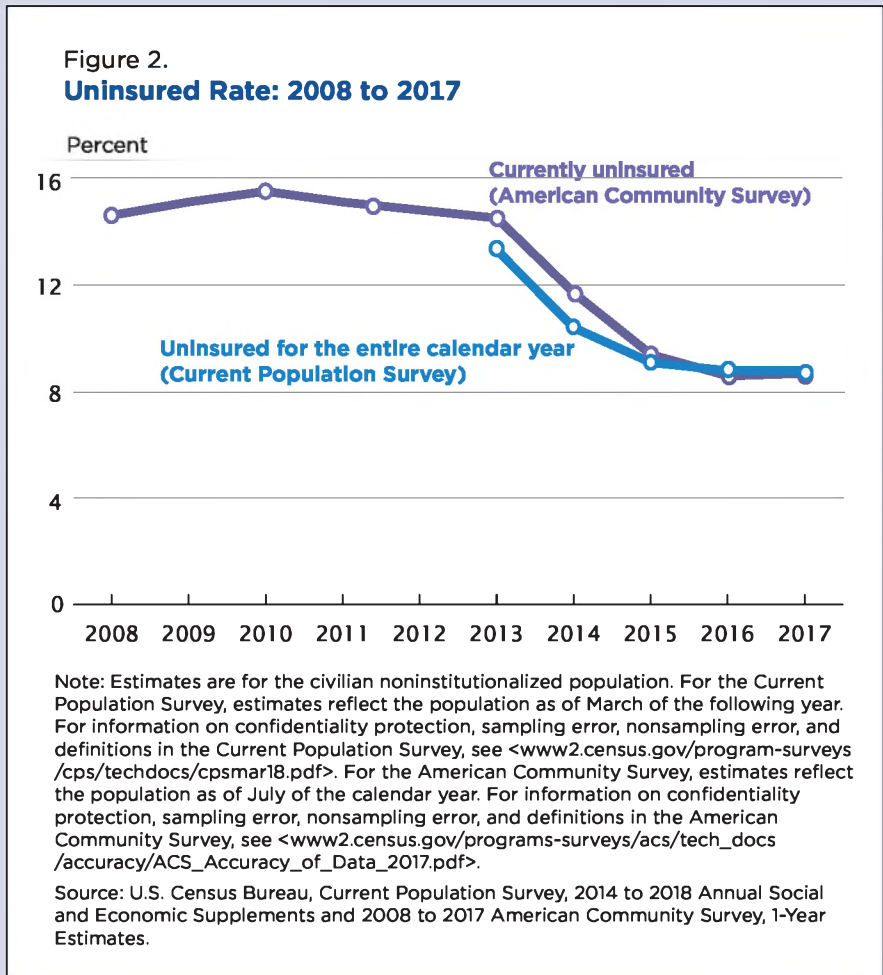
As a result of the difference in the collection of health insurance

coverage status, the resulting uninsured rates measure different concepts. The CPS ASEC uninsured rate represents the percentage of people who had no health insurance coverage at any time during the previous calendar year. The ACS uninsured rate is a measure of the percentage of people who were uninsured at the time of the interview.

As measured by the CPS ASEC, the uninsured rate was essentially unchanged between 2016 and 2017, at 8.8 percent. As measured by the ACS, the uninsured

rate increased by 0.2 percentage points from 8.6 percent in 2016 to 8.7 percent in 2017 (Figure 2).

Over a longer period, as measured by the ACS, uninsured rates remained relatively stable between 2008 and 2013, but decreased sharply by 2.8 percentage points between 2013 and 2014. Uninsured rates then decreased by 2.3 percentage points between 2014 and 2015 and 0.8 percentage points between 2015 and 2016. Between 2016 and 2017, the uninsured rate increased by 0.2 percentage points.



The percentage of people covered by any type of health insurance in 2017 was not statistically different from the percentage in 2016. The percentage of people covered by private health insurance or either of the two subtypes of private health insurance (employment-based and direct-purchase) also did not statistically change between 2016 and 2017.

Between 2016 and 2017, the percentage of people with government health insurance increased by 0.5 percentage points, to 37.7 percent in 2017 (Table 1).¹¹ Of the three subtypes of government health insurance, both military health care and Medicare coverage rates increased between 2016 and 2017. The percentage of people covered by military health care increased by 0.2 percentage points to 4.8 percent in 2017. The rate of Medicare coverage increased by

¹¹ All comparative statements in this report have undergone statistical testing, and unless otherwise noted, all comparisons are statistically significant at the 10 percent level.

0.6 percentage points to 17.2 percent in 2017. This increase was partly due to growth in the number of people aged 65 and over.

Multiple Coverage Types

While most people have a single type of insurance, some people may have more than one type of coverage during the calendar year. They may have multiple types of coverage at one time to supplement their primary insurance type, or they may switch coverage types over the course of the year. Of the population with health insurance coverage in 2017, 77.8 percent had one coverage type during the year and 22.2 percent had multiple coverage types over the course of the year (Figure 3).

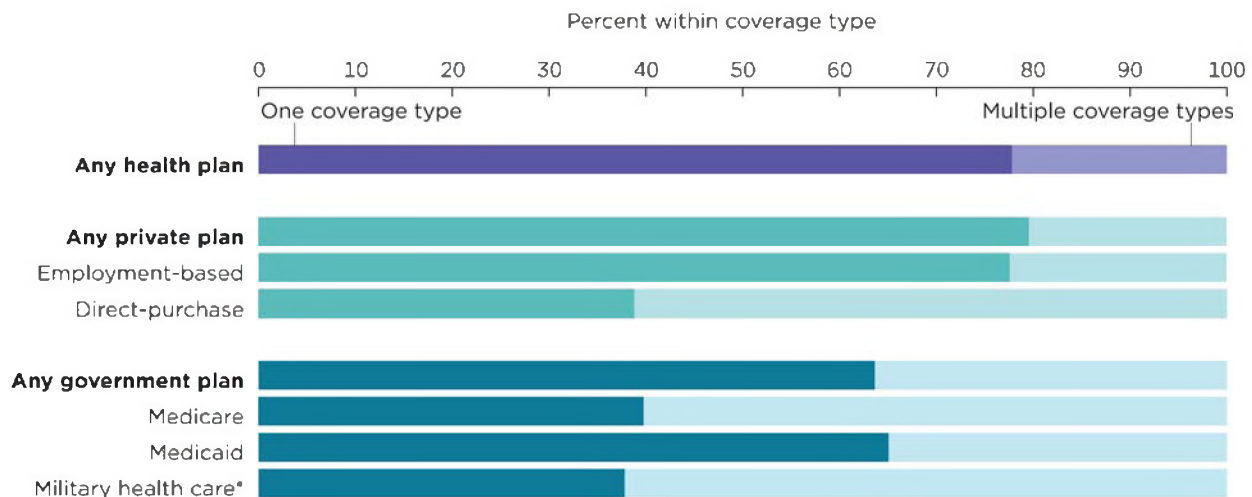
Some types of health insurance were more likely to be held alone, while other types of health insurance coverage were more likely to be held in combination with another type of insurance at some point during the

year. Most people with employer-based health insurance coverage or Medicaid coverage did not have more than one plan type. In 2017, only 22.4 percent of people with employer-sponsored coverage and 35.0 percent with Medicaid had multiple types of coverage.

In 2017, the majority of people covered by direct-purchase, Medicare, or military health care had some other type of health insurance during the year (61.2 percent, 60.2 percent, and 62.2 percent, respectively).¹²

¹² The percentage of people with direct-purchase coverage and another type of health insurance was not statistically different from the percentage of people with Medicare and another type of health insurance, or the percentage of people with military health care and another type of health insurance. The percentage of people with Medicare and another type of health insurance was not statistically different from the percentage of people with military health care and another type of health insurance.

Figure 3.
Percentage With One or Multiple Coverage Types: 2017
(Population as of March of the following year)



* Military health care includes TRICARE and CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military.

Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions in the Current Population Survey, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement.

Table 2.
Percentage of People by Type of Health Insurance Coverage by Age: 2016 and 2017

(Numbers in thousands, margins of error in percentage points. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total																					
	2016	2017	Any health insurance													Uninsured ⁵						
			2016		2017		Change (2017 less 2016) ^{1,*}	Private health insurance ³			Government health insurance ⁴			2016		2017		Change (2017 less 2016) ^{1,*}				
	Number	Number	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)		Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)		Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)
							2016											2017				
Total	320,372	323,156	91.2	0.2	91.2	0.2	-0.1	67.5	0.4	67.2	0.4	-0.3	37.3	0.3	37.7	0.3	*0.5	8.8	0.2	8.8	0.2	0.1
Age																						
Under the age of 65	271,098	272,076	89.9	0.2	89.8	0.2	-0.1	70.2	0.4	70.2	0.4	Z	27.0	0.4	27.2	0.4	0.2	10.1	0.2	10.2	0.2	0.1
Under the age of 18	74,047	73,963	94.7	0.3	94.7	0.3	Z	62.7	0.6	63.0	0.6	0.3	41.9	0.6	42.3	0.7	0.4	5.3	0.3	5.3	0.3	Z
Aged 18 to 64	197,051	198,113	88.1	0.2	87.9	0.3	-0.1	73.0	0.4	72.8	0.4	-0.1	21.4	0.3	21.6	0.4	0.2	11.9	0.2	12.1	0.3	0.1
Under the age of 19 ⁶	78,150	78,106	94.6	0.3	94.6	0.3	Z	62.9	0.6	63.3	0.6	0.3	41.5	0.6	41.9	0.7	0.4	5.4	0.3	5.4	0.3	Z
Aged 19 to 64	192,948	193,971	87.9	0.2	87.8	0.3	-0.1	73.1	0.4	72.9	0.4	-0.2	21.1	0.3	21.3	0.4	0.2	12.1	0.2	12.2	0.3	0.1
Aged 19 to 25 ⁷	29,815	29,922	86.9	0.6	86.0	0.7	*-0.9	71.3	0.8	70.2	0.9	-1.1	23.1	0.8	23.4	0.8	0.2	13.1	0.6	14.0	0.7	*0.9
Aged 26 to 34	39,736	40,152	84.3	0.6	84.4	0.6	0.1	69.7	0.7	69.9	0.8	0.2	20.4	0.6	20.3	0.7	-0.1	15.7	0.6	15.6	0.6	-0.1
Aged 35 to 44	40,046	40,659	86.9	0.5	86.7	0.5	-0.2	73.3	0.7	73.6	0.7	0.2	19.3	0.6	19.2	0.6	-0.1	13.1	0.5	13.3	0.5	0.2
Aged 45 to 64	83,351	83,237	90.6	0.3	90.7	0.3	0.1	75.2	0.5	75.1	0.5	-0.1	21.7	0.5	22.1	0.5	0.4	9.4	0.3	9.3	0.3	-0.1
Aged 65 and older	49,274	51,080	98.8	0.1	98.7	0.1	-0.1	52.8	0.8	51.1	0.8	*-1.6	93.6	0.3	93.7	0.3	0.1	1.2	0.1	1.3	0.1	0.1

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

Z Represents or rounds to zero

¹ Details may not sum to totals because of rounding

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at <www2.census.gov/library/publications/2018/demo/p60-264sa.pdf>

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

⁶ Children under the age of 19 are eligible for Medicaid/CHIP.

⁷ This age is of special interest because of the Affordable Care Act's dependent coverage provision. Individuals aged 19 to 25 years may be eligible to be a dependent on a parent's health insurance plan.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements

Health Insurance Coverage by Selected Characteristics

Age

Age is strongly associated with the likelihood that a person has health insurance and the type of health insurance a person has. In 2017, adults aged 65 and over and children under 19 were more likely to have had health insurance coverage (98.7 percent and 94.6 percent, respectively) compared with adults aged 19 to 64 (87.8 percent) (Table 2).

Adults aged 65 and over had the highest rate of health insurance coverage in 2017 (98.7 percent), with 93.7 percent covered by a government plan (primarily Medicare) and 51.1 percent covered by a private plan, which may have supplemented their government coverage.

Between 2016 and 2017, the rate of private coverage for adults aged 65 and over decreased by 1.6 percentage points from 52.8 percent in 2016. The rates of overall health insurance coverage and government coverage did not statistically change between 2016 and 2017 for this age group.

In 2017, children under the age of 19 were more likely to be covered by health insurance than adults aged 19 to 64 (94.6 percent and 87.8 percent, respectively). One reason for this difference could be that children from lower income families may be eligible for programs such as Medicaid or the Children's Health Insurance Program (CHIP).

In 2017, 63.3 percent of children under the age of 19 had private health insurance and 41.9 percent had government coverage. Some children were covered by both private and government coverage during the calendar year. Between 2016 and 2017, there was no statistical change in the rates of overall health insurance coverage, private coverage, or

government coverage for this age group.¹³

Working-age adults (people aged 19 to 64) had a lower rate of health insurance coverage in 2017 (87.8 percent) than both children and older adults.

Among working-age adults, the population aged 26 to 34 was the least likely to be insured, with a coverage rate of 84.4 percent. A higher percentage of adults aged 19 to 25 were insured (86.0 percent) than adults 26 to 34. For age groups between 26 and 64, the rate of health insurance coverage increased as age increased.¹⁴

Working-age adults were more likely than other age groups to be covered by private health insurance, with 72.9 percent of the population aged 19 to 64 having private insurance coverage in 2017. They also had a lower rate of government coverage than children under the age of 19 and adults aged 65 and over, at 21.3 percent.

Between 2016 and 2017, the percentage of adults aged 19 to 25 with any health insurance decreased by 0.9 percentage points to 86.0 percent. No other age group experienced a statistically significant change in their health insurance coverage rate during this time.

The ACS, which has a larger sample size than the CPS ASEC, provides an estimate of health insurance coverage at the time of the interview. The larger sample size offers an opportunity to look at coverage rates for

¹³ The Children's Health Insurance Program (CHIP) is a government program that provides health insurance to children in families with income too high to qualify for Medicaid, but who are unable to afford private health insurance.

¹⁴ In 2017, the health insurance coverage rate for people aged 19 to 25 was not statistically different from the coverage rate for people aged 35 to 44.

smaller groups, such as single years of age (Figure 4).¹⁵

Examining age across childhood and young adulthood, uninsured rates in 2017 were generally lower for children than for young adults, from 3.5 percent for infants to 17.8 percent for 26-year-olds. Two sharp differences existed between single-year ages. The percentage of 19-year-olds without coverage (13.2 percent) was 4.6 percentage points higher than the percentage for people 1 year younger. Likewise, the uninsured rate for 26-year-olds, the highest among all single years of age in 2017, was distinctly higher than for 25-year-olds (17.8 percent and 14.9 percent, respectively).

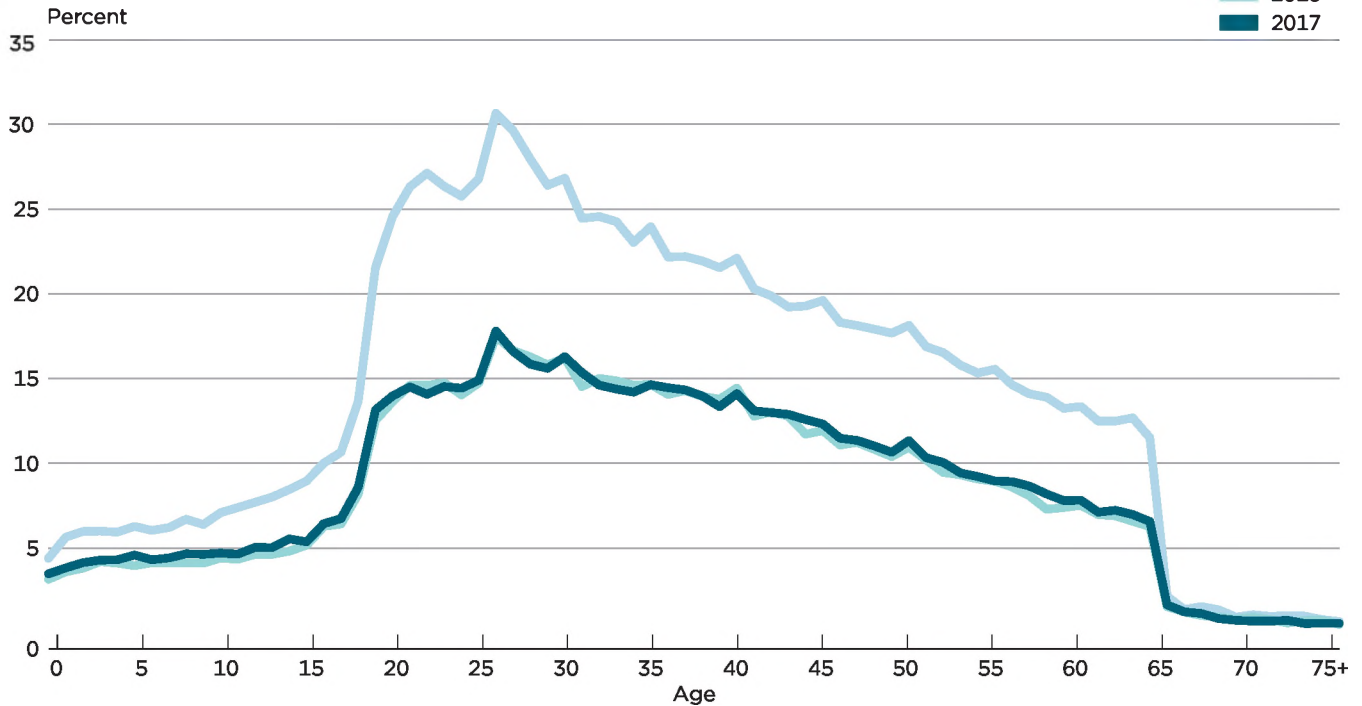
From ages 26 to 64, the uninsured rate generally declined with age. Between the ages of 64 and 65, the uninsured rate then decreased 4.9 percentage points. In 2017, 6.6 percent of 64-year-olds and 1.6 percent of 65-year-olds did not have health insurance coverage. For adults aged 65 and over, the uninsured rate varied little by age.

Between 2016 and 2017, the percentage of people without health insurance coverage at the time of interview did not statistically change for most single years of age. However, for children under the age of 19 and working-age adults between 50 and 59, the uninsured rate increased across multiple single years of age.

Between 2013 and 2017, uninsured rates fell for all single-year ages under the age of 65, with the largest declines of about 12.0 percentage points for each age between 21 and 28. An uneven downward shift in

¹⁵ These estimates and estimates in the remainder of this section come from the 2013, 2016, and 2017 American Community Survey, 1-year estimates. In the ACS, health insurance coverage status corresponds to coverage at the time of the interview (see the text box "Two Measures of Health Insurance Coverage").

Figure 4.
Uninsured Rate by Single Year of Age: 2013, 2016, and 2017
 (Civilian noninstitutionalized population)



For information on confidentiality protection, sampling error, nonsampling error, and definitions in the American Community Survey, see <www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf>.

Source: U.S. Census Bureau, 2013, 2016, and 2017 American Community Surveys, 1-Year Estimates.

uninsured rates reduced some of the age-specific disparities. However, in 2017, three notable sharp differences remained between single-year ages, specifically between 18- and 19-year-olds, between 25- and 26-year-olds, and between 64- and 65-year-olds.

Marital Status

Many adults obtain health insurance coverage through their spouse. In 2017, married adults aged 19 to 64 had the highest coverage rate, at 90.9 percent (Table 3).¹⁶ The coverage rate was lowest for people who were separated (79.7 percent). Of people who were never married, 84.0 percent were covered by health insurance. The coverage rates for people

¹⁶ All estimates by marital status are for the population aged 19 to 64.

who were widowed or divorced were 86.6 percent and 86.4 percent, respectively.¹⁷

Between 2016 and 2017, none of the marital status groups had a statistically significant change in their rate of overall coverage.

Disability Status

Adults with a disability had a higher rate of health insurance coverage (91.2 percent) than adults with no disability (87.5 percent) in 2017 (Table 3).¹⁸

Adults with a disability were less likely than adults with no disability

¹⁷ In 2017, the coverage rate of people who were widowed was not statistically different from the coverage rate of people who were divorced.

¹⁸ All estimates by disability status are for the population aged 19 to 64.

to have private health insurance coverage and more likely to have government coverage. In 2017, 44.8 percent of adults with a disability had private coverage, compared with 75.5 percent of adults with no disability, a 30.7 percentage-point difference. At the same time, 57.8 percent of adults with a disability and 17.8 percent with no disability had government coverage, a 39.9 percentage-point difference.

Between 2016 and 2017, neither the population with a disability nor the population with no disability had statistically significant changes in their rates of overall coverage, private coverage, or government coverage.

Table 3.

Percentage of People by Type of Health Insurance Coverage for Working-Age Adults Aged 19 to 64: 2016 and 2017

(Numbers in thousands, margins of error in percentage points. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total																					
	2016	2017	Any health insurance										Uninsured ⁵									
			2016		2017		Change (2017 less 2016) ¹ *	Private health insurance ³			Government health insurance ⁴				2016		2017		Change (2017 less 2016) ¹ *			
	Number	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent		Margin of error ² (±)	Change (2017 less 2016) ¹ *	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Change (2017 less 2016) ¹ *	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)		Change (2017 less 2016) ¹ *		
Total	320,372	323,156	91.2	0.2	91.2	0.2	-0.1	67.5	0.4	67.2	0.4	-0.3	37.3	0.3	37.7	0.3	*0.5	8.8	0.2	8.8	0.2	0.1
Total, 19 to 64 years old	192,948	193,971	87.9	0.2	87.8	0.3	-0.1	73.1	0.4	72.9	0.4	-0.2	21.1	0.3	21.3	0.4	0.2	12.1	0.2	12.2	0.3	0.1
Marital Status																						
Married ⁶	101,822	101,580	91.2	0.3	90.9	0.3	-0.3	80.1	0.5	79.7	0.4	-0.4	17.9	0.4	18.3	0.4	0.4	8.8	0.3	9.1	0.3	0.3
Widowed	3,633	3,586	86.1	1.6	86.6	1.6	0.6	58.7	2.0	57.2	2.3	-1.4	33.5	2.2	36.0	2.2	2.4	13.9	1.6	13.4	1.6	-0.6
Divorced	19,460	19,510	86.1	0.6	86.4	0.7	0.3	64.3	1.0	65.4	1.0	1.1	26.8	0.9	26.3	0.9	-0.5	13.9	0.6	13.6	0.7	-0.3
Separated	4,495	4,372	80.8	1.5	79.7	1.7	-1.1	55.9	1.9	55.4	2.0	-0.5	31.0	1.8	29.9	1.8	-1.1	19.2	1.5	20.3	1.7	1.1
Never married	63,537	64,923	84.0	0.5	84.0	0.4	Z	66.5	0.7	66.6	0.6	0.1	23.2	0.6	23.1	0.5	-0.1	16.0	0.5	16.0	0.4	Z
Disability Status⁷																						
With a disability	15,248	14,957	91.2	0.7	91.2	0.7	Z	43.5	1.2	44.8	1.2	1.3	58.6	1.1	57.8	1.2	-0.8	8.8	0.7	8.8	0.7	Z
With no disability	176,842	178,063	87.6	0.2	87.5	0.3	-0.2	75.9	0.4	75.5	0.4	-0.3	17.5	0.3	17.8	0.3	0.3	12.4	0.2	12.5	0.3	0.2
Work Experience																						
All workers	149,105	150,487	88.8	0.3	88.7	0.3	-0.2	80.1	0.3	80.2	0.3	Z	13.9	0.3	14.0	0.3	0.1	11.2	0.3	11.3	0.3	0.2
Worked full-time, year-round	107,577	109,511	90.2	0.3	90.2	0.3	Z	84.5	0.3	84.4	0.4	-0.1	10.4	0.3	10.9	0.3	*0.5	9.8	0.3	9.8	0.3	Z
Worked less than full-time, year-round	41,528	40,976	85.2	0.5	84.6	0.6	-0.6	69.0	0.6	68.9	0.7	-0.1	23.1	0.6	22.4	0.6	-0.6	14.8	0.5	15.4	0.6	0.6
Did not work at least 1 week	43,843	43,484	85.0	0.5	84.9	0.5	-0.1	49.1	0.8	47.9	0.8	*-1.1	45.6	0.7	46.5	0.9	0.9	15.0	0.5	15.1	0.5	0.1
Educational Attainment																						
Total, 26 to 64 years old	163,133	164,049	88.1	0.2	88.1	0.3	Z	73.4	0.4	73.4	0.4	Z	20.8	0.3	20.9	0.4	0.2	11.9	0.2	11.9	0.3	Z
No high school diploma	15,389	15,150	72.7	1.1	73.7	1.1	1.0	40.9	1.1	42.4	1.2	1.5	37.7	1.1	37.5	1.2	-0.3	27.3	1.1	26.3	1.1	-1.0
High school graduate (includes equivalency)	45,401	44,772	84.8	0.5	84.5	0.5	-0.4	65.0	0.7	65.4	0.7	0.4	26.3	0.6	26.3	0.6	-0.1	15.2	0.5	15.5	0.5	0.4
Some college, no degree	26,594	26,109	88.4	0.5	88.0	0.5	-0.4	71.8	0.8	70.6	0.8	*-1.2	23.8	0.7	24.7	0.8	*0.9	11.6	0.5	12.0	0.5	0.4
Associate's degree	17,739	17,659	90.7	0.6	90.5	0.7	-0.2	77.9	0.9	77.2	0.9	-0.7	19.5	0.8	19.5	0.8	0.1	9.3	0.6	9.5	0.7	0.2
Bachelor's degree	36,528	38,465	93.2	0.4	92.8	0.4	-0.4	86.8	0.5	85.5	0.5	*-1.3	11.6	0.4	12.4	0.5	*0.8	6.8	0.4	7.2	0.4	0.4
Graduate or professional degree	21,482	21,894	95.2	0.4	95.8	0.4	*0.6	90.0	0.6	90.4	0.6	0.4	9.8	0.6	10.3	0.6	0.5	4.8	0.4	4.2	0.4	*-0.6

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

Z Represents or rounds to zero

¹ Details may not sum to totals because of rounding

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-264sa.pdf.

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), as well as care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

⁶ The combined category "married" includes three individual categories: "married, civilian spouse present," "married, armed forces spouse present," and "married, spouse absent."

⁷ The sum of those with and without a disability does not equal the total because disability status is not defined for individuals in the armed forces.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements

Work Experience

For many adults aged 19 to 64, health insurance coverage and type of coverage is related to work status, such as working full-time, year-round; working less than full-time, year-round; or not working at all during the calendar year.^{19, 20}

In 2017, 88.7 percent of all workers had health insurance coverage. Full-time, year-round workers were more likely to be covered by health insurance (90.2 percent) than the population who worked less than full-time, year-round (84.6 percent) or nonworkers (84.9 percent) (Table 3).²¹

Workers were more likely than nonworkers to be covered by private health insurance coverage. In 2017, 84.4 percent of full-time, year-round workers had private insurance coverage, compared with 68.9 percent of people who worked less than full-time, year-round and 47.9 percent of nonworkers.

In 2017, nonworkers were more than three times as likely to have government coverage (46.5 percent) than workers (14.0 percent). Among all workers, 10.9 percent of people who worked full-time, year-round and 22.4 percent of people who worked less than full-time, year-round had government coverage in 2017.

Between 2016 and 2017, there was no statistical difference in the health insurance coverage rates for workers or nonworkers. During this time, there were also no statistical differences in coverage rates for the population who worked full-time, year-round or

for the population who worked less than full-time, year-round.

Educational Attainment

People with higher levels of educational attainment were more likely to have health insurance coverage than people with lower levels of education. In 2017, 95.8 percent of the population aged 26 to 64 with a graduate or professional degree had health insurance coverage, compared with 92.8 percent of the population with a bachelor's degree, 88.0 percent of the population with some college (no degree), 84.5 percent of high school graduates, and 73.7 percent of the population with no high school diploma (Table 3).²²

Between 2016 and 2017, people with a graduate or professional degree experienced a 0.6 percentage-point increase in their overall coverage rate. No other educational attainment groups saw a statistically significant change in their overall rate of coverage.

People with some college (no degree) and people with a bachelor's degree were the only educational attainment groups for which rates of private and government coverage changed between 2016 and 2017. For people with some college (no degree), the rate of private coverage decreased by 1.2 percentage points (to 70.6 percent), and the rate of government coverage increased by 0.9 percentage points (to 24.7 percent). For people with a bachelor's degree, the rate of private coverage decreased by 1.3 percentage points (to 85.5 percent), and the rate of government coverage

increased by 0.8 percentage points (to 12.4 percent).²³

Household Income

In 2017, people in households with lower income had lower health insurance coverage rates than people in households with higher income.²⁴ In 2017, 86.1 percent of people in households with an annual income of less than \$25,000 had health insurance coverage, compared with 92.1 percent of people in households with income of \$75,000 to \$99,999, and 95.7 percent of people in households with income of \$125,000 or more (Table 4).²⁵

People in households with lower income also had lower rates of private coverage than people with higher income, and these differences varied more for lower income groups than for higher income groups. In 2017, the private health insurance coverage rate for people in households with income of \$25,000 to \$49,999 (51.1 percent) was 21.0 percentage points higher than the rate for people in households with income below \$25,000 (30.1 percent). At the same time, the private health insurance coverage rate for people in households with income at or above \$125,000 (88.4 percent) was 4.9 percentage points higher than the rate for people in households with income of \$100,000 to \$124,999 (83.4 percent).

Conversely, government coverage rates decreased as income increased, and as with private coverage, rates

¹⁹ In this report, a full-time, year-round worker is a person who worked 35 or more hours per week (full-time) and 50 or more weeks during the previous calendar year (year-round). For school personnel, summer vacation is counted as weeks worked if they are scheduled to return to their job in the fall.

²⁰ All estimates by work experience are for the population aged 19 to 64.

²¹ In 2017, the health insurance coverage rate for people who worked less than full-time, year-round was not statistically different from the coverage rate for nonworkers.

²² All estimates by educational attainment are for the population aged 26 to 64.

²³ The percentage-point difference in the private coverage rate between 2016 and 2017 for people with some college (no degree) was not statistically different from the percentage-point difference for people with a bachelor's degree. The percentage-point difference in the government coverage rate between 2016 and 2017 for people with some college, no degree was not statistically different from the percentage-point difference for people with a bachelor's degree.

²⁴ Income refers to the total household income, not an individual's own income.

²⁵ The 2016 income estimates are inflation-adjusted and presented in 2017 dollars.

differed more between lower incomes than between higher incomes. In 2017, the government coverage rate for people in households with income of less than \$25,000 (68.4 percent) was 15.3 percentage points higher than the rate for people in households with income of \$25,000 to \$49,999 (53.0 percent). For the two highest income groups, the difference was smaller. The government coverage rate for people in households with income of \$100,000 to \$124,999 (24.4 percent) was 5.0 percentage points higher than the rate for people in households with income at or above \$125,000 (19.4 percent).

The overall percentage of people with health insurance coverage did not statistically change between 2016 and 2017 for any income group.

Rates of private and government coverage changed for some income groups. The percentage of people with private coverage decreased for three income groups between 2016 and 2017. People in households with income of \$25,000 to \$49,999 had a decrease of 1.1 percentage points (from 52.3 percent in 2016). People in households with income of \$50,000 to \$74,999 had a decrease of 1.3 percentage points (from 68.0 percent in 2016). The private coverage rate for people in households with income of \$75,000 to \$99,999 decreased by 1.8 percentage points (from 79.0 percent in 2016).²⁶

²⁶ The percentage-point difference in the private coverage rate between 2016 and 2017 for people in households with income of \$25,000 to \$49,999 was not statistically different from the percentage-point difference for people in households with income of \$50,000 to \$74,999 and with income of \$75,000 to \$99,999.

The percentage-point difference in the private coverage rate between 2016 and 2017 for people in households with income of \$50,000 to \$74,999 was not statistically different from the percentage-point difference for people in households with income of \$75,000 to \$99,999.

Between 2016 and 2017, the rate of government coverage increased by 2.3 percentage points for this same group (people in households with income of \$75,000 to \$99,999). The rate of government coverage also increased for people in households with income of \$100,000 to \$124,999 (2.0 percentage-point increase).²⁷ The percentage of people with government coverage did not change for any other income group.

Income-to-Poverty Ratio

People in families are classified as being in poverty if their income is less than their poverty threshold.²⁸ People who live alone or with nonrelatives have a poverty status that is defined based on their own income. The income-to-poverty ratio compares a family's or an unrelated individual's income with the applicable threshold.

Health insurance coverage rates are generally higher for people in higher income-to-poverty ratio groups. In 2017, people in poverty (the population living below 100 percent of poverty) had the lowest health insurance coverage rate, at 83.0 percent, while people living at or above 400 percent of poverty had the highest coverage rate, at 95.7 percent (Table 4).

Government coverage continued to be most prevalent for the population in poverty (62.8 percent) and least prevalent for the population with income-to-poverty ratios at or above

²⁷ The percentage-point difference in the government coverage rate between 2016 and 2017 for people in households with income of \$75,000 to \$99,999 was not statistically different from the percentage-point difference for people in households with income of \$100,000 to \$124,999.

²⁸ The Office of Management and Budget determined the official definition of poverty in Statistical Policy Directive 14. Appendix B of the report *Income and Poverty in the United States: 2017* provides a more detailed description of how the Census Bureau calculates poverty; see <www.census.gov/content/dam/Census/library/publications/2018/demo/p60-263.pdf>.

400 percent of poverty (24.2 percent) in 2017.²⁹

Between 2016 and 2017, the percentage of people with any health insurance coverage did not statistically change for any income-to-poverty group.

Coverage rates for subtypes of insurance, however, changed for some groups. Two groups had offsetting changes in coverage between 2016 and 2017, with a decrease in private coverage and an increase in government coverage. For people in households with income from 200 to 299 percent of poverty, the private coverage rate decreased 1.7 percentage points and government coverage increased 2.0 percentage points. For people in households with income at or above 400 percent of poverty, the private coverage rate decreased 0.6 percentage points, while the government coverage rate increased by 1.3 percentage points.³⁰ During the same time, the government coverage rate decreased by 1.2 percentage points for people in households with income from 300 to 399 percent of poverty (to 30.0 percent).

In 2014, policy changes associated with the Affordable Care Act provided the option for states to expand Medicaid eligibility to people whose income-to-poverty ratio fell under a particular threshold (for more information, see the text box "Health Insurance and the Affordable Care Act"). For adults aged 19 to 64, the relationship between poverty status,

²⁹ In 2017, the government coverage rate for the population living below 100 percent of poverty was not statistically different from the coverage rate for the population living below 138 percent of poverty.

³⁰ The percentage-point difference between 2016 and 2017 for neither the private coverage rate nor the government coverage rate for people with income from 200 to 299 percent of poverty was statistically different from the percentage-point differences for people at or above 400 percent of poverty.

Table 4. Percentage of People by Type of Health Insurance Coverage by Household Income and Income-to-Poverty Ratio: 2016 and 2017

(Numbers in thousands, margins of error in percentage points. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total																					
	2016	2017	Any health insurance										Uninsured ⁵									
			2016		2017		Change (2017 less 2016) ^{1,*}	Private health insurance ³				Government health insurance ⁴				2016		2017		Change (2017 less 2016) ^{1,*}		
	Number	Number	Per-cent	Margin of error ² (±)	Per-cent	Margin of error ² (±)		Per-cent	Margin of error ² (±)	Per-cent	Margin of error ² (±)	Per-cent	Margin of error ² (±)	Per-cent	Margin of error ² (±)	Per-cent	Margin of error ² (±)	Per-cent	Margin of error ² (±)			
Total	320,372	323,156	91.2	0.2	91.2	0.2	-0.1	67.5	0.4	67.2	0.4	-0.3	37.3	0.3	37.7	0.3	*0.5	8.8	0.2	8.8	0.2	0.1
Household Income⁶																						
Less than \$25,000	47,507	46,682	86.2	0.6	86.1	0.5	-0.1	30.3	0.8	30.1	0.8	-0.2	67.9	0.8	68.4	0.7	0.5	13.8	0.6	13.9	0.5	0.1
\$25,000 to \$49,999	62,357	62,187	88.1	0.4	87.7	0.5	-0.4	52.3	0.8	51.1	0.8	*-1.1	52.5	0.7	53.0	0.8	0.6	11.9	0.4	12.3	0.5	0.4
\$50,000 to \$74,999	54,487	53,710	90.0	0.5	89.6	0.5	-0.4	68.0	0.8	66.7	0.8	*-1.3	37.4	0.8	37.3	0.8	-0.1	10.0	0.5	10.4	0.5	0.4
\$75,000 to \$99,999	43,902	44,982	92.3	0.5	92.1	0.4	-0.2	79.0	0.7	77.2	0.8	*-1.8	26.6	0.8	28.9	0.9	*2.3	7.7	0.5	7.9	0.4	0.2
\$100,000 to \$124,999	33,406	32,108	94.1	0.5	94.6	0.4	0.5	83.3	0.8	83.4	0.8	0.1	22.4	0.8	24.4	0.9	*2.0	5.9	0.5	5.4	0.4	-0.5
\$125,000 or more	78,712	83,487	95.8	0.3	95.7	0.3	-0.1	88.5	0.5	88.4	0.4	-0.1	18.9	0.5	19.4	0.6	0.5	4.2	0.3	4.3	0.3	0.1
Income-to-Poverty Ratio																						
Below 100 percent of poverty	40,616	39,698	83.7	0.6	83.0	0.7	-0.7	28.6	0.9	28.2	1.0	-0.4	63.6	0.8	62.8	0.9	-0.8	16.3	0.6	17.0	0.7	0.7
Below 138 percent of poverty	61,039	61,174	84.7	0.5	84.4	0.6	-0.3	31.1	0.7	31.3	0.8	0.2	63.1	0.6	62.7	0.8	-0.5	15.3	0.5	15.6	0.6	0.3
From 100 to 199 percent of poverty	54,629	56,004	87.4	0.5	87.2	0.6	-0.1	45.4	0.9	45.5	0.8	0.1	55.9	0.8	55.7	0.8	-0.2	12.6	0.5	12.8	0.6	0.1
From 200 to 299 percent of poverty	51,705	51,354	89.2	0.5	89.1	0.5	-0.1	66.2	0.8	64.5	0.8	*-1.7	38.0	0.8	40.0	0.8	*2.0	10.8	0.5	10.9	0.5	0.1
From 300 to 399 percent of poverty	42,562	41,649	92.5	0.4	92.3	0.4	-0.2	76.4	0.8	76.7	0.8	0.3	31.1	0.8	30.0	0.8	*-1.2	7.5	0.4	7.7	0.4	0.2
At or above 400 percent of poverty	130,398	133,844	95.6	0.2	95.7	0.2	0.1	86.6	0.3	86.0	0.3	*-0.6	22.8	0.4	24.2	0.4	*1.3	4.4	0.2	4.3	0.2	-0.1

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

Z Represents or rounds to zero.

¹ Details may not sum to totals because of rounding.

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at <www2.census.gov/library/publications/2018/demo/p60-264sa.pdf>.

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), and care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

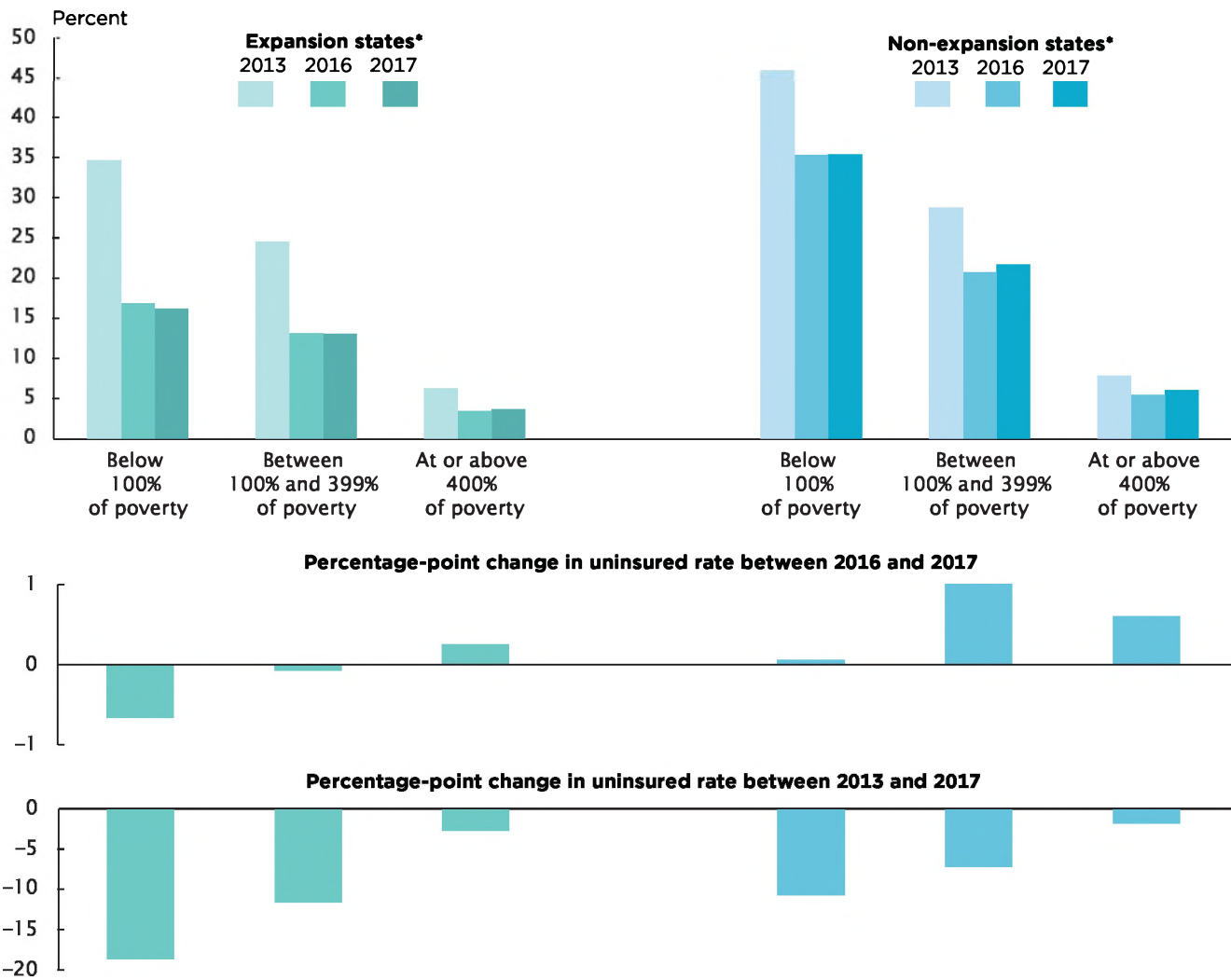
⁶ The 2016 income estimates are inflation-adjusted and presented in 2017 dollars.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements

Figure 5.
Uninsured Rate by Poverty Status and Medicaid Expansion of State for Adults Aged 19 to 64: 2013, 2016, and 2017

(Civilian noninstitutionalized population)



* Medicaid expansion status as of January 1, 2017. For a list of expansion and non-expansion states, see Table 6: Percentage of People Without Health Insurance Coverage by State: 2013, 2016, and 2017.

Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions in the American Community Survey, see <www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf>.

Source: U.S. Census Bureau, 2013, 2016, and 2017 American Community Surveys, 1-Year Estimates.

the uninsured rate in 2017, and the change in the uninsured rate between 2016 and 2017 may be related to the state of residence and whether or not that state expanded Medicaid eligibility (Figure 5).^{31, 32}

In states that expanded Medicaid eligibility on or before January 1, 2017, (“expansion states”) and states that did not expand Medicaid eligibility (“non-expansion states”), the uninsured rate (based on coverage at the time of interview) decreased for adults aged 19 to 64 as the income-to-poverty ratio increased. However, in both 2016 and 2017, the uninsured rate was higher in non-expansion states than in expansion states regardless of individuals’ poverty status group.

Changes in the uninsured rate between 2016 and 2017 varied by poverty status and state Medicaid expansion status. In states that expanded Medicaid eligibility, the uninsured rate decreased for persons living below 100 percent of poverty and increased for people living at or above 400 percent of poverty. In non-expansion states, the uninsured rate increased for both people living from

100 to 399 percent of poverty and people living at or above 400 percent of poverty.

Family Status

Many people obtain health insurance coverage through a family member’s plan. The Census Bureau classifies living arrangements into three types: families, unrelated subfamilies, and unrelated individuals.³³ Families are the largest of these categories (80.7 percent of the population in 2017), followed by unrelated individuals (19.0 percent), and unrelated subfamilies (0.3 percent).

In 2017, people living in families had a higher health insurance coverage rate (91.7 percent) than unrelated individuals (88.8 percent) and people living in unrelated subfamilies (87.7 percent) (Table 5).³⁴ Between 2016 and 2017, there were no statistically significant changes in either the overall coverage rates or the private coverage rates for people with any of these three types of living arrangements.

During this time, the government coverage rate increased by 0.5 percentage points for people in families (to 36.9 percent). There were no statistical changes in government coverage rates for unrelated individuals and for people living in unrelated subfamilies.

³³ Families are defined as groups of two or more related people where one of them is the householder. Family members must be related by birth, marriage, or adoption and reside together. Unrelated subfamilies are family units that reside with, but are not related to, the householder. For example, unrelated subfamilies could include a married couple with or without children, or a single parent with one or more never-married children under 18 years old living in a household. An unrelated subfamily may also include people such as partners, roommates, or resident employees and their spouses and/or children. The number of unrelated subfamily members is included in the total number of household members, but is not included in the count of family members. The remainder of the population is classified as unrelated individuals.

³⁴ In 2017, the health insurance coverage rate of unrelated individuals was not statistically different from the coverage rate of people living in unrelated subfamilies.

Race and Hispanic Origin

In 2017, 93.7 percent of non-Hispanic Whites had health insurance coverage. This rate was higher than the coverage rate for Blacks (89.4 percent), Asians (92.7 percent), and Hispanics (83.9 percent) (Table 5).

Non-Hispanic Whites and Asians were among the most likely to have private health insurance in 2017, at 73.2 percent and 72.2 percent, respectively.^{35, 36} Hispanics, who had the lowest rate of overall health insurance coverage, also had the lowest rate of private coverage, at 53.5 percent. In 2017, 56.5 percent of Blacks had private health insurance coverage.

Rates of government health coverage followed a different pattern than private health insurance coverage rates. In 2017, the government coverage rate was the highest for Blacks (44.1 percent), followed by Hispanics (39.5 percent), and non-Hispanic Whites (36.6 percent). Asians had the lowest rate of health insurance coverage through the government, at 29.6 percent in 2017.

Between 2016 and 2017, there were no statistically significant changes in overall health insurance coverage rates for any of the race and Hispanic origin groups.

Rates of private and government coverage changed for some race and Hispanic origin groups. Between 2016 and 2017, non-Hispanic Whites and Asians experienced a decrease in

³¹ Figure 5 and estimates in the remainder of this section use data from the 2013, 2016, and 2017 American Community Survey, 1-year estimates, due to the larger sample size of the ACS compared with the CPS ASEC. The ACS measures health insurance at the time of interview. For information on how health insurance estimates differ between the ACS and CPS ASEC, see the text box “Two Measures of Health Insurance Coverage.” Additionally, national statistics on income and poverty from the ACS are not identical to those from the CPS ASEC. For information on poverty estimates from the ACS and how they differ from those based on the CPS ASEC, see “Differences Between the Income and Poverty Estimates from the American Community Survey (ACS) and the Annual Social and Economic Supplement to the Current Population Survey (CPS ASEC)” at <www.census.gov/topics/income-poverty/poverty/guidance/data-sources/acs-vs-cps.html>.

³² Thirty-one states and the District of Columbia expanded Medicaid eligibility on or before January 1, 2017. For a list of the states and their Medicaid expansion status as of January 1, 2017, see Table 6: Percentage of People Without Health Insurance Coverage by State: 2013, 2016, and 2017.

³⁵ The small sample size of the Asian population and the fact that the CPS does not use separate population controls for weighting the Asian sample to national totals, contributes to the large variances surrounding estimates for this group. As a result, the CPS is unable to detect statistically significant differences between some estimates for the Asian population. The ACS, based on a larger sample of the population, is a better source for estimating and identifying changes for small subgroups of the population.

³⁶ In 2017, the private coverage rate for non-Hispanic Whites was not statistically different from the private coverage rate for Asians.

Table 5.

Percentage of People by Type of Health Insurance Coverage by Selected Demographic Characteristics: 2016 and 2017

(Numbers in thousands, margins of errors in percentage points. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total																					
	2016	2017	Any health insurance															Uninsured ⁵				
			2016		2017		Change (2017 less 2016) ¹ *	Private health insurance ³				Government health insurance ⁴				2016		2017		Change (2017 less 2016) ¹ *		
	Number	Number	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)		Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)	Per- cent	Margin of error ² (±)		Per- cent	Margin of error ² (±)
							2016													2017		
Total	320,372	323,156	91.2	0.2	91.2	0.2	-0.1	67.5	0.4	67.2	0.4	-0.3	37.3	0.3	37.7	0.3	*0.5	8.8	0.2	8.8	0.2	0.1
Family Status																						
In families	259,863	260,709	91.8	0.2	91.7	0.2	-0.1	68.7	0.4	68.3	0.4	-0.3	36.4	0.4	36.9	0.4	*0.5	8.2	0.2	8.3	0.2	0.1
Householder	82,854	83,103	91.6	0.3	91.2	0.3	*-0.4	71.2	0.4	70.0	0.4	*-1.1	36.3	0.4	37.0	0.4	*0.7	8.4	0.3	8.8	0.3	*0.4
Related children under the age of 18..	72,674	72,532	94.8	0.3	94.7	0.3	Z	63.0	0.6	63.4	0.6	0.4	41.5	0.7	41.8	0.7	0.3	5.2	0.3	5.3	0.3	Z
Related children under the age of 6	23,531	23,574	94.2	0.4	94.0	0.5	-0.2	58.9	1.0	59.2	1.0	0.3	45.1	1.0	44.9	1.0	-0.1	5.8	0.4	6.0	0.5	0.2
In unrelated subfamilies	1,208	1,054	86.5	2.9	87.7	2.8	1.2	48.5	5.3	52.5	5.5	4.1	48.6	4.9	45.4	5.2	-3.2	13.5	2.9	12.3	2.8	-1.2
Unrelated individuals	59,301	61,393	88.7	0.3	88.8	0.4	0.1	62.8	0.6	62.5	0.7	-0.3	40.6	0.5	41.2	0.6	0.6	11.3	0.3	11.2	0.4	-0.1
Residence⁶																						
Inside metropolitan statistical areas	276,682	280,048	91.3	0.2	91.2	0.2	-0.1	68.5	0.4	68.0	0.4	*-0.5	35.9	0.4	36.6	0.4	*0.6	8.7	0.2	8.8	0.2	0.1
Inside principal cities ..	103,365	104,068	90.2	0.3	89.6	0.4	*-0.6	64.0	0.6	63.1	0.7	-0.8	37.9	0.7	38.2	0.6	0.3	9.8	0.3	10.4	0.4	*0.6
Outside principal cities ..	173,317	175,980	92.0	0.3	92.2	0.2	0.2	71.2	0.5	70.8	0.5	-0.4	34.8	0.4	35.6	0.5	*0.8	8.0	0.3	7.8	0.2	-0.2
Outside metropolitan statistical areas ⁷	43,689	43,108	90.6	0.6	90.8	0.5	0.2	61.1	1.1	61.9	1.1	0.8	45.6	1.1	45.5	1.1	-0.1	9.4	0.6	9.2	0.5	-0.2
Race⁸ and Hispanic Origin																						
White	246,310	247,695	91.6	0.2	91.5	0.2	-0.1	69.4	0.4	69.0	0.4	-0.4	36.6	0.3	37.1	0.4	*0.5	8.4	0.2	8.5	0.2	0.1
White, not Hispanic	195,453	195,530	93.7	0.2	93.7	0.2	Z	73.9	0.4	73.2	0.4	*-0.7	35.9	0.4	36.6	0.4	*0.7	6.3	0.2	6.3	0.2	Z
Black	42,040	42,564	89.5	0.5	89.4	0.5	-0.1	56.5	1.0	56.5	0.9	Z	43.7	0.9	44.1	0.9	0.4	10.5	0.5	10.6	0.5	0.1
Asian	18,897	19,484	92.4	0.7	92.7	0.7	0.4	74.2	1.2	72.2	1.4	*-2.0	27.1	1.2	29.6	1.2	*2.5	7.6	0.7	7.3	0.7	-0.4
Hispanic (any race)	57,670	59,227	84.0	0.5	83.9	0.6	Z	52.4	0.8	53.5	0.9	*1.1	40.1	0.7	39.5	0.7	-0.6	16.0	0.5	16.1	0.6	Z
Nativity																						
Native born	276,518	277,748	92.7	0.2	92.5	0.2	*-0.2	68.7	0.4	68.2	0.4	*-0.5	38.1	0.3	38.7	0.4	*0.5	7.3	0.2	7.5	0.2	*0.2
Foreign born	43,854	45,408	82.0	0.6	83.2	0.6	*1.2	59.9	0.7	60.6	0.8	0.7	31.7	0.7	32.0	0.7	0.3	18.0	0.6	16.8	0.6	*-1.2
Naturalized citizen	20,409	21,854	91.5	0.6	91.1	0.5	-0.4	67.3	1.0	65.6	1.0	*-1.6	37.2	1.0	37.5	1.0	0.3	8.5	0.6	8.9	0.5	0.4
Not a citizen	23,445	23,554	73.8	1.0	75.9	1.0	*2.1	53.5	1.1	55.9	1.0	*2.4	27.0	1.0	27.0	0.9	Z	26.2	1.0	24.1	1.0	*-2.1

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

Z Represents or rounds to zero

¹ Details may not sum to totals because of rounding.

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at <www2.census.gov/library/publications/2018/demo/p60-264sa.pdf>

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs) and care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

⁶ The 2016 estimates presented for residence may not match the previously published estimates due to a correction in the assignment of principal city status for a small number of households. For the definition of metropolitan statistical areas and principal cities, see <www.census.gov/programs-surveys/metro-micro/about/glossary.html>.

⁷ The "Outside metropolitan statistical areas" category includes both micropolitan statistical areas and territory outside of metropolitan and micropolitan statistical areas. For more information, see "About Metropolitan and Micropolitan Statistical Areas" at <www.census.gov/population/metro/about/>.

⁸ Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White and American Indian and Alaska Native or Asian and Black or African American, is available from the 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in the 2010 Census. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements.

their private coverage rate (0.7 and 2.0 percentage points, respectively).³⁷ The private coverage rate for Hispanics increased by 1.1 percentage points. There was no statistical change in the private coverage rate for Blacks.

The percentage of non-Hispanic Whites and Asians with government coverage increased between 2016 and 2017 (0.7 and 2.5 percentage points, respectively). There was no statistically significant change in the government coverage rate for Blacks and Hispanics.

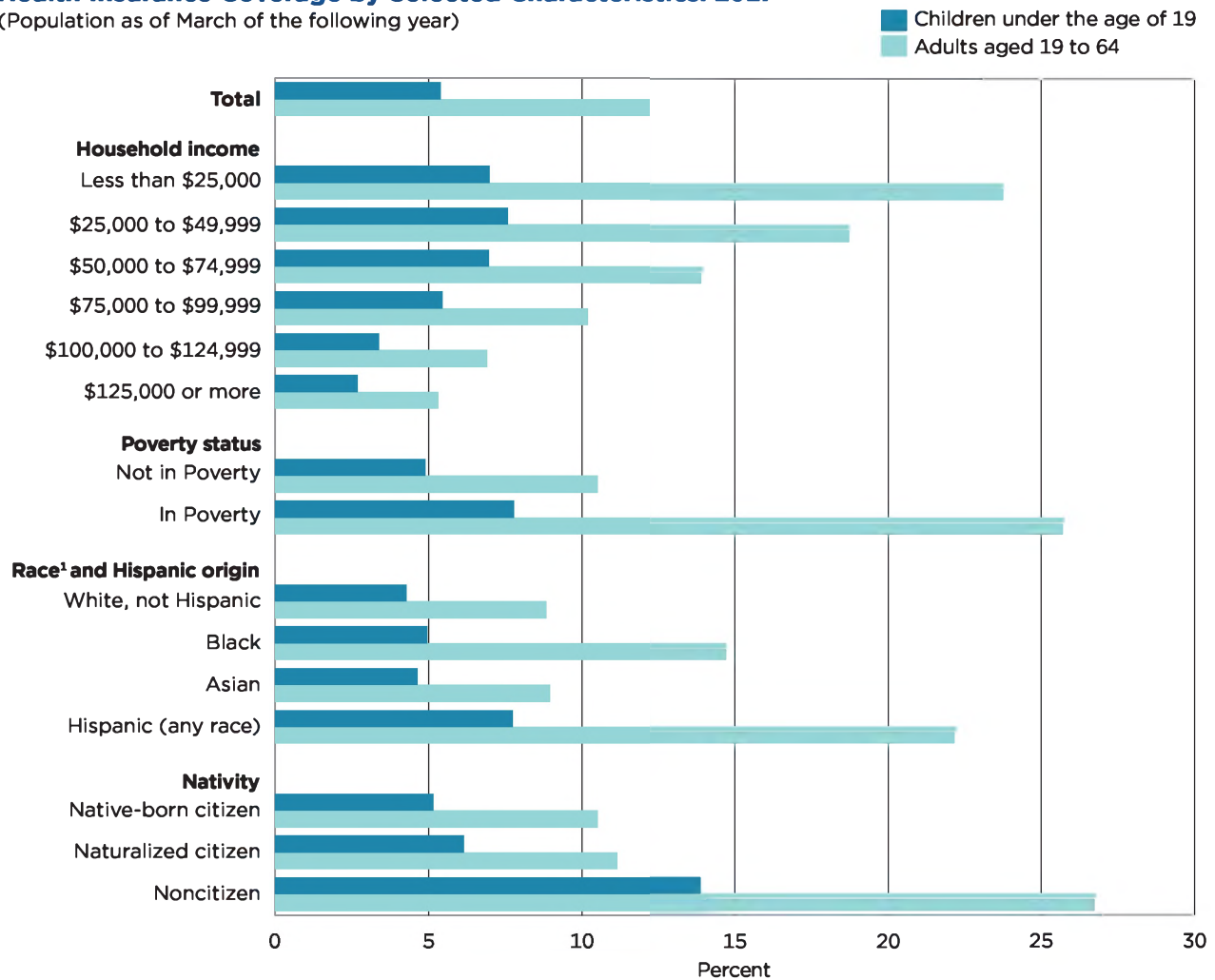
Nativity

In 2017, the overall health insurance coverage rate for the native-born population (92.5 percent) was larger than that of naturalized citizens (91.1 percent) and noncitizens (75.9 percent) (Table 5).

Between 2016 and 2017, the percentage of the native-born population with health insurance coverage decreased by 0.2 percentage points to 92.5 percent. The percentage of

³⁷ The percentage-point difference in the private coverage rate between 2016 and 2017 for non-Hispanic Whites was not statistically different from the percentage-point difference for Asians.

Figure 6.
Percentage of Children Under the Age of 19 and Adults Aged 19 to 64 Without Health Insurance Coverage by Selected Characteristics: 2017
 (Population as of March of the following year)



¹ Federal surveys give respondents the option of reporting more than one race. This figure shows data using the race-alone concept. For example, Asian refers to people who reported Asian and no other race.

For information on confidentiality protection, sampling error, nonsampling error, and definitions in the Current Population Survey, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement.

the foreign born with health insurance increased by 1.2 percentage points to 83.2 percent. Among the foreign-born population, the health insurance coverage rate for non-citizens increased by 2.1 percentage points to 75.9 percent. For this group, the rate of private coverage increased by 2.4 percentage points, and the rate of government coverage did not statistically change.³⁸

Children and Adults Without Health Insurance Coverage

In 2017, 5.4 percent of children under the age of 19 and 12.2 percent of adults aged 19 to 64 did not have health insurance coverage. For all selected characteristics, the percentage of adults without health insurance coverage was significantly higher than for children (under 19 years of age) (Figure 6). Additionally, differences in the uninsured rates between demographic and socioeconomic groups were generally larger among adults than among children.³⁹

For example, the difference in the uninsured rate by poverty status was larger among adults than among children. In 2017, 7.8 percent of children in poverty were uninsured, compared with 4.9 percent of children not in poverty, a 2.9 percentage-point difference. The uninsured rates for adults in poverty and not in poverty were 25.7

³⁸ The percentage-point difference in the private coverage rate between 2016 and 2017 for noncitizens was not statistically different from the percentage-point difference in the overall coverage rate for this group.

³⁹ In 2017, the percentage-point difference in the uninsured rate between children in households with income between \$100,000 and \$124,999 and children in households with income at or above \$125,000 was not statistically different from the percentage-point difference between adults in households with income between \$100,000 and \$124,999 and adults in households with income at or above \$125,000. In 2017, the percentage-point difference in the uninsured rate between native-born children and naturalized children was not statistically different from the percentage-point difference between native-born adults and naturalized adults. In 2017, the percentage-point difference in the uninsured rate between non-Hispanic White children and Asian children was not statistically different from the percentage-point difference between non-Hispanic White adults and Asian adults.

percent and 10.5 percent, respectively, a 15.2 percentage-point difference.

In 2017, non-Hispanic White children had an uninsured rate of 4.3 percent. Asian children had an uninsured rate of 4.6 percent, and Black children had an uninsured rate of 4.9 percent.⁴⁰ Hispanic children had the highest uninsured rate, at 7.7 percent. For all race and Hispanic origin groups, the uninsured rate for adults was significantly larger than the uninsured rate for children.

The uninsured rate for noncitizen children in 2017 was 13.9 percent, compared with 5.2 percent for native-born citizen children, an 8.7 percentage-point difference. For adults in 2017, 26.8 percent of non-citizen adults and 10.5 percent of native-born adults were uninsured, a 16.3 percentage-point difference.

State Estimates of Health Insurance Coverage

During 2017, the state with the lowest percentage of people without health insurance at the time of interview was Massachusetts (2.8 percent), while the state with the highest percentage was Texas (17.3 percent) (Table 6 and Figure 7).⁴¹ Twenty-five states and the District of Columbia had an uninsured rate of 8.0 percent or less, among which six states (Hawaii, Iowa, Massachusetts, Minnesota, Rhode Island, and Vermont) and the District of Columbia had an uninsured rate of 5.0 percent or less. Two states, Oklahoma and Texas, had an uninsured rate of 14.0 percent or more.⁴²

⁴⁰ In 2017, the uninsured rate for non-Hispanic White children was not statistically different from the uninsured rate for Black children or Asian children. In 2017, the uninsured rate for Black children was not statistically different from the uninsured rate for Asian children.

⁴¹ The estimates in this section come from the 2013, 2016, and 2017 American Community Survey 1-year estimates, which measures insurance coverage at the time of interview. The ACS, which has a much larger sample size than the CPS, is also a useful source for estimating and identifying changes in the uninsured population at the state level.

⁴² Consistent with Figure 7, classification into these categories is based on unrounded uninsured rates.

Between 2016 and 2017, the percentage of people without health insurance coverage decreased in three states and increased in 14 states (Table 6 and Figure 8).⁴³ Decreases ranged from 0.2 percentage points to 1.9 percentage points, and increases ranged from 0.3 percentage points to 1.0 percentage point. Thirty-three states and the District of Columbia did not have a statistically significant change in their uninsured rate.

As part of the Patient Protection and Affordable Care Act, 31 states and the District of Columbia expanded Medicaid eligibility on or before January 1, 2017, in (see the text box “Health Insurance Coverage and the Affordable Care Act”).

In general, the uninsured rate in states that expanded Medicaid eligibility prior to January 1, 2017, was lower than in states that did not expand eligibility (Figure 7). In states that expanded Medicaid eligibility (“expansion states”), the uninsured rate in 2017 was 6.5 percent, compared with 12.2 percent in states that did not expand Medicaid eligibility (“non-expansion states”). Many Medicaid expansion states had uninsured rates lower than the national average, while many non-expansion states had uninsured rates above the national average (Figure 8).

The uninsured rates by state ranged from 2.8 percent to 13.7 percent in expansion states, and from 5.4 percent to 17.3 percent in non-expansion states.

Between 2016 and 2017, the uninsured rate did not statistically change in expansion states and increased by 0.4 percentage points in non-expansion states.

⁴³ For additional information on coverage types by state, see <www.census.gov/topics/2018/demo/health-insurance/p60-264.html>.

Table 6.

Percentage of People Without Health Insurance Coverage by State: 2013, 2016, and 2017(Civilian noninstitutionalized population. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf)

State	Medicaid expansion state? Yes (Y) or No (N) ¹	2013 uninsured		2016 uninsured		2017 uninsured		Difference in uninsured			
								2017 less 2016		2017 less 2013	
		Percent	Margin of error ² (±)	Percent	Margin of error ² (±)	Percent	Margin of error ² (±)	Percent	Margin of error ² (±)	Percent	Margin of error ² (±)
United States	X	14.5	0.1	8.6	0.1	8.7	0.1	*0.2	0.1	*-5.8	0.1
Alabama	N	13.6	0.4	9.1	0.3	9.4	0.3	0.3	0.5	*-4.2	0.5
Alaska	+Y	18.5	1.0	14.0	0.9	13.7	0.8	-0.4	1.2	*-4.8	1.3
Arizona	Y	17.1	0.4	10.0	0.3	10.1	0.3	0.1	0.4	*-7.1	0.5
Arkansas	Y	16.0	0.5	7.9	0.4	7.9	0.3	Z	0.5	*-8.1	0.6
California	Y	17.2	0.2	7.3	0.1	7.2	0.1	*-0.2	0.1	*-10.0	0.2
Colorado	Y	14.1	0.3	7.5	0.3	7.5	0.2	Z	0.4	*-6.6	0.4
Connecticut	Y	9.4	0.4	4.9	0.3	5.5	0.3	*0.6	0.5	*-3.9	0.5
Delaware	Y	9.1	0.7	5.7	0.5	5.4	0.6	-0.3	0.7	*-3.7	0.9
District of Columbia	Y	6.7	0.6	3.9	0.6	3.8	0.6	-0.1	0.9	*-2.8	0.8
Florida	N	20.0	0.2	12.5	0.2	12.9	0.2	*0.4	0.3	*-7.1	0.3
Georgia	N	18.8	0.3	12.9	0.3	13.4	0.3	*0.5	0.4	*-5.4	0.4
Hawaii	Y	6.7	0.4	3.5	0.4	3.8	0.4	0.3	0.5	*-2.9	0.5
Idaho	N	16.2	0.8	10.1	0.5	10.1	0.5	Z	0.7	*-6.0	0.9
Illinois	Y	12.7	0.2	6.5	0.2	6.8	0.2	*0.3	0.2	*-5.9	0.3
Indiana	+Y	14.0	0.3	8.1	0.3	8.2	0.3	0.1	0.4	*-5.8	0.4
Iowa	Y	8.1	0.3	4.3	0.2	4.7	0.3	*0.4	0.4	*-3.4	0.4
Kansas	N	12.3	0.4	8.7	0.3	8.7	0.4	Z	0.5	*-3.5	0.6
Kentucky	Y	14.3	0.3	5.1	0.2	5.4	0.3	0.3	0.4	*-8.9	0.4
Louisiana	#Y	16.6	0.4	10.3	0.4	8.4	0.3	*-1.9	0.5	*-8.3	0.5
Maine	N	11.2	0.5	8.0	0.5	8.1	0.5	0.1	0.7	*-3.1	0.7
Maryland	Y	10.2	0.3	6.1	0.3	6.1	0.2	Z	0.4	*-4.0	0.4
Massachusetts	Y	3.7	0.2	2.5	0.2	2.8	0.1	*0.3	0.2	*-0.9	0.2
Michigan	~Y	11.0	0.2	5.4	0.1	5.2	0.2	-0.2	0.2	*-5.8	0.2
Minnesota	Y	8.2	0.3	4.1	0.2	4.4	0.2	*0.3	0.3	*-3.8	0.3
Mississippi	N	17.1	0.5	11.8	0.4	12.0	0.5	0.2	0.7	*-5.0	0.7
Missouri	N	13.0	0.3	8.9	0.2	9.1	0.3	0.2	0.4	*-3.9	0.4
Montana	+Y	16.5	0.8	8.1	0.5	8.5	0.5	0.3	0.8	*-8.0	0.9
Nebraska	N	11.3	0.5	8.6	0.5	8.3	0.4	-0.3	0.6	*-3.0	0.6
Nevada	Y	20.7	0.6	11.4	0.5	11.2	0.4	-0.1	0.6	*-9.4	0.8
New Hampshire	~Y	10.7	0.5	5.9	0.4	5.8	0.4	-0.1	0.6	*-4.9	0.7
New Jersey	Y	13.2	0.2	8.0	0.2	7.7	0.2	-0.2	0.3	*-5.5	0.3
New Mexico	Y	18.6	0.6	9.2	0.5	9.1	0.6	-0.1	0.8	*-9.5	0.9
New York	Y	10.7	0.2	6.1	0.1	5.7	0.1	*-0.4	0.2	*-5.0	0.2
North Carolina	N	15.6	0.3	10.4	0.2	10.7	0.2	0.3	0.3	*-5.0	0.4
North Dakota	Y	10.4	0.8	7.0	0.6	7.5	0.6	0.5	0.9	*-2.8	1.0
Ohio	Y	11.0	0.2	5.6	0.2	6.0	0.2	*0.3	0.2	*-5.1	0.3
Oklahoma	N	17.7	0.3	13.8	0.3	14.2	0.3	0.4	0.4	*-3.5	0.5
Oregon	Y	14.7	0.4	6.2	0.2	6.8	0.3	*0.6	0.4	*-7.8	0.5
Pennsylvania	~Y	9.7	0.2	5.6	0.2	5.5	0.2	-0.1	0.2	*-4.2	0.2
Rhode Island	Y	11.6	0.7	4.3	0.5	4.6	0.4	0.3	0.6	*-7.0	0.8
South Carolina	N	15.8	0.4	10.0	0.3	11.0	0.3	*1.0	0.4	*-4.8	0.5
South Dakota	N	11.3	0.7	8.7	0.5	9.1	0.6	0.3	0.8	*-2.2	0.9
Tennessee	N	13.9	0.3	9.0	0.2	9.5	0.3	*0.5	0.4	*-4.4	0.4
Texas	N	22.1	0.2	16.6	0.2	17.3	0.2	*0.7	0.3	*-4.8	0.3
Utah	N	14.0	0.5	8.8	0.4	9.2	0.4	0.4	0.6	*-4.8	0.6
Vermont	Y	7.2	0.6	3.7	0.4	4.6	0.4	*0.8	0.6	*-2.7	0.8
Virginia	N	12.3	0.3	8.7	0.3	8.8	0.3	0.1	0.4	*-3.5	0.4
Washington	Y	14.0	0.3	6.0	0.2	6.1	0.2	0.2	0.3	*-7.9	0.4
West Virginia	Y	14.0	0.5	5.3	0.3	6.1	0.4	*0.8	0.5	*-7.9	0.7
Wisconsin	N	9.1	0.2	5.3	0.2	5.4	0.2	0.1	0.3	*-3.7	0.3
Wyoming	N	13.4	0.9	11.5	1.0	12.3	1.2	0.7	1.6	*-1.2	1.5

* Statistically different from zero at the 90 percent confidence level.

+ Expanded Medicaid eligibility after January 1, 2015, and on or before January 1, 2016.

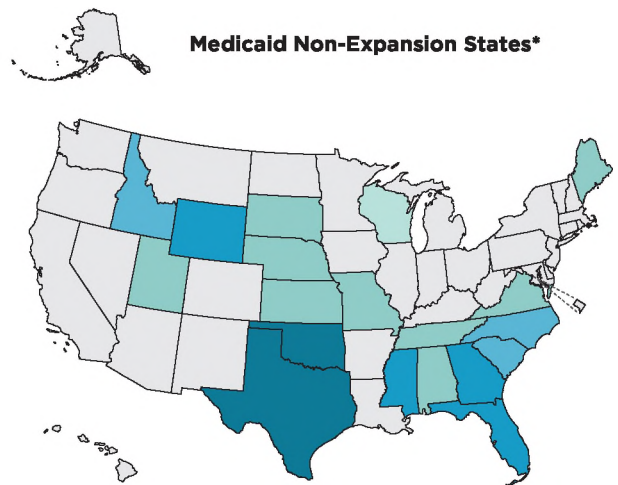
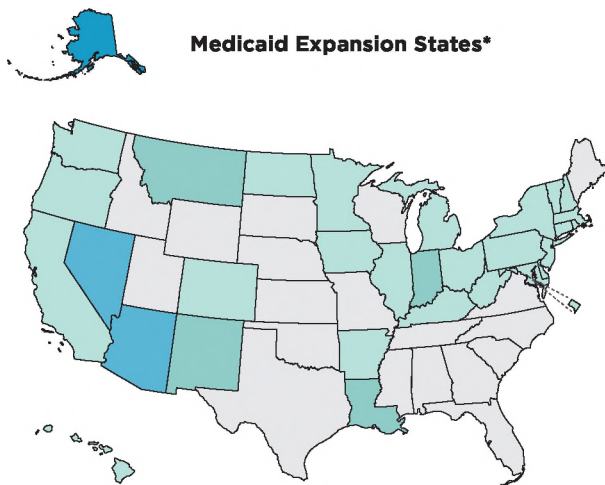
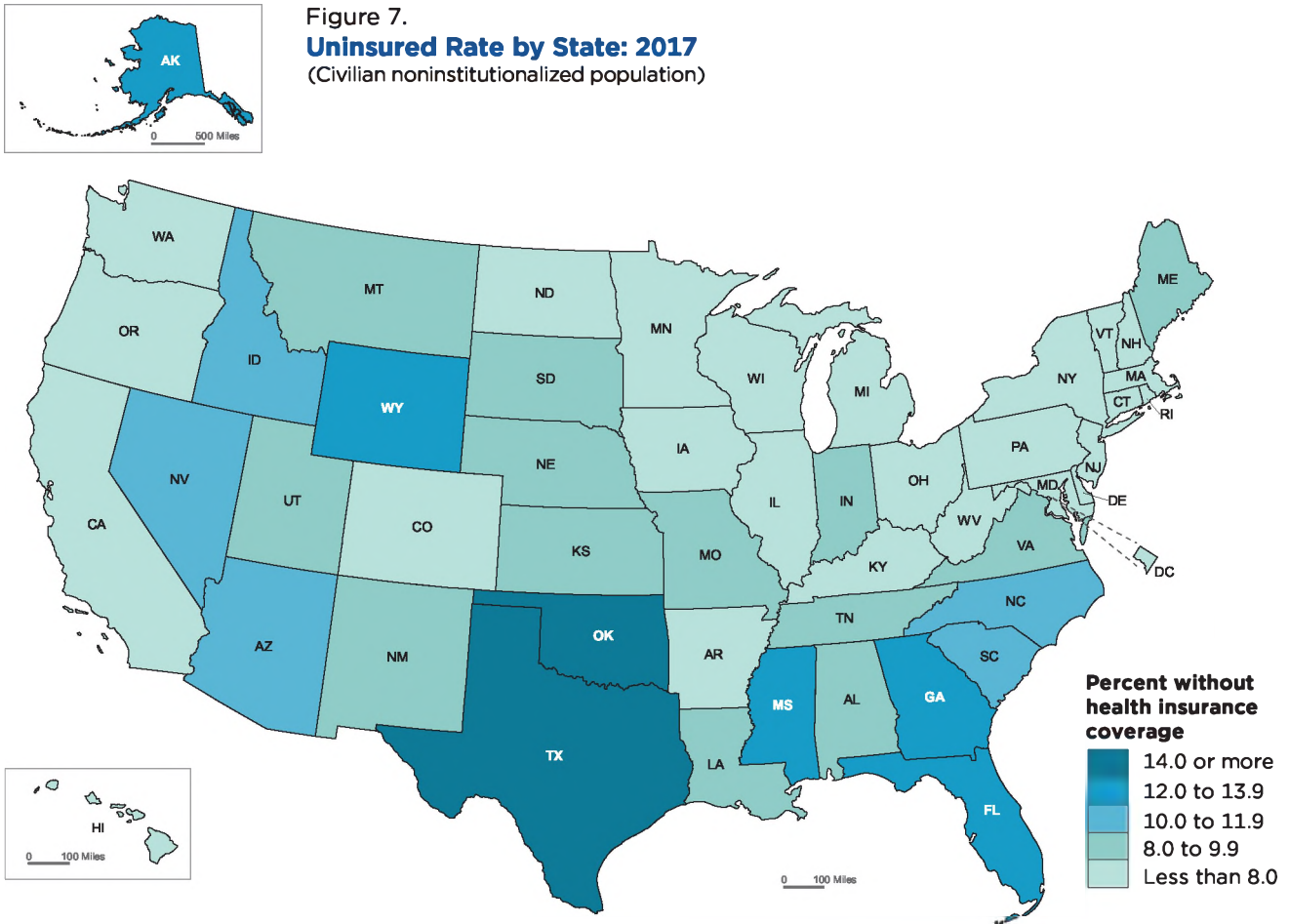
X Not applicable.

¹ Medicaid expansion status as of January 1, 2017. For more information, see <www.medicaid.gov/state-overviews/index.html>.² Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error is in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

Note: Differences are calculated with unrounded numbers, which may produce different results from using the rounded values in the table.

Source: U.S. Census Bureau, 2013, 2016, and 2017 American Community Survey 1-Year Estimates.

Figure 7.
Uninsured Rate by State: 2017
 (Civilian noninstitutionalized population)



* Medicaid expansion status as of January 1, 2017. For a list of expansion and non-expansion states, see Table 6: Percentage of People Without Health Insurance Coverage by State: 2013, 2016, and 2017.

¹ Classification is based on unrounded uninsured rates.

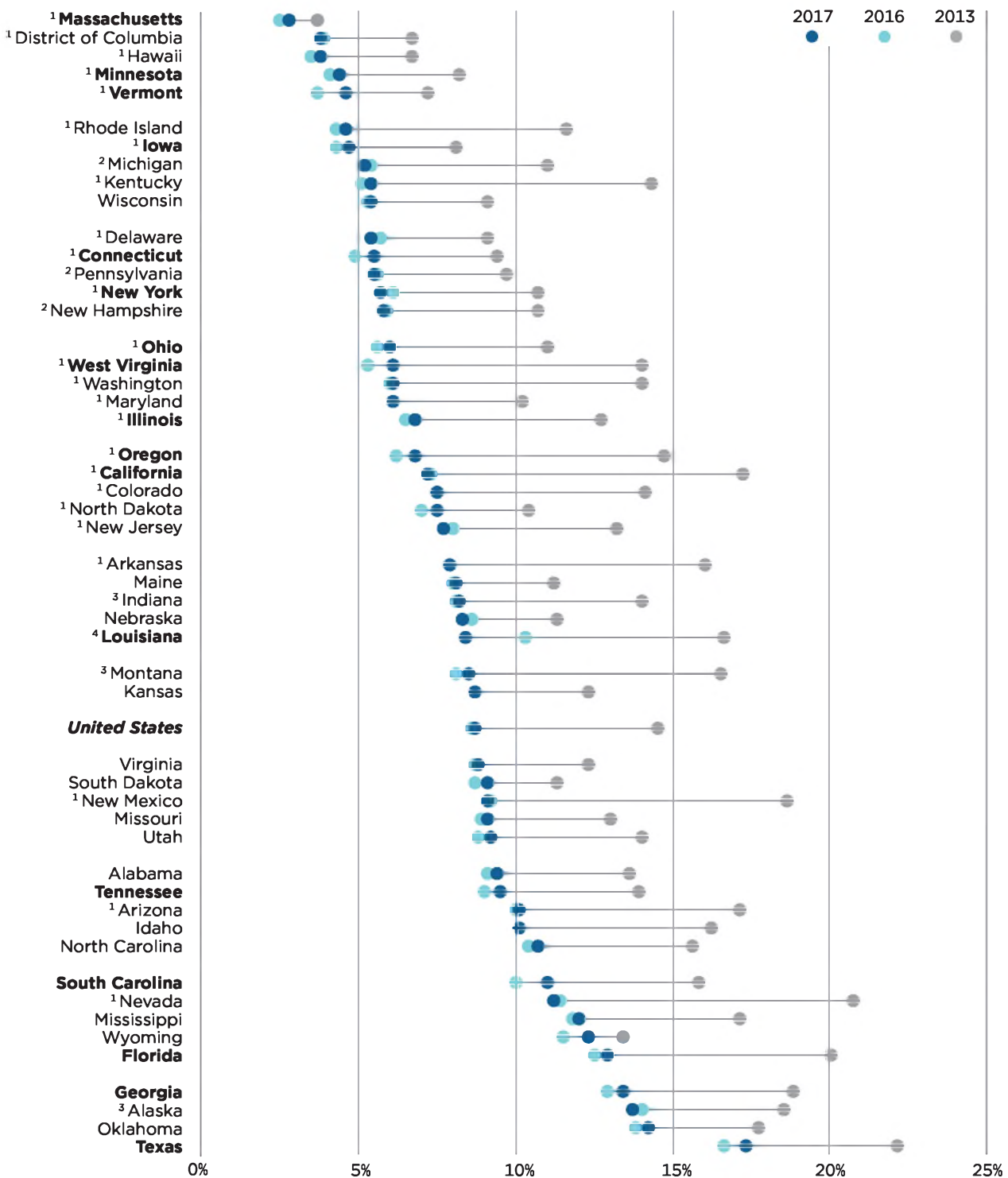
Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions in the American Community Survey, see <www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf>.

Source: U.S. Census Bureau, 2017 American Community Survey, 1-Year Estimates.

Figure 8.

Change in the Uninsured Rate by State: 2013, 2016, and 2017

(Civilian noninstitutionalized population. States with names in bold experienced a statistically significant change between 2016 and 2017)



¹ Expanded Medicaid eligibility as of January 1, 2014.
² Expanded Medicaid eligibility after January 1, 2014, and on or before January 1, 2015.
³ Expanded Medicaid eligibility after January 1, 2015, and on or before January 1, 2016.
⁴ Expanded Medicaid eligibility after January 1, 2016, and on or before January 1, 2017.
 Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions in the American Community Survey, see <www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf>.
 Source: U.S. Census Bureau, 2013, 2016, and 2017 American Community Surveys, 1-Year Estimates.

More Information About Health Insurance Coverage

Additional Data and Contacts

Detailed tables, historical tables, press releases, and briefings are available on the Census Bureau's Health Insurance Web site. The Web site can be accessed at <www.census.gov/topics/health/health-insurance.html>.

Microdata are available for download on the Census Bureau's Web site. Disclosure protection techniques have been applied to CPS microdata to protect respondent confidentiality.

State and Local Estimates of Health Insurance Coverage

The Census Bureau publishes annual estimates of health insurance coverage by state and other smaller geographic units based on data collected in the ACS. Single-year estimates are available for geographic units with populations of 65,000 or more. Five-year estimates are available for all geographic units, including census tracts and block groups.

The Census Bureau's Small Area Health Insurance Estimates (SAHIE) program also produces single-year estimates of health insurance for states and all counties. These estimates are based on models using data from a variety of sources, including current surveys, administrative records, and intercensal population estimates. In general, SAHIE estimates have lower variances than ACS estimates but are released later because they incorporate these additional data into their models.

Small Area Health Insurance Estimates are available at <www.census.gov/programs-surveys/sahie.html>. The most recent estimates are for 2016.

Comments

The Census Bureau welcomes the comments and advice of data and report users. If you have suggestions or comments on the health insurance coverage report, please write to:

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Assistant Division Chief, Employment Characteristics
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Washington, DC 20233-8500
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Sources of Estimates

The majority of the estimates in this report are from the 2014, 2017, and 2018 Current Population Survey Annual Social and Economic Supplements (CPS ASEC) and were collected in the 50 states and the District of Columbia. These data do not represent residents of Puerto Rico and the U.S. Island Areas.⁴⁴ These data are based on a sample of about 92,000 addresses. The estimates in this report are controlled to independent national population estimates by age, sex, race, and Hispanic origin for March of the year in which the data are collected. Beginning with 2010, estimates are based on 2010 Census population counts and are updated annually taking into account births, deaths, emigration, and immigration.

The CPS is a household survey primarily used to collect employment data. The sample universe for the basic CPS consists of the resident civilian noninstitutionalized population

⁴⁴ The U.S. Island Areas include American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Virgin Islands of the United States.

of the United States. People in institutions, such as prisons, long-term care hospitals, and nursing homes are not eligible to be interviewed in the CPS. Students living in dormitories are included in the estimates only if information about them is reported in an interview at their parents' home. Since the CPS is a household survey, people who are homeless and not living in shelters are not included in the sample. The sample universe for the CPS ASEC is slightly larger than that of the basic CPS since it includes military personnel who live in a household with at least one other civilian adult, regardless of whether they live off post or on post. All other armed forces are excluded. For further documentation about the CPS ASEC, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>.

Additional estimates in this report are from the American Community Survey (ACS). The ACS is an ongoing, nationwide survey designed to provide demographic, social, economic, and housing data at different levels of geography. While the ACS includes Puerto Rico and the group quarters population, the ACS data in this report focus on the civilian noninstitutionalized population of the United States (excluding Puerto Rico and some people living in group quarters). It has an annual sample size of about 3.5 million addresses. For information on the ACS sample design and other topics, visit <www.census.gov/programs-surveys/acs/>.

Statistical Accuracy

The estimates in this report (which may be shown in text, figures, and tables) are based on responses from a sample of the population. Sampling

error is the uncertainty between an estimate based on a sample and the corresponding value that would be obtained if the estimate were based on the entire population (as from a census). All comparative statements in this report have undergone statistical testing, and comparisons are significant at the 90 percent level unless otherwise noted. Data are subject to error arising from a variety of sources. Measures of sampling error are provided in the form of margins of error, or confidence intervals, for all estimates included in this report. In addition to sampling error, nonsampling error may be introduced during any of the operations used to collect and process survey data, such as editing, reviewing, or keying data from questionnaires. In this report, the variances

of estimates were calculated using the Fay and Train (1995) Successive Difference Replication (SDR) method.

Most of the data from the 2018 CPS ASEC were collected in March (with some data collected in February and April). Each year, the CPS ASEC sample ranges between 92,000 and 100,000 addresses. In 2018, the CPS ASEC sample had 92,000 addresses, as 5,000 randomly selected addresses were removed from the March sample. The 5,000 addresses were given the pre-2013 health insurance questions in order to fulfill budgetary requirements for the 2018 fiscal year.^{45, 46} Adjustments

⁴⁵ Public Law 113-235, 2017.

⁴⁶ The series of questions asking about health insurance coverage in calendar year 2012 and earlier.

to the weights were made to account for the reduction in sample. Further information about the source and accuracy of the CPS ASEC estimates is available at <www2.census.gov/library/publications/2018/demo/p60-264sa.pdf>.

The remaining data presented in this report are based on the ACS sample collected from January 2017 through December 2017. For more information on sampling and estimation methods, confidentiality protection, and sampling and non-sampling errors, please see the 2017 ACS Accuracy of the Data document located at <www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf>.

APPENDIX A. ADDITIONAL HEALTH INSURANCE COVERAGE TABLES

The Current Population Survey Annual Social and Economic Supplement (CPS ASEC) along with the American Community Survey (ACS) are used to produce additional health insurance coverage tables. These tables are available on the U.S. Census Bureau's Health Insurance Web site. The Web site may be accessed through the Census Bureau's home page at <www.census.gov> or directly at <www.census.gov/topics/health/health-insurance.html>. The tables may also be accessed directly at <www.census.gov/topics/2018/demo/health-insurance/p60-264.html>.

Table A-1.

Number of People by Type of Health Insurance Coverage by Age: 2016 and 2017

(Numbers in thousands, margins of error in thousands. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total		Any health insurance					Private health insurance ³					Government health insurance ⁴					Uninsured ⁵				
	2016	2017	2016		2017		Change (2017 less 2016) ^{1,*}	2016		2017		Change (2017 less 2016) ^{1,*}	2016		2017		Change (2017 less 2016) ^{1,*}	2016		2017		Change (2017 less 2016) ^{1,*}
	Number	Number	Number	Margin of error ² (±)	Number	Margin of error ² (±)		Number	Margin of error ² (±)	Number	Margin of error ² (±)		Number	Margin of error ² (±)	Number	Margin of error ² (±)		Number	Margin of error ² (±)	Number	Margin of error ² (±)	
Total	320,372	323,156	292,320	541	294,613	662	*2,293	216,203	1,145	217,007	1,158	804	119,361	1,018	121,965	1,086	*2,604	28,052	519	28,543	634	492
Age																						
Under age 65	271,098	272,076	243,645	582	244,211	664	566	190,198	1,051	190,882	1,064	684	73,220	991	74,082	1,042	862	27,453	508	27,865	612	412
Under age 18	74,047	73,963	70,123	246	70,033	267	-90	46,393	438	46,570	488	177	31,020	481	31,277	482	258	3,924	192	3,930	238	6
Aged 18 to 64	197,051	198,113	173,521	535	174,178	569	657	143,805	772	144,312	760	507	42,200	689	42,804	729	604	23,530	438	23,935	498	405
Under age 19 ⁶	78,150	78,106	73,948	240	73,884	295	-63	49,185	452	49,419	504	235	32,439	501	32,748	509	309	4,203	205	4,221	252	19
Aged 19 to 64	192,948	193,971	169,697	525	170,327	561	630	141,013	750	141,463	749	449	40,781	662	41,334	717	553	23,251	435	23,644	489	393
Aged 19 to 25 ⁷	29,815	29,922	25,917	274	25,727	298	-190	21,247	290	21,002	304	-244	6,898	263	6,994	260	96	3,898	179	4,195	204	*297
Aged 26 to 34	39,736	40,152	33,499	267	33,875	310	*376	27,692	313	28,047	329	355	8,097	258	8,154	295	57	6,237	224	6,277	229	40
Aged 35 to 44	40,046	40,659	34,794	197	35,253	198	*459	29,373	270	29,912	272	*540	7,728	228	7,825	240	97	5,252	192	5,407	199	154
Aged 45 to 64	83,351	83,237	75,487	342	75,472	330	-15	62,702	449	62,501	469	-201	18,058	408	18,361	421	303	7,863	257	7,765	282	-98
Aged 65 and older	49,274	51,080	48,675	225	50,402	209	*1,726	26,005	378	26,125	441	120	46,140	259	47,883	232	*1,743	598	69	678	71	80

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

¹ Details may not sum to totals because of rounding.

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at <www2.census.gov/library/publications/2018/demo/p60-264sa.pdf>.

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), and care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

⁶ Children under the age of 19 are eligible for Medicaid/CHIP.

⁷ This age is of special interest because of the Affordable Care Act's dependent coverage provision. Individuals aged 19 to 25 may be eligible to be a dependent on a parent's health insurance plan.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements.

Table A-2.

Number of People by Type of Health Insurance Coverage for Working-Age Adults Aged 19 to 64: 2016 and 2017

(Numbers in thousands, margins of error in thousands. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total																					
	2016	2017	Any health insurance												Uninsured ⁵							
			2016		2017		Change (2017 less 2016) ¹ *	Private health insurance ³				Government health insurance ⁴				2016		2017				
	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Change (2017 less 2016) ¹ *	Number		Margin of error ² (±)	Number	Margin of error ² (±)	Change (2017 less 2016) ¹ *	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Change (2017 less 2016) ¹ *	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Change (2017 less 2016) ¹ *	
							2016															2017
Total	320,372	323,156	292,320	541	294,613	662	*2,293	216,203	1,145	217,007	1,158	804	119,361	1,018	121,965	1,086	*2,604	28,052	519	28,543	634	492
Total, 19 to 64 years old	192,948	193,971	169,697	525	170,327	561	630	141,013	750	141,463	749	449	40,781	662	41,334	717	553	23,251	435	23,644	489	393
Marital Status																						
Married ⁶	101,822	101,580	92,821	670	92,318	805	-503	81,594	666	80,988	773	-606	18,230	447	18,597	476	367	9,001	333	9,262	314	261
Widowed	3,633	3,586	3,127	158	3,107	162	-20	2,131	117	2,053	134	-79	1,218	101	1,290	99	71	506	61	479	62	-27
Divorced	19,460	19,510	16,753	363	16,858	380	105	12,503	317	12,753	338	250	5,223	212	5,136	203	-86	2,707	132	2,652	146	-55
Separated	4,495	4,372	3,632	169	3,486	161	-146	2,512	144	2,423	139	-89	1,394	96	1,309	90	-85	863	73	886	84	23
Never married	63,537	64,923	53,364	547	54,558	570	*1,195	42,272	552	43,246	517	*973	14,716	392	15,002	388	286	10,174	320	10,365	304	191
Disability Status⁷																						
With a disability	15,248	14,957	13,899	358	13,641	350	-258	6,633	231	6,702	240	70	8,933	287	8,639	300	-294	1,349	109	1,317	100	-32
With no disability	176,842	178,063	154,940	572	155,735	585	*796	134,162	765	134,502	751	340	30,989	558	31,744	572	*755	21,902	417	22,327	466	425
Work Experience																						
All workers	149,105	150,487	132,422	587	133,419	738	*996	119,497	661	120,622	767	*1,125	20,797	474	21,115	500	318	16,682	385	17,068	379	386
Worked full-time, year-round	107,577	109,511	97,049	652	98,770	713	*1,722	90,853	669	92,394	721	*1,540	11,224	313	11,927	367	*703	10,528	292	10,741	286	213
Worked less than full-time, year-round	41,528	40,976	35,374	514	34,648	511	*-725	28,643	441	28,228	468	-416	9,573	286	9,189	283	*-385	6,154	225	6,327	244	173
Did not work at least 1 week ..	43,843	43,484	37,275	507	36,908	547	-367	21,517	413	20,841	419	*-676	19,984	395	20,218	484	235	6,568	247	6,576	256	8
Educational Attainment																						
Total, 26 to 64 years old	163,133	164,049	143,780	473	144,599	534	*819	119,766	685	120,460	691	694	33,883	547	34,340	594	457	19,353	386	19,449	446	96
No high school diploma	15,389	15,150	11,184	300	11,161	297	-23	6,293	218	6,425	228	132	5,806	218	5,677	217	-129	4,205	189	3,989	197	-216
High school graduate (includes equivalency)	45,401	44,772	38,511	605	37,814	579	*-697	29,512	541	29,273	510	-239	11,961	328	11,756	328	-205	6,890	232	6,958	261	67
Some college, no degree	26,594	26,109	23,512	407	22,977	381	*-536	19,102	383	18,445	343	*-656	6,324	227	6,439	221	115	3,082	147	3,133	155	51
Associate's degree	17,739	17,659	16,096	354	15,987	348	-110	13,820	323	13,627	328	-193	3,454	171	3,449	153	-5	1,642	110	1,673	127	30
Bachelor's degree	36,528	38,465	34,032	503	35,690	577	*1,658	31,698	498	32,889	576	*1,191	4,239	172	4,765	204	*525	2,496	133	2,775	160	*279
Graduate or professional degree	21,482	21,894	20,444	437	20,971	431	*527	19,342	432	19,801	419	459	2,098	122	2,254	130	156	1,038	86	922	82	*-116

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

¹ Details may not sum to totals because of rounding.

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-264sa.pdf.

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), and care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

⁶ The combined category "married" includes three individual categories: "married, civilian spouse present," "married, armed forces spouse present," and "married, spouse absent."

⁷ The sum of those with and without a disability does not equal the total because disability status is not defined for individuals in the armed forces.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements.

Table A-3.

Number of People by Type of Health Insurance Coverage by Household Income and Income-to-Poverty Ratio: 2016 and 2017

(Numbers in thousands, margins of error in thousands. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total																					
	2016	2017	Any health insurance										Uninsured ⁵									
			2016		2017		Change (2017 less 2016) ^{1,*}	Private health insurance ³				Government health insurance ⁴		2016		2017		Change (2017 less 2016) ^{1,*}				
	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)		Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)		Number	Margin of error ² (±)	Number	Margin of error ² (±)
							Number											Margin of error ² (±)				
Total	320,372	323,156	292,320	541	294,613	662	*2,293	216,203	1,145	217,007	1,158	804	119,361	1,018	121,965	1,086	*2,604	28,052	519	28,543	634	492
Household Income⁶																						
Less than \$25,000	47,507	46,682	40,958	779	40,199	797	-758	14,398	461	14,071	460	-327	32,259	668	31,920	664	-339	6,550	288	6,482	304	-67
\$25,000 to \$49,999	62,357	62,187	54,940	967	54,569	981	-371	32,584	685	31,800	706	-784	32,708	744	32,986	756	278	7,417	294	7,618	350	201
\$50,000 to \$74,999	54,487	53,710	49,036	901	48,141	860	-895	37,049	783	35,844	732	*-1,205	20,369	531	20,031	524	-338	5,452	266	5,570	298	118
\$75,000 to \$99,999	43,902	44,982	40,533	797	41,436	864	903	34,696	729	34,733	805	38	11,697	389	13,014	483	*1,318	3,369	216	3,546	206	177
\$100,000 to \$124,999	33,406	32,108	31,425	730	30,367	769	*-1,057	27,822	656	26,787	703	*-1,035	7,483	342	7,831	351	348	1,982	171	1,741	147	*-241
\$125,000 or more	78,712	83,487	75,429	1,034	79,900	1,251	*4,472	69,654	1,050	73,771	1,204	*4,117	14,845	458	16,182	523	*1,337	3,283	223	3,587	229	304
Income-to-Poverty Ratio																						
Below 100 percent of poverty	40,616	39,698	34,004	683	32,950	806	*-1,053	11,620	420	11,185	490	-434	25,826	585	24,934	647	*-892	6,612	261	6,748	311	135
Below 138 percent of poverty	61,039	61,174	51,681	820	51,632	927	-49	19,001	537	19,159	577	158	38,522	692	38,329	798	-193	9,357	316	9,542	392	185
From 100 to 199 percent of poverty	54,629	56,004	47,735	876	48,862	906	1,127	24,786	671	25,492	632	706	30,518	651	31,192	667	674	6,894	309	7,142	348	248
From 200 to 299 percent of poverty	51,705	51,354	46,131	825	45,756	850	-375	34,216	742	33,119	692	*-1,097	19,631	478	20,519	559	*887	5,574	258	5,598	262	23
From 300 to 399 percent of poverty	42,562	41,649	39,359	753	38,432	860	-927	32,525	640	31,940	790	-585	13,258	448	12,478	420	*-780	3,204	192	3,218	189	14
At or above 400 percent of poverty	130,398	133,844	124,665	1,256	128,044	1,343	*3,378	112,884	1,217	115,059	1,301	*2,175	29,793	575	32,376	629	*2,583	5,733	272	5,801	262	68

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

¹ Details may not sum to totals because of rounding.

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-264sa.pdf.

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), and care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

⁶ The 2016 income estimates are inflation-adjusted and presented in 2017 dollars.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements.

Table A-4.

Number of People by Type of Health Insurance Coverage by Selected Demographic Characteristics: 2016 and 2017

(Numbers in thousands, margins of errors in thousands. Population as of March of the following year. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Total																					
	2016		2017		Any health insurance										Uninsured ⁵							
	2016	2017	2016		2017		Change (2017 less 2016) ¹ *	Private health insurance ³				Government health insurance ⁴				2016		2017		Change (2017 less 2016) ¹ *		
			Number	Margin of error ² (±)	Number	Margin of error ² (±)		Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)					
	Number	Number	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Change (2017 less 2016) ¹ *	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Change (2017 less 2016) ¹ *	Number	Margin of error ² (±)	Number	Margin of error ² (±)	Change (2017 less 2016) ¹ *					
Total	320,372	323,156	292,320	541	294,613	662	*2,293	216,203	1,145	217,007	1,158	804	119,361	1,018	121,965	1,086	*2,604	28,052	519	28,543	634	492
Family Status																						
In families	259,863	260,709	238,655	883	239,167	1,016	512	178,401	1,203	178,086	1,216	-315	94,707	936	96,220	1,084	*1,513	21,208	504	21,542	581	334
Householder	82,854	83,103	75,899	437	75,756	466	-143	58,954	458	58,182	458	*-773	30,074	335	30,712	435	*638	6,956	217	7,347	220	*391
Related children under age 18	72,674	72,532	68,867	261	68,701	289	-166	45,793	440	45,988	487	195	30,180	481	30,327	473	148	3,807	194	3,831	234	24
Related children under age 6	23,531	23,574	22,175	128	22,165	136	-10	13,848	224	13,950	236	101	10,603	238	10,594	235	-9	1,355	105	1,408	110	53
In unrelated subfamilies ..	1,208	1,054	1,045	135	924	117	-120	585	102	553	84	-32	587	89	479	83	-108	163	37	129	30	-34
Unrelated individuals	59,301	61,393	52,621	729	54,521	779	*1,901	37,217	645	38,368	645	*1,151	24,067	437	25,266	492	*1,199	6,680	227	6,872	278	192
Residence⁶																						
Inside metropolitan statistical areas	276,682	280,048	252,748	2,587	255,475	2,663	*2,727	189,505	2,011	190,316	2,218	811	99,424	1,584	102,358	1,570	*2,934	23,935	582	24,573	654	638
Inside principal cities ..	103,365	104,068	93,278	1,882	93,280	1,843	2	66,111	1,329	65,713	1,497	-398	39,170	1,108	39,721	1,033	551	10,088	405	10,788	463	*700
Outside principal cities	173,317	175,980	159,470	2,442	162,195	2,437	*2,725	123,393	1,906	124,603	2,021	1,209	60,254	1,265	62,637	1,268	*2,383	13,847	491	13,785	459	-62
Outside metropolitan statistical areas ⁷	43,689	43,108	39,572	2,525	39,138	2,524	-434	26,699	1,723	26,691	1,747	-8	19,936	1,395	19,607	1,404	-329	4,117	371	3,970	343	-147
Race⁸ and Hispanic Origin																						
White	246,310	247,695	225,497	491	226,621	552	*1,124	170,839	949	170,913	965	74	90,220	847	91,952	929	*1,732	20,813	455	21,075	526	262
White, not Hispanic	195,453	195,530	183,139	422	183,168	437	29	144,398	839	143,181	793	*-1,216	70,136	701	71,550	804	*1,415	12,314	360	12,362	395	48
Black	42,040	42,564	37,612	227	38,052	211	*439	23,739	415	24,041	401	302	18,377	378	18,792	376	415	4,428	223	4,512	204	84
Asian	18,897	19,484	17,455	208	18,071	237	*616	14,013	260	14,068	305	55	5,124	237	5,761	253	*637	1,442	134	1,413	133	-29
Hispanic (any race)	57,670	59,227	48,433	319	49,719	360	*1,286	30,192	453	31,672	562	*1,480	23,125	419	23,414	426	289	9,237	316	9,508	356	271
Nativity																						
Native born	276,518	277,748	256,338	767	256,827	849	488	189,946	1,126	189,503	1,104	-443	105,440	982	107,421	1,068	*1,981	20,180	438	20,921	513	*742
Foreign born	43,854	45,408	35,982	538	37,786	664	*1,804	26,258	469	27,504	577	*1,247	13,921	389	14,544	396	*623	7,872	312	7,622	316	-250
Naturalized citizen	20,409	21,854	18,684	405	19,918	468	*1,235	13,726	346	14,342	414	*616	7,591	259	8,191	280	*601	1,726	125	1,936	116	*210
Not a citizen	23,445	23,554	17,298	380	17,868	450	*570	12,532	346	13,162	359	*630	6,330	262	6,353	266	22	6,147	269	5,687	263	*-460

* Changes between the estimates are statistically different from zero at the 90 percent confidence level.

¹ Details may not sum to totals because of rounding.

² A margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at <www2.census.gov/library/publications/2018/demo/p60-264sa.pdf>.

³ Private health insurance includes coverage provided through an employer or union, coverage purchased directly by an individual from an insurance company, or coverage through someone outside the household.

⁴ Government health insurance coverage includes Medicaid, Medicare, TRICARE, CHAMPVA (Civilian Health and Medical Program of the Department of Veterans Affairs), and care provided by the Department of Veterans Affairs and the military.

⁵ Individuals are considered to be uninsured if they do not have health insurance coverage for the entire calendar year.

⁶ The 2016 estimates presented for residence may not match the previously published estimates due to a correction in the assignment of principal city status for a small number of households. For the definition of metropolitan statistical areas and principal cities, see <www.census.gov/programs-surveys/metro-micro/about/glossary.html>.

⁷ The "Outside metropolitan statistical areas" category includes both micropolitan statistical areas and territory outside of metropolitan and micropolitan statistical areas. For more information, see "About Metropolitan and Micropolitan Statistical Areas" at <www.census.gov/population/metro/about/>.

⁸ Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White and American Indian and Alaska Native or Asian and Black or African American, is available from the 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in the 2010 Census. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

Note: The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.

Source: U.S. Census Bureau, Current Population Survey, 2017 and 2018 Annual Social and Economic Supplements.

Table A-5.

Number of People Without Health Insurance Coverage by State: 2013, 2016, and 2017(Numbers in thousands. Civilian noninstitutionalized population. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/facs/tech_docs/accuracy/ACS_Accuracy_of_Data_2017.pdf)

State	Medicaid expansion state? Yes (Y) or No (N) ¹	2013 uninsured		2016 uninsured		2017 uninsured		Difference in uninsured			
		Number	Margin of error ² (±)	Number	Margin of error ² (±)	Number	Margin of error ² (±)	2017 less 2016		2017 less 2013	
								Number	Margin of error ² (±)	Number	Margin of error ² (±)
United States		45,181	200	27,304	162	28,019	188	*715	248	*-17,161	275
Alabama	N	645	17	435	14	449	16	14	22	*-197	23
Alaska	+Y	132	7	101	6	98	6	-3	9	*-34	9
Arizona	Y	1,118	24	681	21	695	20	14	29	*-423	32
Arkansas	Y	465	14	232	12	232	10	27	16	*-233	17
California	Y	6,500	57	2,844	41	2,797	34	-47	53	*-3,704	67
Colorado	Y	729	18	410	14	414	13	4	19	*-315	22
Connecticut	Y	333	14	172	11	194	12	*22	16	*-139	19
Delaware	Y	83	6	53	5	51	5	-2	7	*-32	8
District of Columbia	Y	42	4	26	4	26	4	Z	6	*-16	6
Florida	N	3,853	43	2,544	47	2,676	43	*132	64	*-1,177	61
Georgia	N	1,846	30	1,310	30	1,375	29	*66	42	*-471	42
Hawaii	Y	91	6	49	5	53	5	4	7	*-38	7
Idaho	N	257	12	168	8	172	9	4	12	*-85	15
Illinois	Y	1,618	27	817	20	859	23	*43	31	*-759	35
Indiana	+Y	903	19	530	17	536	18	6	25	*-367	26
Iowa	Y	248	9	132	8	146	8	*14	11	*-102	12
Kansas	N	348	12	249	9	249	11	Z	14	*-99	16
Kentucky	Y	616	14	223	10	235	12	12	16	*-381	19
Louisiana	#Y	751	17	470	17	383	13	*-87	22	*-369	21
Maine	N	147	7	106	7	107	6	1	9	*-40	10
Maryland	Y	593	17	363	16	366	15	2	22	*-228	23
Massachusetts	Y	247	10	171	10	190	10	*19	14	*-57	14
Michigan	~Y	1,072	19	527	14	510	15	-17	20	*-562	24
Minnesota	Y	440	14	225	10	243	11	*18	15	*-197	18
Mississippi	N	500	16	346	12	352	15	6	19	*-148	22
Missouri	N	773	18	532	14	548	17	16	22	*-225	25
Montana	+Y	165	8	83	6	88	6	4	8	*-77	10
Nebraska	N	209	9	161	9	157	7	-4	12	*-52	12
Nevada	Y	570	17	330	13	333	13	2	19	*-237	21
New Hampshire	~Y	140	7	78	6	77	5	-1	8	*-63	9
New Jersey	Y	1,160	22	705	19	688	17	-17	26	*-472	28
New Mexico	Y	382	13	188	10	187	12	-1	16	*-195	18
New York	Y	2,070	30	1,183	26	1,113	27	*-70	38	*-957	41
North Carolina	N	1,509	26	1,038	21	1,076	24	*38	32	*-433	36
North Dakota	Y	73	6	52	5	56	5	3	7	*-18	7
Ohio	Y	1,258	21	644	18	686	22	*42	28	*-572	31
Oklahoma	N	666	13	530	13	545	12	16	17	*-120	17
Oregon	Y	571	15	253	10	281	12	*28	16	*-290	19
Pennsylvania	~Y	1,222	22	708	21	692	21	-16	30	*-530	31
Rhode Island	Y	120	7	45	5	48	4	3	7	*-72	8
South Carolina	N	739	18	486	14	542	17	*56	22	*-197	25
South Dakota	N	93	5	74	4	77	5	3	7	*-16	7
Tennessee	N	887	20	592	16	629	19	*37	25	*-258	27
Texas	N	5,748	55	4,545	55	4,817	48	*272	73	*-931	73
Utah	N	402	13	265	12	282	12	17	17	*-120	18
Vermont	Y	45	4	23	2	28	3	*5	4	*-17	5
Virginia	N	991	22	715	21	729	21	14	30	*-261	31
Washington	Y	960	22	428	15	446	15	18	21	*-514	26
West Virginia	Y	255	10	96	6	109	7	*13	9	*-146	12
Wisconsin	N	518	14	300	10	309	11	9	15	*-208	17
Wyoming	N	77	5	67	6	70	7	3	9	-7	8

* Statistically different from zero at the 90 percent confidence level.

~ Expanded Medicaid eligibility after January 1, 2014, and on or before January 1, 2015.

+ Expanded Medicaid eligibility after January 1, 2015, and on or before January 1, 2016

Expanded Medicaid eligibility after January 1, 2016, and on or before January 1, 2017.

Z Represents or rounds to zero

¹ Medicaid expansion status as of January 1, 2017. For more information, see <www.medicaid.gov/state-overviews/index.html>² Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error is in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

Note: Differences are calculated with unrounded numbers, which may produce different results from using the rounded values in the table

Source: U.S. Census Bureau, 2013, 2016, and 2017 American Community Survey 1-Year Estimates

APPENDIX B. ESTIMATES OF HEALTH INSURANCE COVERAGE

Quality of Health Insurance Coverage Estimates

The Current Population Survey Annual Social and Economic Supplement (CPS ASEC) is used to produce official estimates of income and poverty, and it serves as the most widely cited source of estimates on health insurance and the uninsured. Detailed health insurance questions have been asked in the CPS ASEC since 1988 as a part of a mandate to collect data on noncash benefits.

However, researchers have questioned the validity of the health insurance estimates in the previous version of the CPS ASEC.¹ In particular, the estimate of the uninsured in the previous calendar year was not in line with other federal surveys or administrative records, indicating that the CPS

¹The issues with the traditional CPS ASEC health insurance estimates have been well established, as discussed in the Census Bureau's annual publication on health insurance. The *Income, Poverty, and Health Insurance Coverage in the United States* report has detailed the issues with the CPS estimates. For an example, see page 22 in the report, P60-245, *Income, Poverty, and Health Insurance Coverage in the United States: 2012* at <www.census.gov/content/census/en/library/publications/2013/demo/p60-245.html>.

ASEC did not capture as much health insurance coverage in comparison.² Additionally, these concerns extended to undercounting Medicaid enrollment and general misreporting of the source and timing of health insurance coverage.³ To address these concerns, the U.S. Census Bureau substantially redesigned the CPS ASEC health insurance module to improve estimates of health insurance coverage. Evaluation of the new questions included over a decade of research, including focus groups, cognitive interviews, and two national field tests.⁴

² See Jacob A. Klerman, Michael Davern, Kathleen Thiede Call, Victoria Lynch, and Jeanne D. Ringel, "Understanding the Current Population Survey's Insurance Estimates and the Medicaid 'Undercount,'" *Health Affairs—Web Exclusive*: w991-w1001, 2009. Available at <<http://content.healthaffairs.org/content/28/6/w991>>.

³ See Kathleen T. Call, Michael E. Davern, Jacob A. Klerman, and Victoria Lynch, "Comparing Errors in Medicaid Reporting across Surveys: Evidence to Date," *Health Services Research*, 48(2P+1), 2013, pp. 652-664. Available at <<http://onlinelibrary.wiley.com/doi/10.1111/j.1475-6773.2012.01446.x/full>>.

⁴ See the infographic "Improving Health Insurance Coverage Measurement: 1998-2014, A History of Research and Testing" at <www.census.gov/content/dam/Census/newsroom/press-kits/2015/health_insurance_research.pdf>.

In 2014, the Census Bureau implemented changes to the CPS ASEC, including a complete redesign of the health insurance questions. Due to the differences in measurement, health insurance estimates for calendar year 2013 and later years are not directly comparable to previous years; this report does not compare estimates from the redesigned CPS ASEC to the previous version of the health insurance questions. Researchers should use caution when comparing results over time. In particular, the estimate of the uninsured population is lower than in previous years, since the redesigned questions capture more health insurance coverage than the preceding CPS ASEC. For more information on why the CPS ASEC was redesigned, as well as the results from the 2013 field test, see <www.census.gov/topics/health/health-insurance/guidance/cpsasec-redesign.html>.

APPENDIX C. REPLICATE WEIGHTS

Beginning with the 2011 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) report, the variance of CPS ASEC estimates used to calculate the standard errors and confidence intervals displayed in the text tables are calculated using the Successive Difference Replication (SDR) method.¹ This method involves the computation of a set of replicate weights, which account for the complex survey design of the CPS. The SDR method has been used to estimate variances in the American Community Survey since its inception.

Before 2011, the standard errors of CPS ASEC estimates were calculated using a Generalized Variance Function (GVF) approach. Under this approach, generalized variance parameters were used in formulas provided in the source and accuracy statement to estimate standard errors.

One study found that the CPS ASEC GVF standard errors performed poorly against more precise Survey Design-Based (SDB) estimates.² In most cases, results indicated that the published GVF parameters significantly underestimated standard errors in the CPS ASEC. This and other critiques prompted the Census Bureau to transition from using the GVF method of estimating standard errors to using the SDR method of estimating standard errors for the CPS ASEC. In 2009, the U.S. Census Bureau released replicate weights for the 2005 through 2009 CPS ASEC collection years and has released replicate weights for 2010 to 2018 with the release of the CPS ASEC public-use data.

Following the 2009 release of CPS ASEC replicate weights, another study compared replicate weight standard error estimates with SDB

estimates.³ Replicate weight estimates performed markedly better against SDB standard errors than those calculated using the published GVF parameters.

Since the published GVF parameters generally underestimated standard errors, standard errors produced using SDR may be higher than in previous reports. For most CPS ASEC estimates, the increase in standard errors from GVF to SDR will not alter the findings. However, marginally significant differences using the GVF may not be significant using replicate weights.

The Census Bureau will continue to provide the GVF parameters in the source and accuracy statement.

¹ Robert E. Fay and George F. Train, "Aspects of Survey and Model-Based Postcensal Estimation of Income and Poverty Characteristics for States and Counties," *Proceedings of the Section on Government Statistics, American Statistical Association*, Alexandria, VA, 1995, pp. 154–159.

² Michael Davern, Arthur Jones, James Lepkowski, Gestur Davidson, and Lynn A. Blewett, "Unstable Inferences? An Examination of Complex Survey Sample Design Adjustments Using the Current Population Survey for Health Services Research," *Inquiry*, Vol. 43, No. 3, 2006, pp. 283–297.

³ Michel Boudreaux, Michael Davern, and Peter Graven, "Alternative Variance Estimates in the Current Population Survey and the American Community Survey," presented at the 2011 Annual Meeting of the Population Association of America. Available at <<http://paa2011.princeton.edu/papers/112247>>.

APPENDIX D. ADDITIONAL DATA AND CONTACTS

Press releases, briefings, and data are available on the U.S. Census Bureau's Health Insurance Web site. The Web site may be accessed through the Census Bureau's home page at <www.census.gov> or directly at <www.census.gov/topics/health/health-insurance.html>.

For assistance with health insurance data, contact the Census Bureau Customer Services Center at 1-800-923-8282 (toll-free), or search your topic of interest using the Census Bureau's "Question and Answer Center" found at <<https://ask.census.gov>>.

Customized Tables

The CPS Table Creator

www.census.gov/cps/data/cpstablecreator.html

Gives data users the ability to create customized tables from the Current Population Survey Annual Social and Economic Supplement (CPS ASEC). Table Creator can be used access data back to the 2003 CPS ASEC.

American FactFinder

<http://factfinder.census.gov>

Provides access to data about the United States, Puerto Rico, and the Island Areas. The tabular data in American FactFinder come from several censuses and the American Community Survey (ACS).

Public-Use Microdata

CPS ASEC

Microdata for the 2015 CPS ASEC and earlier years are available online at <http://thedataweb.rm.census.gov/ftp/cps_ftp.html#cpsmarch>.

Technical methods have been applied to CPS microdata to avoid disclosing the identities of individuals from whom data were collected.

ACS

The ACS Public-Use Microdata Sample files (PUMS) are a sample of the actual responses to the ACS and include most population and housing characteristics. These files provide users with the flexibility to prepare customized tabulations and can be used for detailed research and analysis. Files have been edited to protect the confidentiality of all individuals and of all individual households. The smallest geographic unit that is identified within the PUMS is the Public-Use Microdata Area (PUMA). These data are available online at <<http://census.gov/programs-surveys/acs/technical-documentation/pums.html>>. Because the PUMS file is a sample of the ACS, estimates of health insurance coverage may differ slightly.

Topcoding

In the Census Bureau's long history of releasing public-use microdata files based on the CPS ASEC, the Census Bureau has censored the release of "high dollar" amounts, such as medical out-of-pocket expenses (MOOP) and income, in order to meet the

requirements of Title 13.¹ This process is often called topcoding. During the period prior to the March 1996 survey, topcoding was applied by limiting the values for dollar amounts to be no greater than a specified maximum value (the topcode). Values above the maximum were replaced by the maximum value. Beginning with the 1996 survey, the topcoding method was modified so that mean values were substituted for all amounts above the topcode. Using the mean value for all amounts above the topcode made it impossible to examine the distributions above the topcode. In an effort to alleviate this problem and improve the overall usefulness of the CPS ASEC, the Census Bureau sponsored research on methods that both met Title 13 requirements and preserved the distributions above the topcode. This research led to the implementation in the 2011 ASEC of rank proximity swapping methods that switch dollar amounts above the topcode for respondents that are of similar rank. Swapped amounts are rounded following the swapping process to provide additional disclosure avoidance.

¹ For more information, see <www.census.gov/about/policies/privacy/data_stewardship/federal_law.html>.

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FOR IMMEDIATE RELEASE: WEDNESDAY, SEPTEMBER 12, 2018

Income, Poverty and Health Insurance Coverage in the United States: 2017

SEPTEMBER 12, 2018
RELEASE NUMBER CB18-144

SEPT. 12, 2018 — The U.S. Census Bureau announced today that real median household income increased by 1.8 percent between 2016 and 2017, while the official poverty rate decreased 0.4 percentage points. At the same time, the number of people without health insurance coverage and the uninsured rate were not statistically different from 2016.

Median household income in the United States in 2017 was \$61,372, an increase in real terms of 1.8 percent from the 2016 median income of \$60,309. This is the third consecutive annual increase in median household income.



The nation's official poverty rate in 2017 was 12.3 percent, with 39.7 million people in poverty. The number of people in poverty in 2017 was not statistically different from the number in poverty in 2016. The 0.4 percentage-point decrease in the poverty rate from 2016 (12.7 percent) to 2017 represents the third consecutive annual decline in poverty. Since 2014, the poverty rate has fallen 2.5 percentage points, from 14.8 percent to 12.3 percent.

The percentage of people without health insurance coverage for the entire 2017 calendar year was 8.8 percent, or 28.5 million, not statistically different from 2016 (8.8 percent or 28.1 million people). Between 2016 and 2017, the number of people with health insurance coverage increased by 2.3 million, up to 294.6 million.

These findings are contained in two reports: Income and Poverty in the United States: 2017 and Health Insurance Coverage in the United States: 2017.

Another Census Bureau report, The Supplemental Poverty Measure: 2017, was also released today. The supplemental poverty rate in 2017 was 13.9 percent, not statistically different from the 2016 supplemental

poverty rate of 14.0 percent. The Supplemental Poverty Measure (SPM) provides an alternative way of measuring poverty in the United States and serves as an additional indicator of economic well-being. The Census Bureau has published poverty estimates using the SPM annually since 2011 with the collaboration of the Bureau of Labor Statistics.

The Current Population Survey, sponsored jointly by the Census Bureau and Bureau of Labor Statistics, is conducted every month and is the primary source of labor force statistics for the U.S. population; it is used to calculate the monthly unemployment rate estimates. Supplements are added in most months; the Annual Social and Economic Supplement is designed to give annual, national estimates of income, poverty and health insurance numbers and rates. The most recent Annual Social and Economic Supplement was conducted nationwide (February, March and April 2018) and collected information about income and health insurance coverage during the 2017 calendar year.

The Current Population Survey-based income and poverty report includes comparisons with the previous year, and historical tables in the report contain statistics back to 1959. The health insurance report is based on both the Current Population Survey and the American Community Survey. State and local income, poverty and health insurance estimates will be released Thursday, Sept. 13, from the American Community Survey.

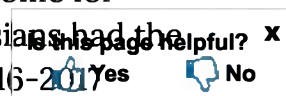
Income

- Median household income in the United States in 2017 was \$61,372, an increase in real terms of 1.8 percent from the 2016 median income of \$60,309. This is the third consecutive annual increase in median household income.
- The 2017 real median income of family households increased 1.4 percent from 2016 to \$77,713. Real median income for married-couple households increased 1.6 percent between 2016 and 2017. The difference between the 2016-2017 percentage change in median income for family households (1.4 percent) and married-couple households (1.6 percent) was not statistically significant. (A family household is a household with a householder who is related to a least one other person in the household by birth, marriage or adoption.)

Race and Hispanic Origin

(Race data refer to people reporting a single race only; Hispanics can be of any race.)

- The real median income of households maintained by non-Hispanic whites (\$68,145) and Hispanics (\$50,486) increased 2.6 percent and 3.7 percent, respectively, between 2016 and 2017. This is the third annual increase in median household income for these two groups. Among the race groups, households maintained by Asians had the highest median income in 2017, \$81,331. The differences between the 2016-2017



percentage changes in median income for non-Hispanic white (2.6 percent) and Hispanic (3.7 percent) households were not statistically significant.

Nativity

- The real median income of households maintained by a native-born person increased 1.5 percent between 2016 and 2017, while the 2017 real median income of households maintained by a foreign-born person was not statistically different from 2016. The difference between the 2016-2017 percentage changes in median income for households maintained by a foreign-born person and those maintained by a native-born person was not statistically significant.

Earnings

- The 2017 real median earnings of all male workers increased 3.0 percent from 2016 to \$44,408, while real median earnings for their female counterparts (\$31,610) saw no statistically significant change between 2016 and 2017.
- In 2017, the real median earnings of men (\$52,146) and women (\$41,977) working full-time, year-round each decreased from their respective 2016 medians by 1.1 percent. The 2017 female-to-male earnings ratio was 0.805, not statistically different from the 2016 ratio. The difference between the 2016-2017 percentage change in median earnings for men and women working full-time, year-round was not statistically significant.
- The number of men and women working full-time, year-round increased by 1.4 million and 1.0 million, respectively, between 2016 and 2017. The difference between the 2016-2017 increases in the number of men and women working full-time, year-round was not statistically significant.

Poverty

- The official poverty rate in 2017 was 12.3 percent, down 0.4 percentage points from 12.7 percent in 2016. This is the third consecutive annual decline in poverty. Since 2014, the poverty rate has fallen 2.5 percentage points, from 14.8 percent to 12.3 percent.
- In 2017, there were 39.7 million people in poverty, not statistically different from the number in poverty in 2016.
- From 2016 to 2017, the number of people in poverty decreased for people in families; people living in the West; people living outside metropolitan statistical areas; all workers; workers who worked less than full-time, year-round; people with a disability; people with a high school diploma but no college degree; and people with some college but no degree.

Age

- Between 2016 and 2017, the poverty rate for adults ages 18 to 64 declined 0.4 percentage points, from 11.6 percent to 11.2 percent, while poverty rates for individuals under age 18 and for people age 65 and older were not statistically different from 2016.

Education

- Between 2016 and 2017, people with at least a bachelor's degree were the only group to have an increase in the poverty rate or the number of people in poverty. Among this group, the poverty rate increased 0.3 percentage points and the number in poverty increased by 363,000 individuals between 2016 and 2017. Even with this increase, among educational attainment groups, people with at least a bachelor's degree had the lowest poverty rates in 2017.

Supplemental Poverty Measure

The Supplemental Poverty Measure (SPM) extends the official poverty measure by taking into account many of the government programs designed to assist low-income families and individuals that are not included in the current official poverty measure.

The SPM released today shows:

- In 2017, the overall SPM rate was 13.9 percent. This is not statistically different from the 2016 SPM rate of 14.0.
- The SPM rate for 2017 was 1.6 percentage points higher than the official poverty rate of 12.3 percent.
- There were 16 states plus the District of Columbia for which SPM rates were higher than official poverty rates, 18 states with lower rates, and 16 states for which the differences were not statistically significant.
- Social Security continued to be the most important anti-poverty program, moving 27.0 million individuals out of poverty. Refundable tax credits moved 8.3 million people out of poverty.

- SPM rates were not statistically different for any of the major age categories in 2017 compared with 2016. SPM rates for individuals under age 18 were 15.6 percent, which is not statistically different than 15.2 percent in 2016.
- The percentage of individuals age 65 and older with SPM resources below half their SPM threshold was 4.9 percent in 2017.

While the official poverty measure includes only pretax money income, the supplemental poverty measure adds the value of in-kind benefits, such as the Supplemental Nutrition Assistance Program, school lunches, housing assistance and refundable tax credits. Additionally, the SPM deducts necessary expenses for critical goods and services from income. Expenses that are deducted include: taxes, child care, commuting expenses, contributions toward the cost of medical care and health insurance premiums, and child support paid to another household. The SPM permits the examination of the effects of government transfers on poverty estimates. For example, not including refundable tax credits (the Earned Income Tax Credit and the refundable portion of the child tax credit) in resources, the poverty rate for all people would have been 16.5 percent rather than 13.9 percent. The SPM

does not replace the official poverty measure and will not be used to determine eligibility for government programs.

Health Insurance

- In 2017, 8.8 percent of people, or 28.5 million, did not have health insurance at any point during the year. The uninsured rate and number of uninsured in 2017 were not statistically different from 2016 (8.8 percent or 28.1 million).
- The percentage of people with health insurance coverage for all or part of 2017 was 91.2 percent, not statistically different from the rate in 2016 (91.2 percent). Between 2016 and 2017, the number of people with health insurance coverage increased by 2.3 million, up to 294.6 million.
- Between 2016 and 2017, the percentage of people without health insurance coverage at the time of interview decreased in three states and increased in 14 states.

Coverage Types

- In 2017, private health insurance coverage continued to be more prevalent than government coverage, at 67.2 percent and 37.7 percent, respectively. Of the subtypes of health insurance coverage, employer-based insurance was the most common, covering 56.0 percent of the population for some or all of the calendar year, followed by Medicaid (19.3 percent), Medicare (17.2 percent), direct-purchase coverage (16.0 percent), and military coverage (4.8 percent).
- Between 2016 and 2017, the rate of Medicare coverage among all people increased by 0.6 percentage points to cover 17.2 percent of people for part or all of 2017 (up from 16.7 percent in 2016). This increase was partly due to growth in the number of people age 65 and over. The population 65 years and older did not have a statistically significant change in the Medicare coverage rate between 2016 and 2017. However, the percentage of the U.S. population 65 years and older increased between 2016 and 2017.
- The military coverage rate increased by 0.2 percentage points to 4.8 percent during this time. Coverage rates for employment-based coverage, direct-purchase coverage, and Medicaid did not statistically change between 2016 and 2017.

Age

- In 2017, the percentage of uninsured children under age 19 (5.4 percent) was statistically different from the percentage in 2016.



- For children under age 19 in poverty, the uninsured rate (7.8 percent) was higher than for children not in poverty (4.9 percent).
- In 2017, adults age 65 and over and children under age 19 were more likely to have had health insurance coverage (98.7 percent and 94.6 percent, respectively) compared with adults ages 19 to 64 (87.8 percent).

Race and Hispanic Origin

(Race data refer to people reporting a single race only; Hispanics can be of any race.)

- Between 2016 and 2017, the uninsured rate did not statistically change for any race or Hispanic origin group.
- In 2017, non-Hispanic whites had the lowest uninsured rate among race and Hispanic-origin groups (6.3 percent). The uninsured rates for blacks and Asians were 10.6 percent and 7.3 percent, respectively. Hispanics had the highest uninsured rate (16.1 percent).

Regional trends are available for income, poverty and health insurance in each respective report, as well as state level data for health insurance.

State and Local Estimates From the American Community Survey

State-level health insurance data from the American Community Survey are included in this report. On Thursday, Sept.13, the Census Bureau will release all 2017 single-year estimates of median household income, poverty and health insurance for all states, counties, places and other geographic units with populations of 65,000 or more from the American

Community Survey. These statistics will include numerous social, economic and housing characteristics, such as language, education, commuting, employment, mortgage status and rent. Subscribers will be able to access these estimates on an embargoed basis.

The American Community Survey provides a wide range of important statistics about people and housing for every community (i.e., census tracts or neighborhoods) across the nation. The results are used by everyone from town and city planners to retailers and homebuilders. The survey is the only source of local estimates for most of the 40 topics it covers.

The Current Population Survey Annual Social and Economic Supplement and American Community Survey are subject to sampling and nonsampling errors. All comparisons made in each respective report have been tested and found to be statistically significant at the 90 percent confidence level, unless otherwise noted.

For additional information on the source of the data and accuracy of the Income, Poverty and Health Insurance estimates, visit

<<https://www2.census.gov/library/publications/2018/demo/p60-263sa.pdf>>.

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Contact










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Yes



No

Who Are the Uninsured? Health

Most Uninsured Were Working-Age Adults

EDWARD BERCHICK | SEPTEMBER 12, 2018

In 2017, the number of people without health insurance increased to 28.0 million, up from 27.3 million the year before, according to the latest American Community Survey data released today.

Who are these millions of people who lack health insurance coverage? Are they young or old? Are they more likely to live in one region of the country? Are they poorer or less educated than those who are insured?

So who were the uninsured? They tended to be 19 to 64 years old, male, have less than a high school education and/or have lower incomes.

Age Of The Uninsured

Working-age adults made up a much larger share of the uninsured population than any other age group. In fact, most uninsured people (84.6 percent) were 19- to 64-year-olds.

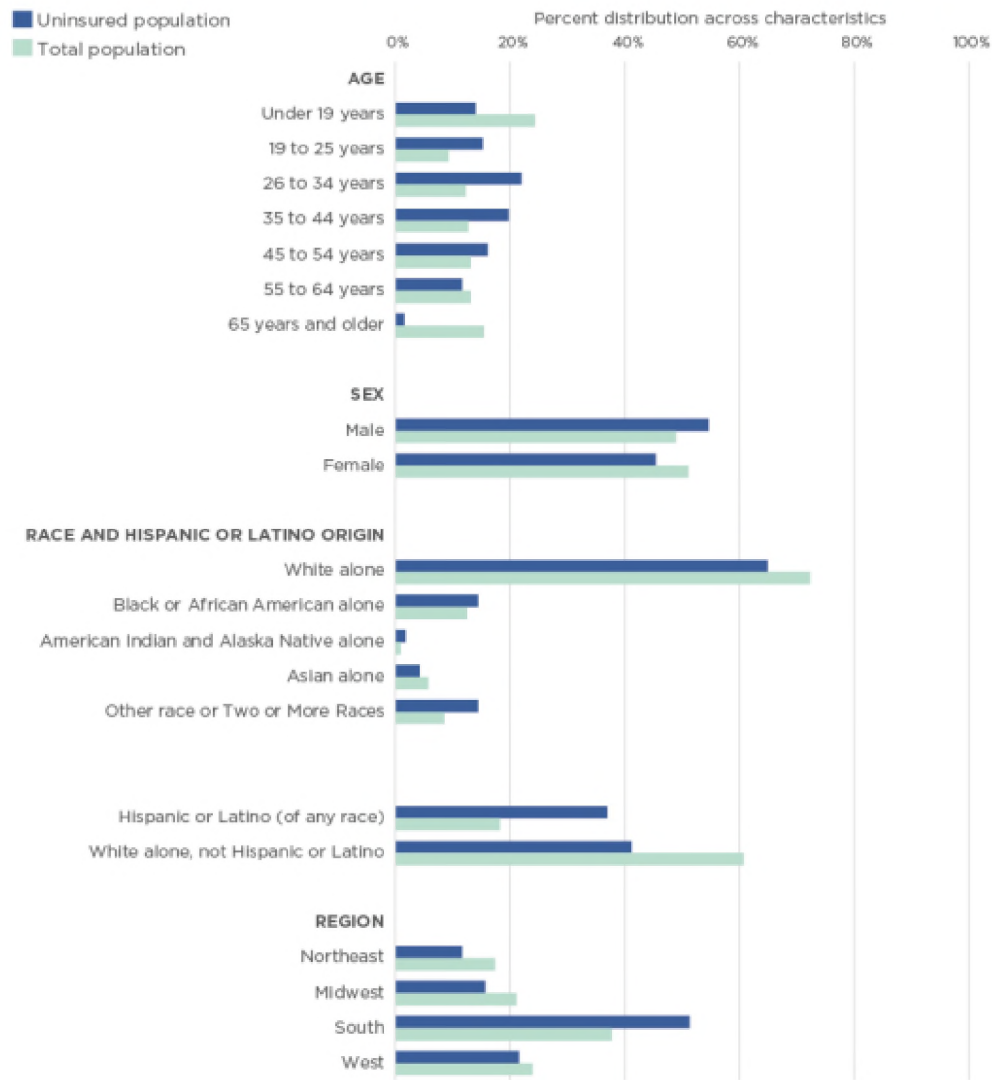
The two largest groups in that age range are 26- to 34-year-olds and 35- to 44-year-olds. About 1 in 4 uninsured people were 26 to 34 years old, and about 1 in 5 people ages 34 to 44.

But that's not all the figure below tells us.

- Over half of all people without health insurance coverage were male (54.6 percent), even though the U.S. population has more women than men.
- About 4 in 10 uninsured people were non-Hispanic white, while nearly 6 in 10 people in the United States were non-Hispanic white.
- Other races and ethnic groups made up the majority of the uninsured population but less than half (39.3 percent) of the total population.
- The uninsured were disproportionately concentrated in the South.

Figure 1.

Demographic Characteristics of the Uninsured and Total Populations: 2017



Note: Estimates are for the civilian noninstitutionalized population.
 For more information on the American Community Survey, see <www.census.gov/programs-surveys/acs/>.
 Source: U.S. Census Bureau 2017 American Community Survey 1-Year Estimates.

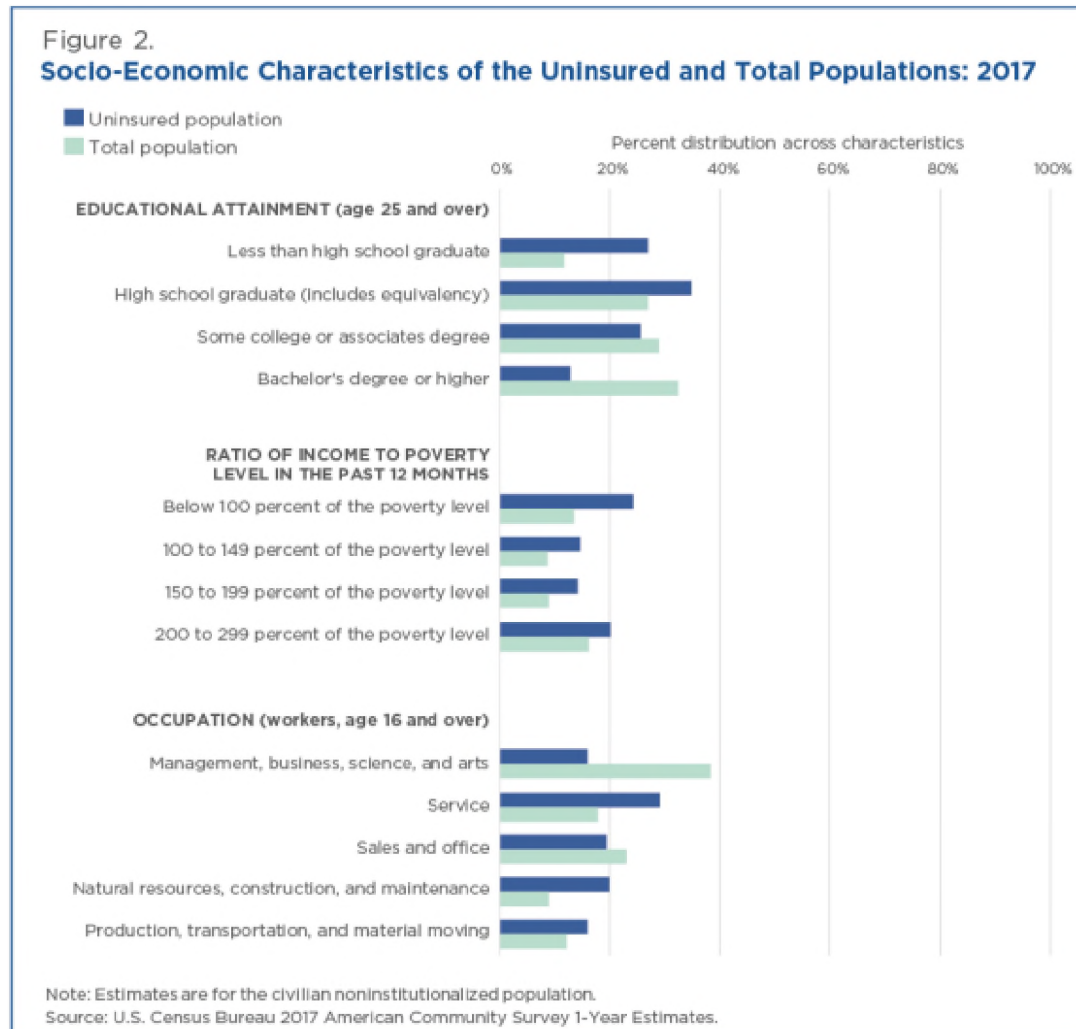
The new data also show that 14.0 percent of those without health insurance are under 19 years old. That number may seem a bit high but it is relatively low considering that children were almost one-quarter of the U.S. population last year.

By contrast, only a small fraction of the uninsured – just 1.4 percent – were age 65 and over.

Social and Economic Factors

Most people without health insurance coverage had a high school education or less. People who did not complete high school made up a much larger part of the uninsured population (26.9 percent) than the overall population (11.8 percent).

The uninsured population was also disproportionately more likely to live in poverty. About 1 in 3 uninsured workers were in service occupations, compared with about 1 in 5 workers in the U.S. overall.



Profile of the Uninsured

So who were the uninsured? They tended to be 19 to 64 years old, male, have less than a high school education and/or have lower incomes. This profile is fairly different from the profile of the overall U.S. population.

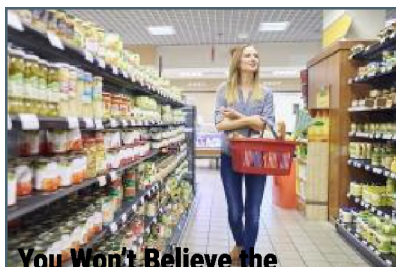
The large sample size of the American Community Survey provides a detailed look at the characteristics of populations such as the uninsured.

To find out more about the uninsured population, such as employment characteristics, disability status, nativity and residence, or about the uninsured population in smaller geographic areas (states, counties and zip codes), see Table S2702 in American FactFinder. (“Selected Characteristics of the Uninsured in the United States”).

Edward Berchick is a demographer in the U.S. Census Bureau’s Social, Economic, and Housing Statistics Division.

Health Insurance Video

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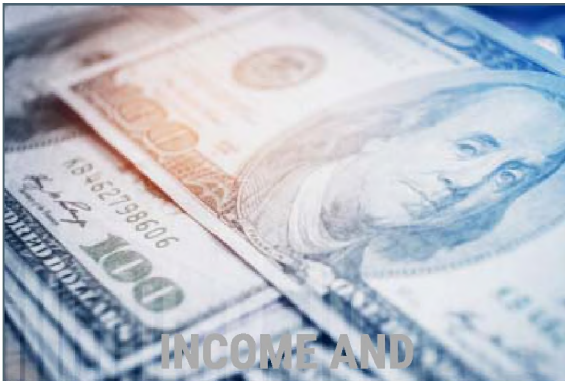
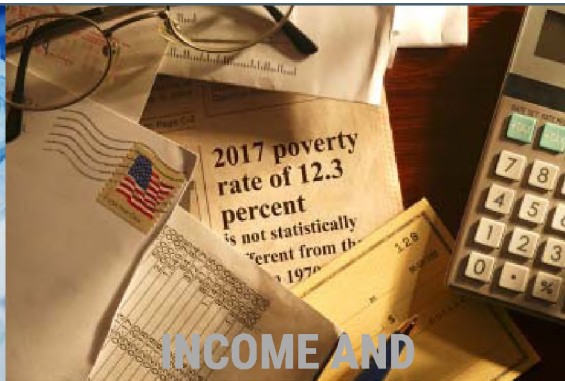
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U.S. Health Reform—Monitoring and Impact

Changes in Health Insurance Coverage 2013–2016: Medicaid Expansion States Lead the Way

September 2018

By Laura Skopec, John Holahan, and Caroline Elmendorf



Robert Wood Johnson
Foundation

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.



With support from the Robert Wood Johnson Foundation (RWJF), the Urban Institute is undertaking a comprehensive monitoring and tracking project to examine the implementation and effects of health reform. The project began in May 2011 and will take place over several years. The Urban Institute will document changes to the implementation of national health reform to help states, researchers and policymakers learn from the process as it unfolds. Reports that have been prepared as part of this ongoing project can be found at www.rwjf.org and www.healthpolicycenter.org.

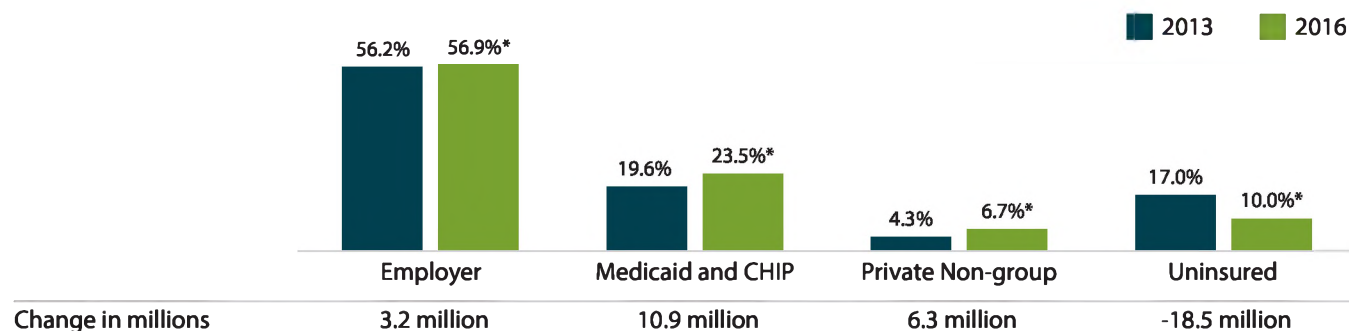
EXECUTIVE SUMMARY

The primary health insurance coverage reforms of the Affordable Care Act (ACA) began to take effect on January 1, 2014. Between 2013 and 2016, the most recent year of American Community Survey (ACS) data available, the share of nonelderly Americans aged 0 to 64 without health insurance fell from 17.0 percent to 10.0 percent, meaning 18.5 million more Americans with health insurance coverage during the first three years of ACA implementation. Virtually all of these gains are attributable to the ACA, as uninsurance had been predicted to be stable over this period without the ACA.¹ Moreover, there were secular declines in employer-sponsored insurance between 2000 and 2013.² Holding demographic, socioeconomic, and region characteristics constant, we

would still expect to see a 6.9 percentage point reduction in the uninsured between 2013 and 2016, suggesting that the ACA, not economic improvement, was responsible for coverage gains.

The changes in coverage types between 2013 and 2016 also reflect the primary coverage expansions of the ACA, which included an expansion of Medicaid eligibility in 31 states and the District of Columbia as of July 1, 2016, and availability of subsidized coverage through the health insurance marketplaces. Of the 18.5 million person increase in coverage, 10.9 million more people had Medicaid coverage and 6.3 million more people had private non-group coverage (such

Executive Summary Figure 1: Share of Nonelderly (0-64) by Coverage Type, 2013-2016

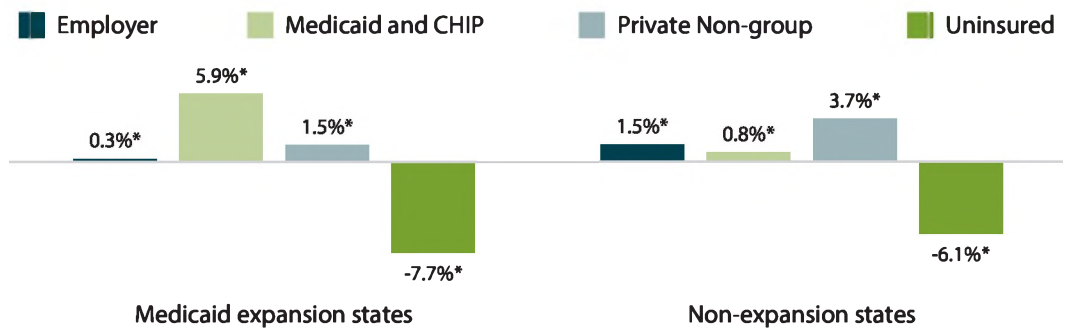


Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

* Estimate is significantly different from estimate for 2013 at the 0.05 level.

Executive Summary Figure 2: Percentage Point Changes in Health Insurance Coverage by State Medicaid Expansion Status, 2013-2016



Change in population	0.3 million	2.1 million
Change in uninsured	-12.6 million	-5.9 million
Share uninsured in 2016	7.6 percent	13.7 percent

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 3.

* Percentage point change is statistically significant at the 5 percent level.

as that offered through the marketplaces). In addition, 3.2 million more nonelderly Americans had employer-sponsored insurance in 2016 compared to 2013, reflecting the growth in the size of the workforce (5.9 million) as the recovery from the Great Recession continued, and potentially increased take-up of employer-sponsored insurance due to the individual mandate.

Medicaid expansion states saw larger reductions in the uninsured rate under the ACA than non-expansion states, mainly through gains in Medicaid coverage. Between 2013 and 2016, the uninsured rate fell by more than half in Medicaid expansion states (15.3 percent to 7.6 percent), meaning 12.6 million more nonelderly Americans had coverage in those states. Of those 12.6 million additional people with coverage, 9.7 million more had Medicaid coverage. Non-expansion states had less dramatic but still large reductions in the uninsured rate, which fell from 19.8 percent to 13.7 percent (a 31 percent decline), largely through gains in private non-group coverage and employer-sponsored insurance.

Coverage gains between 2013 and 2016 were spread broadly across demographic groups, with all age groups, racial and ethnic groups, education levels, income groups, and workers' industry

types we studied gaining coverage. Across all demographic groups, coverage gains were largest for people with incomes below 138 percent of the federal poverty level, the group targeted by the ACA Medicaid expansion. Other groups with large decreases in uninsurance were Hispanic nonelderly, young adults aged 19 to 25, and adults with a high school education or less. Finally, adults working in industries that are traditionally less likely to offer employer-sponsored insurance, such as retail and construction, also had large gains in coverage, not through gains in employer-sponsored coverage, but through gains in Medicaid and private non-group insurance.

Overall, coverage gains were significant and broadly distributed. While Medicaid expansion states fared particularly well in reducing their uninsured rates, non-expansion states still saw significant gains in coverage through private sources. Coverage patterns before and after the ACA differed significantly by demographics, income, region, and state Medicaid expansion status, however. This means that the changes in policy that will adversely affect the availability and cost of coverage in the marketplaces implemented beginning in early 2017 by the current administration will not have uniform effects by demographic groups or across the country and may be particularly adverse in non-expansion states with large gains in private non-group coverage.

INTRODUCTION

Between 2013 and 2016, the effects of the Great Recession subsided, and the economy improved. Gross Domestic Product (GDP) grew from \$15.6 trillion to \$16.7 trillion,³ and the unemployment rate fell from 7.4 percent to 4.9 percent.⁴ These economic improvements were also reflected in household incomes, with the median household income increasing from \$55,214 in 2013 to \$59,039 in 2016.⁵ Poverty rates also declined over this period, from 14.5 percent in 2013 to 12.7 percent in 2016.⁶ These improvements in national and household economic circumstances would be expected to reduce uninsurance on their own to some extent.⁷ In addition, the major health insurance reforms of the Affordable Care Act (ACA) went into effect on January 1, 2014, broadly increasing access to coverage. The ACA's key coverage expansions include guaranteed issue and modified community rating in the non-group and small group health insurance markets, minimum standards for private insurance plans, subsidies to

purchase private non-group health insurance in new health insurance marketplaces, expansion of Medicaid eligibility to childless adults with incomes up to 138 percent of the Federal Poverty Level (FPL) in 31 states and the District of Columbia as of July 1, 2016,⁸ and an individual mandate requiring most Americans to have health insurance coverage.

Studies using a variety of data sources have shown significant reductions in uninsurance under the ACA, as well as decreasing racial and ethnic disparities in uninsurance.⁹ For example, the National Health Interview Survey found a 6.2 percentage point reduction in the uninsured rate for nonelderly Americans between 2013 and 2016, from 16.6 percent to 10.4 percent.¹⁰ This study uses the American Community Survey (ACS) to expand on prior analyses by exploring changes in coverage type between 2013 and 2016 overall and for key demographic and income subgroups.

DATA AND METHODS

This study uses data from the 2013 and 2016 American Community Survey (ACS) Integrated Public Use Microdata Sample (IPUMS) files created by the Minnesota Population Center.¹¹ The ACS is conducted annually by the U.S. Census Bureau through the mail with in-person follow-up for non-respondents. The ACS has the largest sample size of any survey collecting health insurance information, sampling approximately 3 million Americans per year. The health insurance questions are point-in-time and the survey is mailed throughout the year, so our estimates represent an average level of coverage for 2013 and 2016.

We focus our analyses on the civilian, noninstitutionalized, nonelderly population aged 0 to 64, as this population was the most likely to be affected by the ACA coverage expansions (almost all legal U.S. residents age 65 and over have insurance coverage through the Medicare program). The family structures and corresponding income estimates presented in this brief are based on Health Insurance Units (HIUs), which represent household or family units that are typically eligible to purchase health insurance together. The HIUs used in this brief were developed by State Health Data Access Data Assistance Center and made available through the IPUMS.¹² Incomes for HIUs are compared to the appropriate Federal Poverty Level (FPL) for each year, which is the income standard used to determine eligibility for Medicaid and health insurance marketplace subsidies.

Our estimates of coverage type reflect several adjustments to health insurance coverage as reported on the ACS. First, the Urban Institute has developed a series of health insurance coverage edits for the ACS to correct for known inaccuracies in survey-based estimates of health insurance coverage.¹³ In particular, research has found that the ACS data over-represent private non-group coverage relative to other surveys and underrepresent Medicaid and Children's Health Insurance Program (CHIP) coverage among children relative to administrative data.¹⁴ These logical coverage edits reassign coverage types for respondents when other information collected in the ACS, such as receipt of Supplemental Nutrition Assistance Program or other public assistance, implies that a respondent's coverage has likely been misclassified.¹⁵

Second, respondents are able to select multiple health insurance coverage types in the ACS. We assigned respondents to a single coverage type based on the following hierarchy: employer-sponsored insurance (ESI); Medicaid or CHIP; Medicare, Veteran's Affairs (VA), or Civilian Health and Medical Program of the Uniformed Services (CHAMPUS, or military coverage); private non-group; and uninsured. Those respondents who reported only Indian Health Service coverage are considered uninsured. This brief does not show estimates for Medicare, CHAMPUS, and VA coverage, as such coverage changes little for the nonelderly population from

year to year. Approximately 3.0 percent of the nonelderly had Medicare, CHAMPUS, or VA coverage in 2016, up 0.2 percentage points from 2013.

Unless otherwise noted, the figures shown in this brief provide percentage-point changes in health insurance coverage between 2013 and 2016. Because all respondents have been assigned a single coverage type, percentage-point changes among all coverage types within a given demographic or income group add up to zero. However, because Medicare and CHAMPUS are not shown, the percentage-point changes shown in each figure will not add precisely to zero for all groups. Full tables, including Medicare and CHAMPUS coverage, are available in the Appendix.

This brief first reviews changes in demographics and HIU income between 2013 and 2016, then assesses changes in health insurance coverage over that period. For the nonelderly population overall, we present both unadjusted changes in insurance coverage and coverage changes adjusted for changes in income and demographics over the 2013 to 2016 time period. The latter estimates better represent the changes in coverage likely attributable to the ACA coverage expansions. Finally, we explore changes in coverage for specific subgroups, including income, state Medicaid expansion status, age, race and ethnicity, education, work status, industry type, and region.

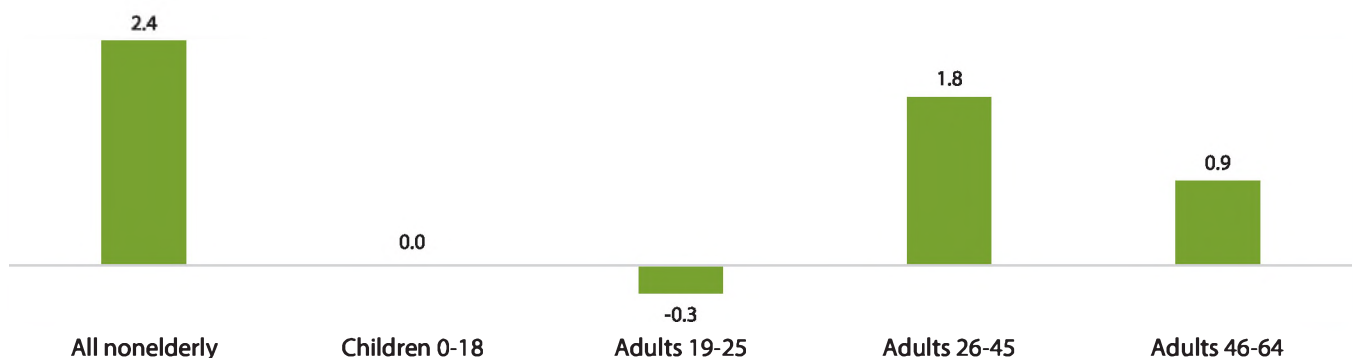
RESULTS

Demographic and Income Trends, 2013-2016

Between 2013 and 2016, the nonelderly population in the U.S. grew by 2.4 million people (Figure 1 and Table 1). There were a roughly equal number of children in 2013 and 2016 (77 million), but 2.4 million more adults aged 19 to 64 (Figure 1 and Table 1). In addition, as the economy improved, the share of the nonelderly population with HIU incomes below

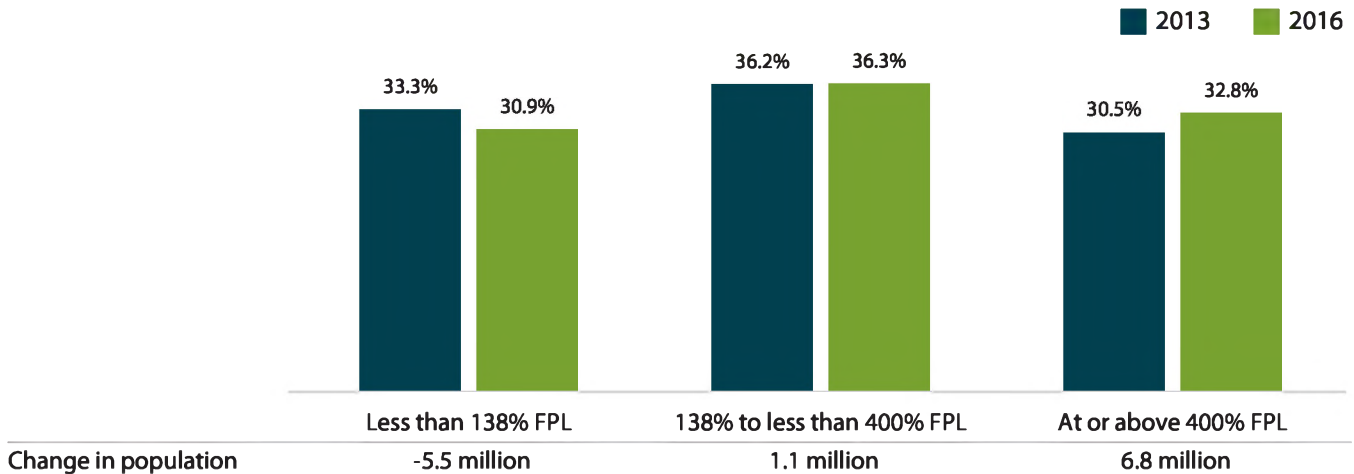
138 percent of the FPL fell from 33.3 percent to 30.9 percent, a reduction of 5.4 million people (Figure 2 and Table 1). Similarly, the share of the nonelderly population with incomes at or above 400 percent of the FPL grew from 30.5 percent to 32.8 percent, an increase of 6.8 million people. These income gains correspond to increases in employment, with 5.9 million more nonelderly adults in the workforce in 2016 than in 2013.

Figure 1: Changes in Millions of Nonelderly (0-64) People by Age Group, 2013-2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Figure 2: Share of the Nonelderly Population by Income Group, 2013 and 2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center.⁸

In addition to income and employment changes, the nonelderly population also became more diverse and more highly educated over the 2013 to 2016 period, continuing longstanding trends. In 2013, 59.9 percent of the nonelderly population was white, non-Hispanic, compared to 58.3 percent in 2016 (Table 1). In addition, 3.8 million more adults aged 25 to 64 had finished college in 2016 compared to 2013 (Table 1).

Finally, population growth was not evenly distributed across regions between 2013 and 2016. The population in the South grew by 2.0 million people and the population in the West grew by 1.1 million people over this period, compared to small population declines in both the Midwest and the Northeast (-0.4 and -0.3 million, respectively) (Table 1). These regional differences in growth are also reflected in population growth

by Medicaid expansion status.¹⁶ Medicaid non-expansion states, which are concentrated in the South, grew by 2.1 million people between 2013 and 2016, compared to 0.3 million people for Medicaid expansion states (Table 1).

All of these changes could have effects on health insurance coverage separate from the ACA coverage expansions, though not all point in the same direction. Greater employment would, in general, mean a higher share of people with access to ESI (although many workers are not offered employer-based insurance), and income increases would also likely mean better access to coverage. In contrast, concentration of population growth in the South likely reduces the effects of the ACA because Medicaid non-expansion states are concentrated in the South.

Table 1: Changes in Nonelderly Population Characteristics between 2013 and 2016

	2013		2016		Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	Millions	Percent	Millions	Percent		
Age						
Children 0-18	77.0	29.2%	77.0	28.9%	-0.3%	0.0
Adults 19-25	28.7	10.9%	28.4	10.7%	-0.2%	-0.3
Adults 26-44	80.9	30.6%	82.7	31.0%	0.4%	1.8
Adults 45-64	77.6	29.4%	78.5	29.4%	0.1%	0.9
Race and ethnicity						
White, non-Hispanic	158.3	59.9%	155.5	58.3%	-1.6%	-2.7
Black, non-Hispanic	33.3	12.6%	33.8	12.7%	0.0%	0.4
Other, non-Hispanic	23.0	8.7%	24.9	9.4%	0.7%	2.0
Hispanic	49.6	18.8%	52.4	19.6%	0.9%	2.7
Income						
Below 138% of FPL	87.9	33.3%	82.4	30.9%	-2.3%	-5.5
138 to less than 400% of FPL	95.7	36.2%	96.8	36.3%	0.1%	1.1
At or above 400% of FPL	80.6	30.5%	87.4	32.8%	2.3%	6.8
Region						
Northeast	46.1	17.4%	45.8	17.2%	-0.3%	-0.3
Midwest	56.3	21.3%	55.9	21.0%	-0.3%	-0.4
South	98.8	37.4%	100.8	37.8%	0.4%	2.0
West	63.0	23.8%	64.1	24.0%	0.2%	1.1
State Medicaid expansion status as of July 1, 2018						
State expanded Medicaid	163.2	61.8%	163.5	61.3%	-0.5%	0.3
State did not expand Medicaid	101.0	38.2%	103.1	38.7%	0.5%	2.1
Education level among adults (18-64)						
High school degree or less	87.1	45.6%	86.0	44.5%	-1.1%	-1.1
Some college	49.5	25.9%	49.2	25.4%	-0.5%	3.8
Finished college	54.3	28.4%	58.2	30.1%	1.6%	3.8

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

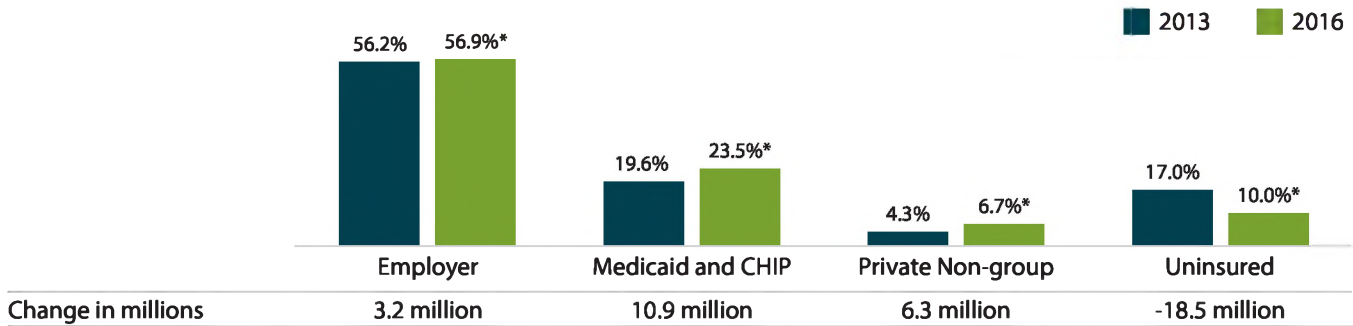
Notes: FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center.⁸

Changes in Coverage, 2013-2016

Over the 2013 to 2016 period, uninsurance fell 7.1 percentage points, from 17.0 percent to 10.0 percent, meaning 18.5 million more nonelderly people had health insurance coverage (Figure 3). Of these, 10.9 million more had Medicaid

coverage, 6.3 million more had private non-group coverage, and 3.2 million more had ESI. This pattern of coverage changes is consistent with the targeting of the ACA coverage expansions, which focused on broadening access to Medicaid and private non-group coverage.

Figure 3: Share of Nonelderly (0-64) by Coverage Type, 2013-2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

* Estimate is significantly different from estimate for 2013 at the 0.05 level.

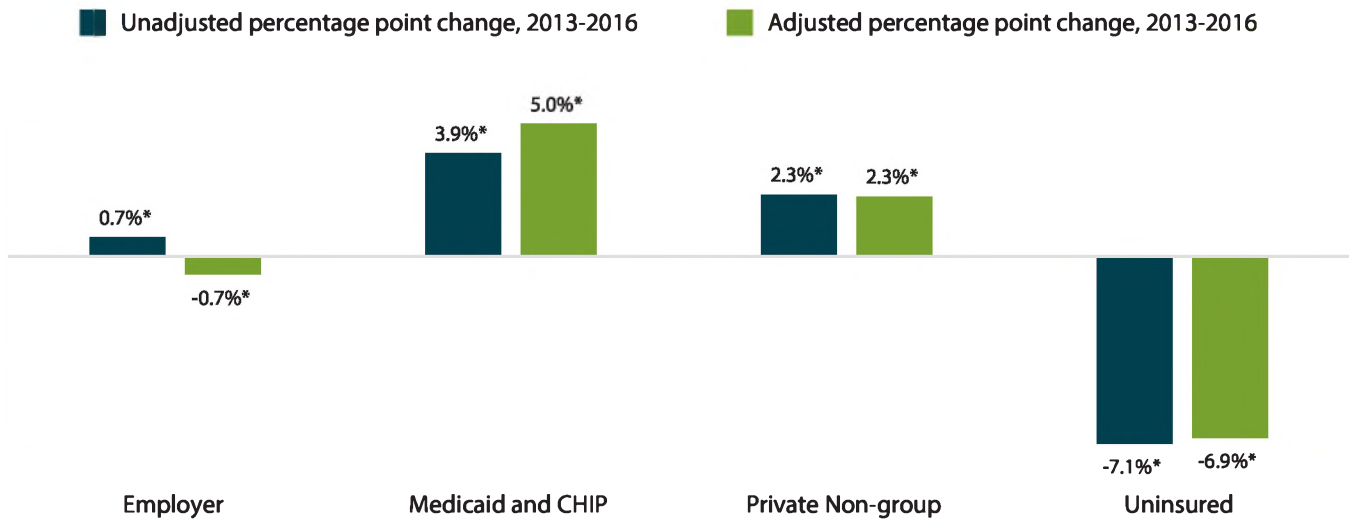
Increases in ESI coverage appear to be driven by a larger number of workers and in the share of nonelderly with incomes at or above 400 percent of the FPL rather than a higher share of workers being offered or taking-up coverage. The share of nonelderly with ESI increased only 0.7 percentage points between 2013 and 2016, but the growth in the nonelderly population and the employed population led to a 3.2 million person increase in the number of nonelderly with ESI (Figure 3).

After adjusting for changes in age, race and ethnicity, income, education, employment, and region over the 2013-2016 period, we estimate that uninsurance would have fallen 6.9 percentage points holding these factors constant (Figure 4), compared to the observed decline of 7.1 percentage points. This implies that nearly all of the gains in coverage between 2013 and 2016 were unrelated to changes in demographic and socioeconomic characteristics over that time period, suggesting that the ACA was responsible for these coverage gains. We also estimate that Medicaid coverage would have increased 5.0 percentage points if these characteristics had remained constant, which is larger than the observed 3.9 percentage point increase in

Medicaid coverage. The lower observed Medicaid coverage increases reflect higher incomes and a decreasing share of the population below 138 percent of the FPL, which is the income eligibility threshold for childless adult coverage in Medicaid expansion states. Similarly, holding age, race and ethnicity, income, education, employment, and region constant over the 2013-2016 period, we would have expected ESI coverage to decrease by 0.7 percentage points, rather than the 0.7 percentage point increase we observe. Prior to ACA implementation, ESI declines were the norm over the 2000-2013 period,¹⁷ but changes in incomes and employment between 2013 and 2016, combined with the individual mandate to purchase coverage, allowed more nonelderly to gain ESI coverage.

Our adjusted estimates are in keeping with our unadjusted findings, which suggested that coverage gains were primarily driven by increases in Medicaid and private non-group coverage. In addition, a prior study that found that survey-based estimates of coverage changes under the ACA likely underestimate, rather than overestimate, the true effects of the ACA given pre-2013 trends in coverage.¹⁸ We therefore present the rest of our results without these adjustments.

Figure 4: Percentage Point Changes in Health Insurance Coverage among Nonelderly (0-64) People Adjusted for Changes in Demographic, Socioeconomic, and Region Characteristics, 2013-2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

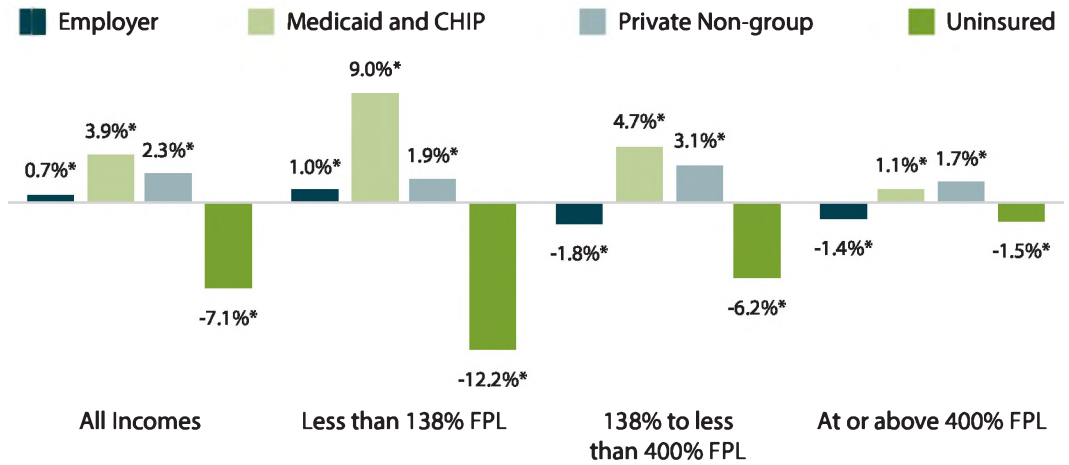
*Estimate is significantly different from 0 at the 5 percent level.

Changes in Coverage by Age and Income

Most of the coverage gains between 2013 and 2016 were concentrated among nonelderly people with incomes below 138 percent of the FPL, those targeted by the ACA Medicaid expansion. For this group, the uninsured rate fell from 28.7 percent in 2013 to 16.5 percent in 2016, meaning 11.6 million more low-income people had coverage (Figure 5). This income group saw significant

gains in Medicaid coverage (a 9.0 percentage point increase or 5.1 million people) and non-group coverage (a 1.9 percentage point increase or 1.4 million people). While this group also saw a modest increase in the share with ESI (1.0 percentage point), the overall size of the population with incomes below 138 percent of the FPL shrank by 5.5 million people, leaving 0.4 million fewer people with ESI in 2016 than in 2013 (Table 2).

Figure 5: Percentage Point Changes in Health Insurance Coverage by Income, 2013-2016



Change in population	2.4 million	-5.5 million	1.1 million	6.8 million
Change in uninsured	-18.5 million	-11.6 million	-5.9 million	-1.1 million
Share uninsured in 2016	10.0 percent	16.5 percent	10.8 percent	2.8 percent

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 1.

* Percentage point change is statistically significant at the 5 percent level.

Reductions in uninsurance were smaller for the second (138 percent to 400 percent FPL) income group, those who were targeted by health insurance marketplace subsidies under the ACA. Uninsurance fell by 6.2 percentage points for nonelderly people with these moderate incomes, driven by gains in Medicaid (4.7 percentage points) and private non-group coverage (3.1 percentage points). Health insurance unit income measured using the ACS does not exactly match Medicaid eligibility requirements,¹⁹ which may explain why we observe significant Medicaid coverage gains for those with incomes between 138 percent and 400 percent of the FPL. Those with incomes above 400 percent of FPL experienced the smallest coverage changes, with a 1.5 percentage point reduction in their already-low

uninsured rate (4.3 to 2.8 percent), a 1.7 percentage point increase in private non-group coverage, and a 1.1 percentage point increase in Medicaid and CHIP coverage. Both the 138 to 400 and the over 400 percent FPL income groups had declines in the share of nonelderly with ESI (1.8 percentage points and 1.4 percentage points, respectively), continuing a longstanding trend of declining ESI.²⁰ However, the number of nonelderly people with ESI in the highest income group grew by 4.7 million, driven by increases in the size of the higher-income population. This led to an overall 0.7 percentage point increase in the share of nonelderly with ESI between 2013 and 2016 as the share of nonelderly people with incomes at or above 400 percent of the FPL grew (Table 2).

Table 2: Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income, 2013 to 2016

	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes	264.2		266.6			2.4 *
Employer	148.4	56.2%	151.7	56.9%	0.7% *	3.2 *
Medicaid and CHIP	51.9	19.6%	62.7	23.5%	3.9% *	10.9 *
CHAMPUS/Medicare	7.5	2.8%	7.9	3.0%	0.1% *	0.4 *
Private Non-group	11.4	4.3%	17.8	6.7%	2.3% *	6.3 *
Uninsured	45.0	17.0%	26.5	10.0%	-7.1% *	-18.5 *
Below 138% of FPL	87.9		82.4			-5.5 *
Employer	19.2	21.9%	18.8	22.9%	1.0% *	-0.4 *
Medicaid and CHIP	37.7	42.9%	42.8	51.9%	9.0% *	5.1 *
CHAMPUS/Medicare	3.3	3.8%	3.4	4.1%	0.3% *	0.0
Private Non-group	2.4	2.7%	3.8	4.6%	1.9% *	1.4 *
Uninsured	25.2	28.7%	13.6	16.5%	-12.2% *	-11.6 *
138% to less than 400% of FPL	95.7		96.8			1.1 *
Employer	59.3	62.0%	58.3	60.2%	-1.8% *	-1.0 *
Medicaid and CHIP	12.7	13.3%	17.4	18.0%	4.7% *	4.7 *
CHAMPUS/Medicare	2.7	2.9%	3.0	3.0%	0.2% *	0.2 *
Private Non-group	4.6	4.8%	7.7	7.9%	3.1% *	3.1 *
Uninsured	16.4	17.1%	10.5	10.8%	-6.2% *	-5.9 *
At or above 400% of FPL	80.6		87.4			6.8 *
Employer	69.9	86.7%	74.6	85.3%	-1.4% *	4.7 *
Medicaid and CHIP	1.4	1.8%	2.5	2.9%	1.1% *	1.1 *
CHAMPUS/Medicare	1.4	1.7%	1.6	1.8%	0.1% *	0.2 *
Private Non-group	4.4	5.5%	6.3	7.2%	1.7% *	1.8 *
Uninsured	3.5	4.3%	2.4	2.8%	-1.5% *	-1.1 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

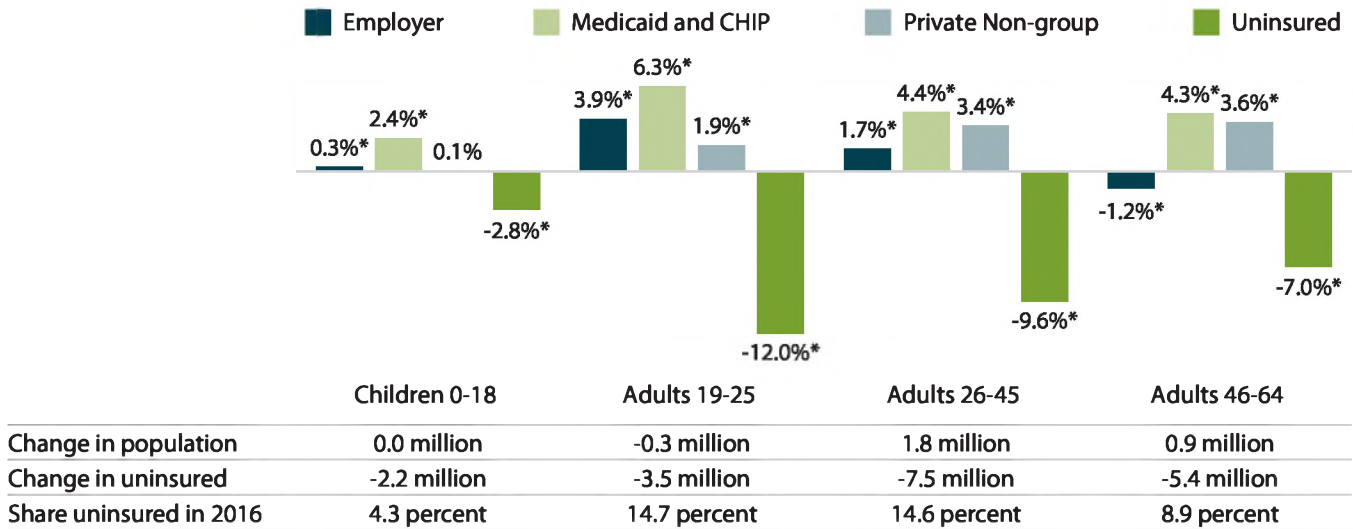
For complete estimates, see Appendix Table 1.

* Percentage point change is statistically significant at the 5 percent level.

While children experienced some coverage gains between 2013 and 2016, they were not as dramatic as coverage gains for adults. For example, the uninsured rate for children fell 2.8 percentage points between 2013 and 2016, compared to 12.0 percentage points for young adults (19 to 25), 9.6 percentage points for adults aged 26 to 45, and 7.0 percent

for adults aged 46 to 64 (Figure 6). Young adults were more likely than children or older adults to gain ESI over this period (3.9 percentage points), reflecting the ACA's dependent coverage provision. In addition, young adults had the largest percentage point gains in Medicaid coverage of any age group, reflecting their lower incomes, on average.

Figure 6: Percentage Point Changes in Health Insurance Coverage by Age Group, 2013-2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 2.

* Percentage point change is statistically significant at the 5 percent level.

Changes in Coverage by Medicaid Expansion

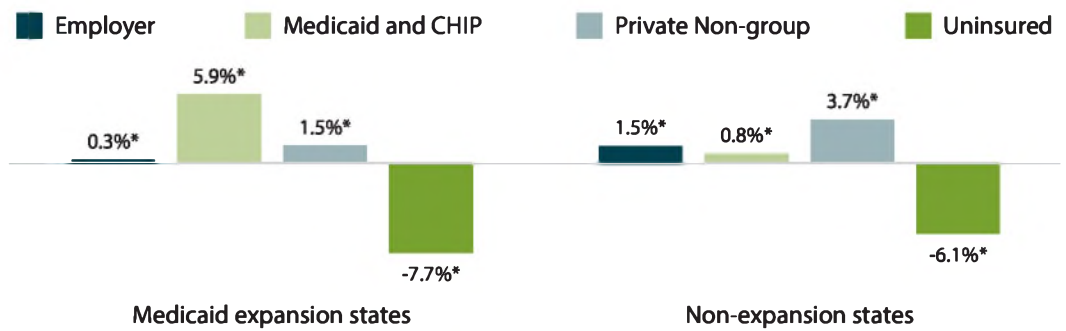
In 2016 there were an additional 12.6 million insured people living in Medicaid expansion states, 68.6 percent of the 18.5 million additional insured nationwide. Between 2013 and 2016, the uninsured rate in Medicaid expansion states fell by half, from 15.3 percent to 7.6 percent (Figure 7). This reduction in uninsurance was driven by gains in Medicaid coverage in these states, with 9.7 million more people having Medicaid coverage (a 5.9 percentage point increase) and 2.4 million more people with private non-group coverage (a 1.5 percentage point increase).

Coverage gains in non-expansion states were less dramatic but still large, with the uninsured rate falling from 19.8 percent to 13.7 percent. In non-expansion states, coverage gains were driven by private non-group coverage rather than Medicaid coverage. Between 2013 and 2016, Medicaid coverage grew by 0.8 percentage points in non-expansion states compared to 5.9 percentage points in Medicaid expansion states. However, private non-group coverage grew 3.7 percentage points in non-expansion states and ESI grew 1.5 percentage points, partially making up for the lack of significant expansion in Medicaid coverage.

Patterns of coverage changes in expansion and non-expansion states were particularly different for nonelderly with incomes below 138 percent FPL, the target population

for the Medicaid expansion (Figure 8). In expansion states, the uninsured rate for low-income nonelderly people fell by more than half, from 26.2 percent to 12.0 percent, and the Medicaid coverage rate increased by 13.8 percentage points (Figure 9). In non-expansion states, in contrast, the uninsured rate fell from 32.3 percent to 23.1 percent, private non-group coverage increased 4.6 percentage points, ESI increased by 2.2 percentage points, and Medicaid coverage increased by 2.1 percentage points (Figure 8 and 9). As shown in Figure 9, these differences in coverage gains for nonelderly with incomes below 138 percent of the FPL exacerbated pre-ACA differences in insurance coverage between Medicaid expansion states and non-expansion states. In particular, in 2013, 32.3 percent of low-income nonelderly people in non-expansion states were uninsured, compared to only 26.2 percent uninsured in expansion states – a gap of 6.1 percentage points; by 2016, that gap had grown to 11.1 percentage points. This was due, in part, to much higher Medicaid coverage in Medicaid expansion states, a difference that grew significantly after the ACA was implemented. In 2013, 45.2 percent of low-income nonelderly people in Medicaid expansion states had Medicaid coverage, compared to 39.6 percent of low-income nonelderly in non-expansion states. By 2016, 58.9 percent of low-income nonelderly had Medicaid coverage in expansion states, compared to 41.7 percent in non-expansion states.

Figure 7: Percentage Point Changes in Health Insurance Coverage by State Medicaid Expansion Status, 2013-2016



Change in population	0.3 million	2.1 million
Change in uninsured	-12.6 million	-5.9 million
Share uninsured in 2016	7.6 percent	13.7 percent

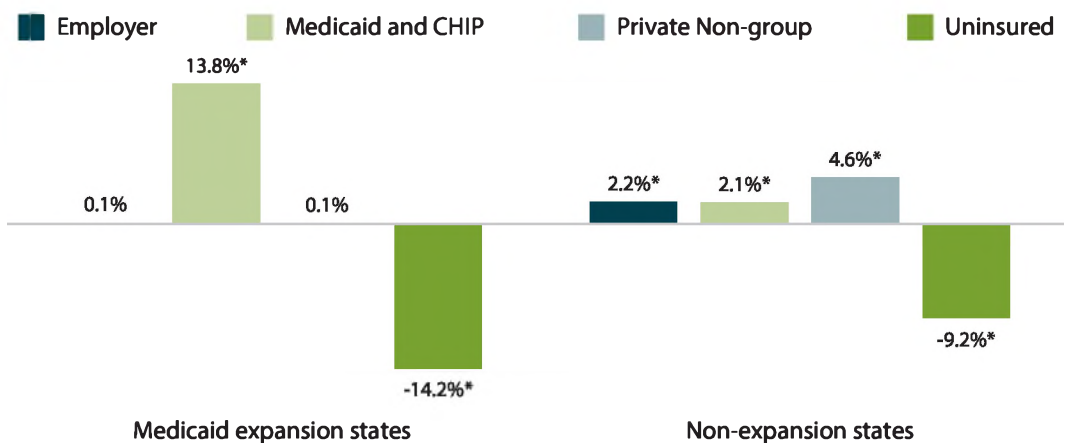
Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 3.

* Percentage point change is statistically significant at the 5 percent level.

Figure 8: Percentage Point Changes in Health Insurance Coverage among Nonelderly with Incomes Below 138 Percent of the Federal Poverty Level by State Medicaid Expansion Status, 2013-2016



Change in population	-3.6 million	-1.8 million
Change in uninsured	-7.9 million	-3.7 million
Share uninsured in 2016	12.0 percent	23.1 percent

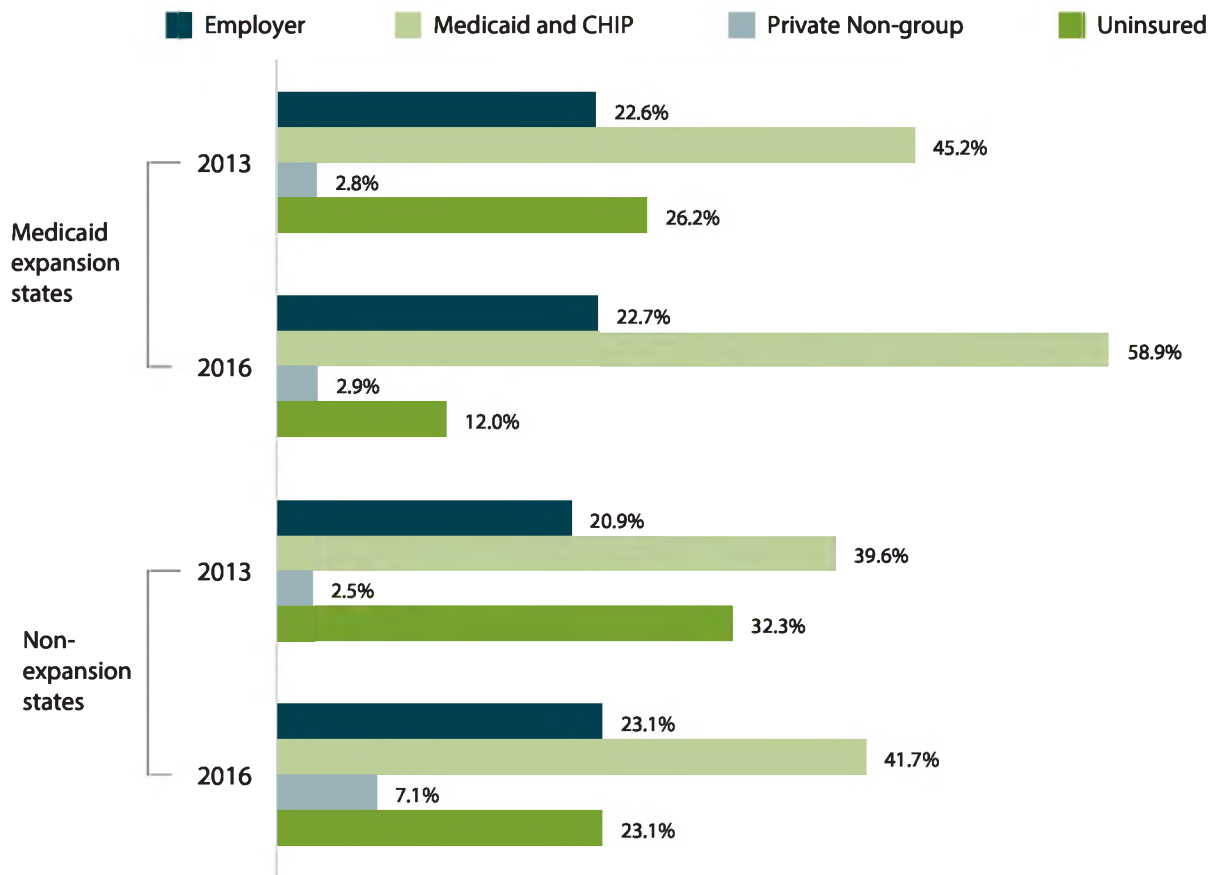
Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 3.

* Percentage point change is statistically significant at the 5 percent level.

Figure 9: Shares of Nonelderly with Incomes Below 138 Percent of the Federal Poverty Level with Each Coverage Type in 2013 and 2016, by State Medicaid Expansion Status



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children’s Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 3.

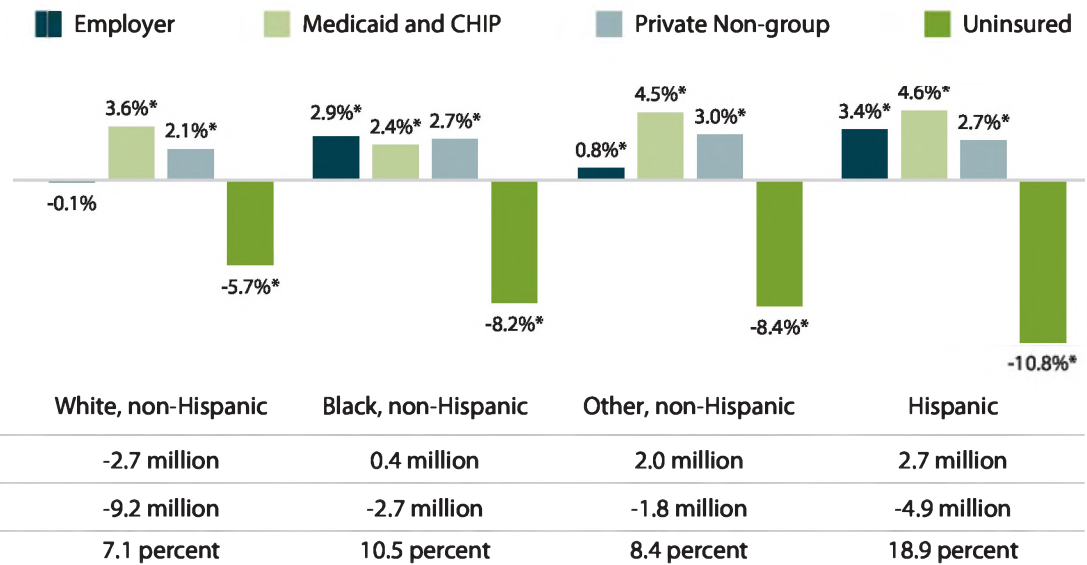
* Percentage point change is statistically significant at the 5 percent level.

Changes in Coverage by Race and Ethnicity

In 2016, all racial and ethnic groups had lower uninsured rates than in 2013, and racial and ethnic gaps in uninsurance narrowed overall. The uninsured rate for non-Hispanic white nonelderly fell 5.7 percentage points, compared to 8.2 percentage points for non-Hispanic black nonelderly, 10.8 percentage points for Hispanic nonelderly, and 8.4 percentage points for other or multiple races (Figure 10). Progress closing racial and ethnic gaps in uninsurance was not

consistent across income groups, however, likely due in part to state Medicaid expansion choices. Among nonelderly with incomes below 138 percent of the FPL, non-Hispanic white nonelderly had a higher uninsured rate than non-Hispanic black nonelderly in 2013 (26.1 percent compared to 24.8 percent), but this pattern reversed by 2016 (13.8 percent uninsured compared to 14.4 percent uninsured) because coverage gains among non-Hispanic white nonelderly were larger than those among non-Hispanic black nonelderly (Figure 11).

Figure 10: Percentage Point Changes in Health Insurance Coverage by Race and Ethnicity, 2013-2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children’s Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

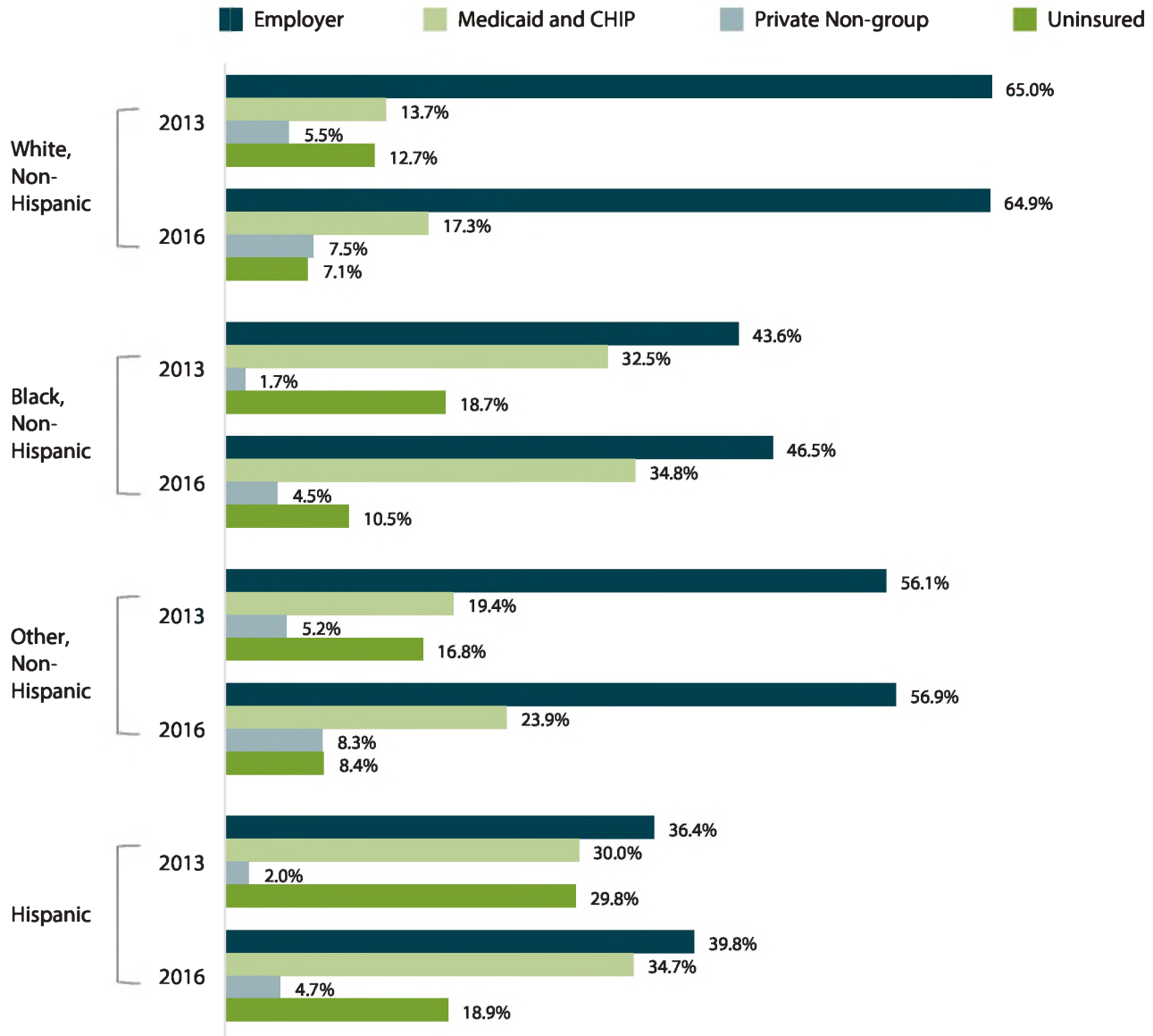
For complete estimates, see Appendix Table 4.

* Percentage point change is statistically significant at the 5 percent level.

Coverage gains between 2013 and 2016 came through different means among racial and ethnic groups, likely due to a variety of factors including age differences, income disparities, and differences in state Medicaid expansion choices and other coverage policies. For example, the 8.2 percentage point reduction in the uninsured rate for non-Hispanic black nonelderly was driven by relatively equally-sized gains in ESI (2.9 percentage points), private non-group coverage (2.7 percentage points),

and Medicaid coverage (2.4 percentage points) (Figure 10). In contrast, the 5.7 percentage point reduction in the uninsured rate for non-Hispanic white nonelderly was driven by gains in Medicaid coverage (3.6 percentage points). Hispanic nonelderly saw the largest percentage point gains in ESI (3.4 percentage points), but still were far less likely than non-Hispanic white nonelderly to be covered by ESI in 2016 (39.8 percent compared to 64.9 percent) (Figure 11).

Figure 11: Shares of Nonelderly with Each Coverage Type in 2013 and 2016, by Race and Ethnicity



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

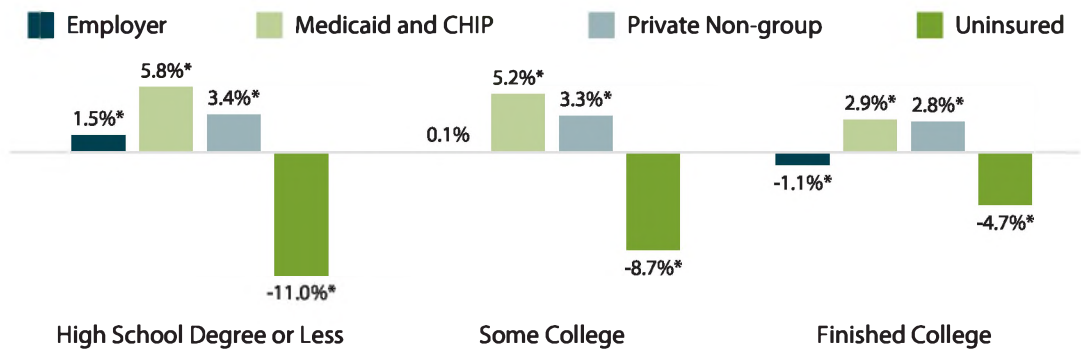
For complete estimates, see Appendix Table 4.

Changes in Coverage by Education

Between 2013 and 2016, the uninsured rate fell for adults aged 18 to 64 with all levels of education, and gaps in uninsurance by education level narrowed. Over this period, uninsurance fell 11.0 percentage points for adults with a high school degree or less, compared to 8.7 percentage points for adults with some college, and 4.7 percentage points for adults who finished college (Figure 12).

All education groups saw gains in Medicaid coverage between 2013 and 2016, ranging from 5.8 percentage points for adults with a high school degree or less to 2.9 percentage points for adults who finished college (Figure 12). However, only adults with a high school degree or less saw ESI gains over this period (1.5 percentage points), while ESI coverage fell by 1.1 percentage points for adults who finished college.

Figure 12: Percentage Point Changes in Health Insurance Coverage among Adults (18-64) by Education Level, 2013-2016



Change in population	-1.1 million	-0.4 million	3.8 million
Change in uninsured	-9.8 million	-4.3 million	-2.4 million
Share uninsured in 2016	18.7 percent	10.1 percent	4.3 percent

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 5.

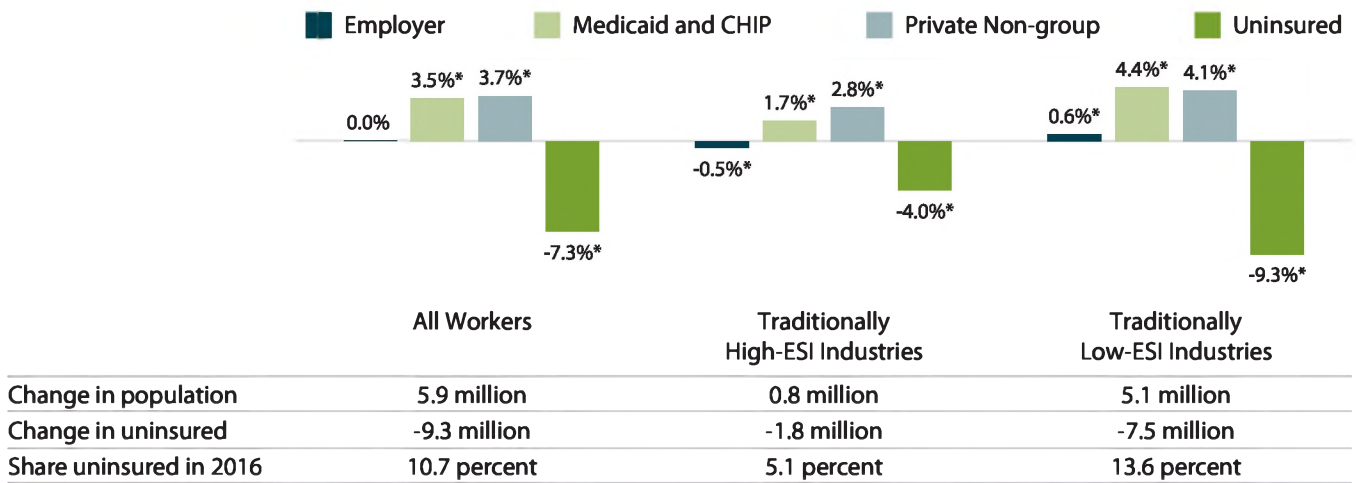
* Percentage point change is statistically significant at the 5 percent level.

Changes in Coverage among Workers, by Industry

The working adult population grew by 5.9 million people between 2013 and 2016, likely due in part to continued economic recovery after the recession (Figure 13). Among working adults aged 18 to 64, the uninsured rate fell from 18.0 percent in 2013 to 10.7 percent in 2016, or 9.3 million fewer uninsured working adults. These coverage gains were driven by gains in private non-group coverage (an increase of 3.7 percentage points) and Medicaid (an increase of 3.5 percentage points) (Figure 13). Gains in coverage were particularly large among low-income workers, who saw their uninsured rate fall from 40.1 percent to 23.0 percent, primarily due to increases in Medicaid coverage (an increase of 12.4 percentage points) (Figure 14). However, low-income workers were still approximately eight times more likely to be uninsured than workers with incomes at or above 400 percent of the FPL in 2016 (23.0 percent compared to 2.9 percent uninsured).

Across all income groups, gains in coverage were concentrated among workers in traditionally low-ESI industries, such as agriculture, construction, and retail.²¹ An additional 7.5 million workers in traditionally low-ESI industries had coverage in 2016 compared to 2013, representing a 9.3 percentage point reduction in the uninsured rate for this group (Figure 13), and amounting to more than 80 percent of the increase in coverage across all workers. Most of these coverage gains were through Medicaid (4.4 percentage points) and private non-group coverage (4.1 percentage points), rather than through increases in the share with ESI coverage (0.6 percentage points). However, in 2016, workers in traditionally low-ESI industries were still far more likely to be uninsured than those in traditionally high-ESI industries (13.6 percent compared to 5.1 percent), and types of coverage differed by industry type. For example, Medicaid coverage increased by 4.4 percentage points among workers in low-ESI industries between 2013 and 2016, compared to 1.7 percentage points among workers in high-ESI industries.

Figure 13: Percentage Point Changes in Health Insurance Coverage among Workers (18-64) by Industry, 2013-2016



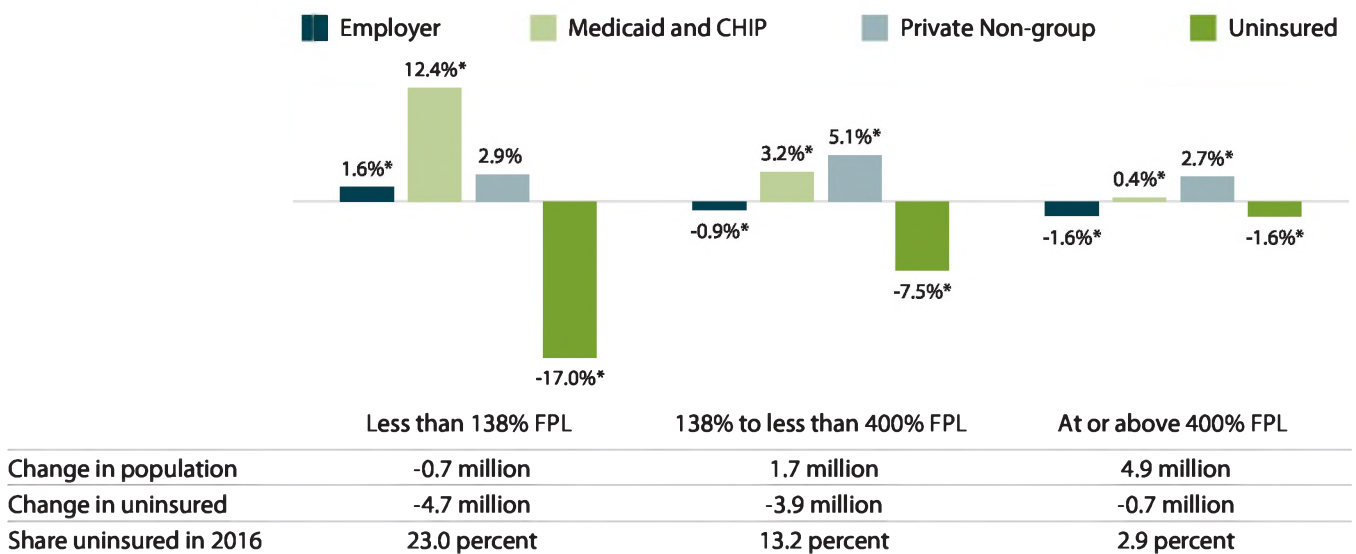
Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al. Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly. High-ESI industries are those with ESI coverage rates of more than 80 percent in 2012. They consist primarily of finance, manufacturing, information, and communications firms. Low-ESI industries had ESI coverage rates of less than 80 percent in 2012 and consist primarily of agriculture, construction, and wholesale and retail trade.

For complete estimates, see Appendix Table 6.

* Percentage point change is statistically significant at the 5 percent level.

Figure 14: Percentage Point Changes in Health Insurance Coverage among Workers (18-64) by Health Insurance Unit Income, 2013-2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al. Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 6.

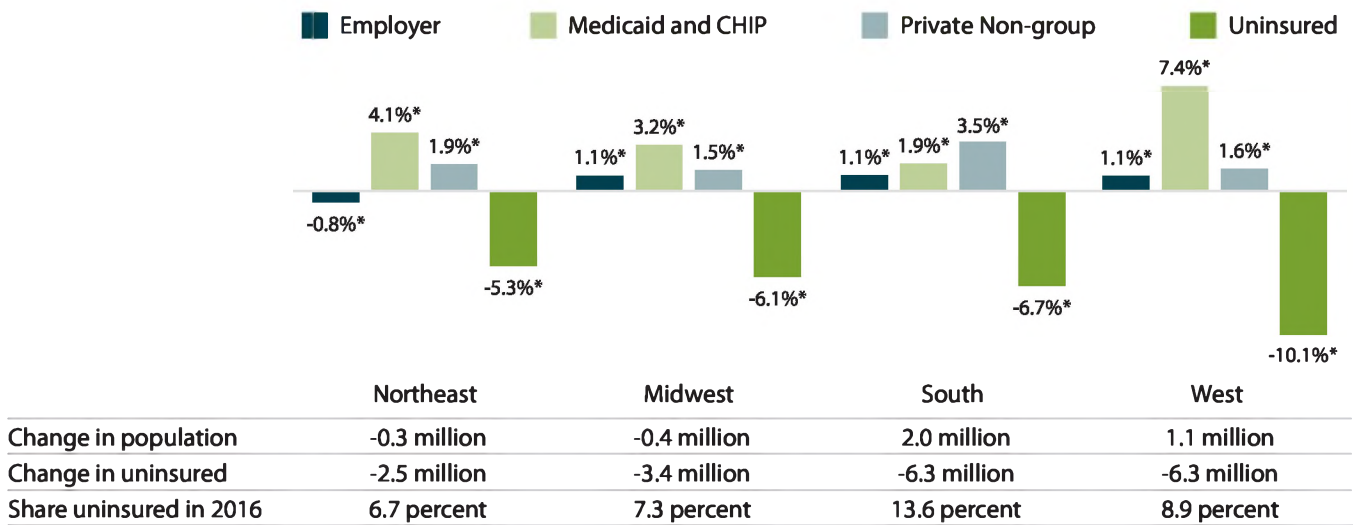
* Percentage point change is statistically significant at the 5 percent level.

Changes in Coverage by Region

Between 2013 and 2016, changes in uninsured rates were not uniform across regions. The West had the largest drop in the uninsured rate of any region over this period, falling 10.1 percentage points (from 19.0 percent to 8.9 percent) (Figure 15). The uninsured rate in the Northeast fell only 5.3 percentage points over this period, from the already-low 12.0 percent to 6.7 percent. The Midwest and South had moderate reductions in uninsured rates of 6.1 percentage points and 6.7 percentage points, respectively.

As of 2016, the uninsured rate in the South was more than twice as high as that in the Northeast (13.6 percent compared to 6.7 percent) (Figure 15). Non-expansion states are concentrated in the South, which is reflected in lower Medicaid coverage gains in that region (1.9 percentage points), higher private non-group coverage gains (3.6 percentage points), and a higher uninsured rate than other regions.

Figure 15: Percentage Point Changes in Health Insurance Coverage by Region, 2013-2016



Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹ Coverage through the Civilian Health and Medical Program of the Uniformed Services and Medicare is not shown because such coverage changes little year to year among the nonelderly.

For complete estimates, see Appendix Table 7.

* Percentage point change is statistically significant at the 5 percent level.

CONCLUSIONS

Between 2013 and 2016, as the major coverage provisions of the ACA were implemented, uninsurance among the nonelderly fell dramatically, from 17.0 percent to 10.0 percent. This reduction in the uninsured rate was virtually all attributable to the ACA, as uninsurance has been predicted to be stable over this period without the ACA.²² In addition, secular declines in employer-sponsored insurance were observed between 2000 and 2013.²³ Holding demographic, socioeconomic, and region characteristics constant, we would still expect to see a 6.9 percentage point reduction in the uninsured between 2013 and 2016, suggesting that the ACA, not economic improvement, was responsible for coverage gains. In addition, a majority of the coverage gains between 2013 and 2016 came through Medicaid and private non-group coverage, the two centerpieces of the ACA's coverage expansions. In addition, 3.2 million nonelderly Americans gained employer-sponsored insurance between 2013 and 2016, reflecting the growth in the size of the workforce (5.9 million) as the recovery from the Great Recession continued.

The coverage gains during ACA implementation were broadly distributed. All age groups, racial and ethnic groups,

education levels, income groups, and workers' industry types we studied had lower uninsured rates in 2016 than in 2013, and these gains were largest for people with incomes below 138 percent of the FPL, the targets of the ACA Medicaid eligibility expansion. While Medicaid expansion states fared particularly well in reducing their uninsured rates, non-expansion states still saw significant gains in coverage through private sources.

Our study does not reflect recent changes to the marketplaces and the repeal of the individual mandate to purchase coverage. Some evidence suggests that uninsurance increased between 2016 and 2018, perhaps due to these changes in policy.²⁴ Because coverage patterns differ across the country and by demographic groups, changes in policy affecting the availability and affordability of coverage in the marketplaces will not have uniform effects on uninsurance. Coverage through private non-group sources such as the marketplaces has been particularly important in reducing the uninsured rate in non-expansion states, so policies detrimental to the functioning of these markets could further widen the gap in insurance coverage by state Medicaid expansion status.

APPENDIX

Appendix Table 1. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income, 2013 to 2016

	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes	264.2		266.6			2.4 *
Employer	148.4	56.2%	151.7	56.9%	0.7% *	3.2 *
Medicaid and CHIP	51.9	19.6%	62.7	23.5%	3.9% *	10.9 *
CHAMPUS/Medicare	7.5	2.8%	7.9	3.0%	0.1% *	0.4 *
Private Non-group	11.4	4.3%	17.8	6.7%	2.3% *	6.3 *
Uninsured	45.0	17.0%	26.5	10.0%	-7.1% *	-18.5 *
Below 138% of FPL	87.9		82.4			-5.5 *
Employer	19.2	21.9%	18.8	22.9%	1.0% *	-0.4 *
Medicaid and CHIP	37.7	42.9%	42.8	51.9%	9.0% *	5.1 *
CHAMPUS/Medicare	3.3	3.8%	3.4	4.1%	0.3% *	0.0
Private Non-group	2.4	2.7%	3.8	4.6%	1.9% *	1.4 *
Uninsured	25.2	28.7%	13.6	16.5%	-12.2% *	-11.6 *
138% to less than 400% of FPL	95.7		96.8			1.1 *
Employer	59.3	62.0%	58.3	60.2%	-1.8% *	-1.0 *
Medicaid and CHIP	12.7	13.3%	17.4	18.0%	4.7% *	4.7 *
CHAMPUS/Medicare	2.7	2.9%	3.0	3.0%	0.2% *	0.2 *
Private Non-group	4.6	4.8%	7.7	7.9%	3.1% *	3.1 *
Uninsured	16.4	17.1%	10.5	10.8%	-6.2% *	-5.9 *
At or above 400% of FPL	80.6		87.4			6.8 *
Employer	69.9	86.7%	74.6	85.3%	-1.4% *	4.7 *
Medicaid and CHIP	1.4	1.8%	2.5	2.9%	1.1% *	1.1 *
CHAMPUS/Medicare	1.4	1.7%	1.6	1.8%	0.1% *	0.2 *
Private Non-group	4.4	5.5%	6.3	7.2%	1.7% *	1.8 *
Uninsured	3.5	4.3%	2.4	2.8%	-1.5% *	-1.1 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 2. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Age Group, 2013 to 2016

	Children 0-18					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	36.3	47.2%	36.6	47.5%	0.3% *	0.3 *
Medicaid and CHIP	31.6	41.0%	33.5	43.5%	2.4% *	1.9 *
CHAMPUS/Medicare	1.3	1.7%	1.3	1.7%	0.0%	0.0
Private Non-group	2.3	2.9%	2.3	3.0%	0.1%	0.0
Uninsured	5.5	7.1%	3.3	4.3%	-2.8% *	-2.2 *
Below 138% of FPL						
Employer	3.1	10.7%	2.7	10.4%	-0.3% *	-0.3 *
Medicaid and CHIP	22.1	77.5%	21.3	81.2%	3.7% *	-0.7 *
CHAMPUS/Medicare	0.7	2.4%	0.6	2.3%	-0.1%	-0.1 *
Private Non-group	0.1	0.2%	0.2	0.7%	0.5% *	0.1 *
Uninsured	2.6	9.2%	1.4	5.4%	-3.8% *	-1.2 *
138% to less than 400% of FPL						
Employer	16.8	57.3%	15.8	53.6%	-3.7% *	-1.0 *
Medicaid and CHIP	8.8	29.9%	10.8	36.7%	6.7% *	2.1 *
CHAMPUS/Medicare	0.4	1.5%	0.5	1.6%	0.1%	0.0
Private Non-group	0.9	3.2%	0.9	3.0%	-0.2% *	0.0 *
Uninsured	2.4	8.0%	1.5	5.1%	-2.9% *	-0.8 *
At or above 400% of FPL						
Employer	16.5	85.6%	18.0	85.0%	-0.6% *	1.6 *
Medicaid and CHIP	0.8	4.0%	1.3	6.3%	2.3% *	0.6 *
CHAMPUS/Medicare	0.2	1.1%	0.2	1.2%	0.0%	0.0 *
Private Non-group	1.3	6.7%	1.2	5.9%	-0.9% *	0.0 *
Uninsured	0.5	2.6%	0.4	1.7%	-0.8% *	-0.1 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 2. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Age Group, 2013 to 2016 (continued)

	Adults 19-25					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	15.0	52.2%	15.9	56.0%	3.9% *	0.9 *
Medicaid and CHIP	3.6	12.5%	5.3	18.8%	6.3% *	1.7 *
CHAMPUS/Medicare	0.6	2.0%	0.5	1.9%	-0.1% *	0.0 *
Private Non-group	1.9	6.7%	2.4	8.6%	1.9% *	0.5 *
Uninsured	7.7	26.7%	4.2	14.7%	-12.0% *	-3.5 *
Below 138% of FPL						
Employer	9.0	45.6%	8.8	48.5%	2.9% *	-0.2 *
Medicaid and CHIP	3.2	16.1%	4.5	25.1%	9.0% *	1.4 *
CHAMPUS/Medicare	0.4	2.0%	0.3	1.9%	0.0%	0.0 *
Private Non-group	1.4	7.2%	1.5	8.4%	1.2% *	0.1 *
Uninsured	5.7	29.0%	2.9	16.0%	-13.0% *	-2.8 *
138% to less than 400% of FPL						
Employer	4.9	63.9%	5.8	66.7%	2.8% *	0.9 *
Medicaid and CHIP	0.4	5.1%	0.8	8.7%	3.6% *	0.4 *
CHAMPUS/Medicare	0.2	2.1%	0.2	1.9%	-0.2% *	0.0
Private Non-group	0.4	5.5%	0.8	9.1%	3.6% *	0.4 *
Uninsured	1.8	23.4%	1.2	13.6%	-9.8% *	-0.6 *
At or above 400% of FPL						
Employer	1.1	81.9%	1.4	82.3%	0.4%	0.3 *
Medicaid and CHIP	0.0	1.7%	0.0	2.8%	1.1% *	0.0 *
CHAMPUS/Medicare	0.0	1.7%	0.0	1.4%	-0.3%	0.0
Private Non-group	0.1	4.7%	0.1	7.3%	2.7% *	0.1 *
Uninsured	0.1	10.0%	0.1	6.1%	-3.9% *	0.0 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 2. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Age Group, 2013 to 2016 (continued)

	Adults 26-45					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	47.7	59.0%	50.1	60.6%	1.7% *	2.4 *
Medicaid and CHIP	9.1	11.3%	12.9	15.6%	4.4% *	3.8 *
CHAMPUS/Medicare	1.6	2.0%	1.8	2.1%	0.1% *	0.2 *
Private Non-group	2.9	3.6%	5.8	7.0%	3.4% *	2.9 *
Uninsured	19.5	24.1%	12.0	14.6%	-9.6% *	-7.5 *
Below 138% of FPL						
Employer	4.0	17.5%	4.3	20.0%	2.5% *	0.3 *
Medicaid and CHIP	7.0	31.0%	9.3	43.5%	12.5% *	2.2 *
CHAMPUS/Medicare	0.7	3.2%	0.7	3.4%	0.2% *	0.0
Private Non-group	0.3	1.5%	1.0	4.8%	3.3% *	0.7 *
Uninsured	10.6	46.8%	6.0	28.2%	-18.5% *	-4.6 *
138% to less than 400% of FPL						
Employer	21.3	65.0%	21.5	64.6%	-0.4% *	0.2 *
Medicaid and CHIP	1.9	5.7%	3.2	9.5%	3.8% *	1.3 *
CHAMPUS/Medicare	0.6	1.9%	0.7	2.1%	0.2% *	0.1 *
Private Non-group	1.5	4.6%	2.9	8.8%	4.2% *	1.4 *
Uninsured	7.5	22.9%	5.0	15.0%	-7.8% *	-2.5 *
At or above 400% of FPL						
Employer	22.4	88.1%	24.3	86.8%	-1.4% *	1.9 *
Medicaid and CHIP	0.2	0.9%	0.5	1.8%	0.9% *	0.3 *
CHAMPUS/Medicare	0.3	1.0%	0.3	1.2%	0.2% *	0.1 *
Private Non-group	1.1	4.3%	1.8	6.6%	2.3% *	0.7 *
Uninsured	1.4	5.6%	1.0	3.7%	-1.9% *	-0.4 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 2. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Age Group, 2013 to 2016 (continued)

	Adults 46-64					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	49.4	63.7%	49.0	62.5%	-1.2% *	-0.4 *
Medicaid and CHIP	7.5	9.7%	11.0	14.0%	4.3% *	3.4 *
CHAMPUS/Medicare	3.9	5.1%	4.3	5.4%	0.3% *	0.3 *
Private Non-group	4.3	5.5%	7.2	9.2%	3.6% *	2.9 *
Uninsured	12.4	15.9%	7.0	8.9%	-7.0% *	-5.4 *
Below 138% of FPL						
Employer	3.2	19.0%	3.1	18.3%	-0.7% *	-0.2 *
Medicaid and CHIP	5.4	32.0%	7.7	45.8%	13.8% *	2.2 *
CHAMPUS/Medicare	1.5	9.1%	1.7	9.9%	0.8% *	0.1 *
Private Non-group	0.6	3.3%	1.1	6.4%	3.1% *	0.5 *
Uninsured	6.2	36.7%	3.3	19.6%	-17.1% *	-3.0 *
138% to less than 400% of FPL						
Employer	16.3	62.8%	15.1	59.9%	-2.9% *	-1.1 *
Medicaid and CHIP	1.7	6.5%	2.6	10.5%	3.9% *	0.9 *
CHAMPUS/Medicare	1.5	5.8%	1.6	6.4%	0.6% *	0.1 *
Private Non-group	1.7	6.7%	3.1	12.1%	5.4% *	1.3 *
Uninsured	4.7	18.1%	2.8	11.0%	-7.1% *	-1.9 *
At or above 400% of FPL						
Employer	29.9	86.4%	30.8	84.6%	-1.8% *	0.9 *
Medicaid and CHIP	0.4	1.2%	0.7	1.8%	0.7% *	0.3 *
CHAMPUS/Medicare	0.9	2.5%	1.0	2.7%	0.1% *	0.1 *
Private Non-group	2.0	5.8%	3.1	8.4%	2.6% *	1.1 *
Uninsured	1.4	4.1%	0.9	2.6%	-1.6% *	-0.5 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 3. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and State Medicaid Expansion Status, 2013 to 2016

	Medicaid Expansion States					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	94.5	57.9%	95.1	58.2%	0.3% *	0.6 *
Medicaid and CHIP	33.0	20.2%	42.7	26.1%	5.9% *	9.7 *
CHAMPUS/Medicare	3.7	2.3%	3.9	2.4%	0.1% *	0.2 *
Private Non-group	7.0	4.3%	9.4	5.8%	1.5% *	2.4 *
Uninsured	25.0	15.3%	12.4	7.6%	-7.7% *	-12.6 *
Below 138% of FPL						
Employer	11.9	22.6%	11.1	22.7%	0.1% *	-0.8 *
Medicaid and CHIP	23.8	45.2%	28.9	58.9%	13.8% *	5.1 *
CHAMPUS/Medicare	1.7	3.2%	1.7	3.4%	0.2% *	0.0
Private Non-group	1.5	2.8%	1.4	2.9%	0.1% *	-0.1 *
Uninsured	13.8	26.2%	5.9	12.0%	-14.2% *	-7.9 *
138% to less than 400% of FPL						
Employer	36.1	62.7%	34.6	60.3%	-2.5% *	-1.5 *
Medicaid and CHIP	8.3	14.4%	12.0	20.9%	6.5% *	3.7 *
CHAMPUS/Medicare	1.4	2.4%	1.5	2.6%	0.2% *	0.1 *
Private Non-group	2.7	4.7%	4.2	7.2%	2.6% *	1.5 *
Uninsured	9.1	15.8%	5.2	9.0%	-6.8% *	-3.9 *
At or above 400% of FPL						
Employer	46.5	87.7%	49.4	86.5%	-1.2% *	2.9 *
Medicaid and CHIP	1.0	1.8%	1.8	3.2%	1.3% *	0.8 *
CHAMPUS/Medicare	0.6	1.2%	0.7	1.3%	0.1% *	0.1 *
Private Non-group	2.8	5.3%	3.9	6.7%	1.4% *	1.0 *
Uninsured	2.1	3.9%	1.3	2.3%	-1.7% *	-0.8 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 3. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and State Medicaid Expansion Status, 2013 to 2016 (continued)

	Non-Expansion States					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	53.9	53.4%	56.6	54.9%	1.5% *	2.6 *
Medicaid and CHIP	18.8	18.7%	20.1	19.5%	0.8% *	1.2 *
CHAMPUS/Medicare	3.8	3.7%	4.0	3.9%	0.1% *	0.2 *
Private Non-group	4.4	4.4%	8.3	8.1%	3.7% *	3.9 *
Uninsured	20.0	19.8%	14.1	13.7%	-6.1% *	-5.9 *
Below 138% of FPL						
Employer	7.4	20.9%	7.7	23.1%	2.2% *	0.4 *
Medicaid and CHIP	14.0	39.6%	13.9	41.7%	2.1% *	0.0
CHAMPUS/Medicare	1.7	4.7%	1.7	5.1%	0.3% *	0.0
Private Non-group	0.9	2.5%	2.4	7.1%	4.6% *	1.5 *
Uninsured	11.4	32.3%	7.7	23.1%	-9.2% *	-3.7 *
138% to less than 400% of FPL						
Employer	23.2	60.8%	23.7	60.1%	-0.7% *	0.5 *
Medicaid and CHIP	4.4	11.7%	5.4	13.7%	2.1% *	1.0 *
CHAMPUS/Medicare	1.4	3.6%	1.5	3.7%	0.2% *	0.1 *
Private Non-group	1.9	5.0%	3.5	8.9%	3.9% *	1.6 *
Uninsured	7.2	19.0%	5.3	13.5%	-5.5% *	-1.9 *
At or above 400% of FPL						
Employer	23.4	84.8%	25.2	83.2%	-1.6% *	1.8 *
Medicaid and CHIP	0.4	1.6%	0.7	2.4%	0.8% *	0.3 *
CHAMPUS/Medicare	0.7	2.7%	0.8	2.7%	0.1%	0.1 *
Private Non-group	1.6	5.9%	2.4	8.0%	2.1% *	0.8 *
Uninsured	1.4	5.1%	1.1	3.7%	-1.3% *	-0.3 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 4. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Race and Ethnicity, 2013 to 2016

	White Only (Non-Hispanic)					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	102.9	65.0%	100.9	64.9%	-0.1%	-2.0 *
Medicaid and CHIP	21.7	13.7%	26.9	17.3%	3.6% *	5.2 *
CHAMPUS/Medicare	4.9	3.1%	5.0	3.2%	0.2% *	0.2 *
Private Non-group	8.6	5.5%	11.7	7.5%	2.1% *	3.1 *
Uninsured	20.1	12.7%	11.0	7.1%	-5.7% *	-9.2 *
Below 138% of FPL						
Employer	11.2	28.1%	10.3	28.0%	0.0%	-0.9 *
Medicaid and CHIP	14.6	36.7%	17.3	47.2%	10.6% *	2.7 *
CHAMPUS/Medicare	2.1	5.2%	2.0	5.5%	0.3% *	-0.1 *
Private Non-group	1.6	4.0%	2.0	5.5%	1.4% *	0.4 *
Uninsured	10.4	26.1%	5.1	13.8%	-12.3% *	-5.4 *
138% to less than 400% of FPL						
Employer	38.8	67.0%	35.8	64.8%	-2.2% *	-3.0 *
Medicaid and CHIP	6.2	10.7%	8.0	14.5%	3.8% *	1.8 *
CHAMPUS/Medicare	1.9	3.2%	2.0	3.5%	0.4% *	0.1 *
Private Non-group	3.5	6.0%	5.0	9.0%	3.0% *	1.5 *
Uninsured	7.7	13.2%	4.5	8.2%	-5.0% *	-3.1 *
At or above 400% of FPL						
Employer	52.9	87.7%	54.9	86.2%	-1.4% *	2.0 *
Medicaid and CHIP	0.8	1.4%	1.5	2.4%	1.0% *	0.7 *
CHAMPUS/Medicare	1.0	1.6%	1.1	1.7%	0.1% *	0.1 *
Private Non-group	3.6	5.9%	4.7	7.4%	1.6% *	1.2 *
Uninsured	2.1	3.4%	1.4	2.2%	-1.2% *	-0.7 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 4. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Race and Ethnicity, 2013 to 2016 (continued)

	Black Only (Non-Hispanic)					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	14.5	43.6%	15.7	46.5%	2.9% *	1.2 *
Medicaid and CHIP	10.8	32.5%	11.8	34.8%	2.4% *	0.9 *
CHAMPUS/Medicare	1.2	3.5%	1.2	3.7%	0.2% *	0.1 *
Private Non-group	0.6	1.7%	1.5	4.5%	2.7% *	0.9 *
Uninsured	6.2	18.7%	3.6	10.5%	-8.2% *	-2.7 *
Below 138% of FPL						
Employer	2.9	17.6%	3.1	20.0%	2.5% *	0.2 *
Medicaid and CHIP	8.7	53.1%	8.9	58.5%	5.4% *	0.3 *
CHAMPUS/Medicare	0.6	3.5%	0.6	3.8%	0.4% *	0.0
Private Non-group	0.2	1.1%	0.5	3.2%	2.1% *	0.3 *
Uninsured	4.1	24.8%	2.2	14.4%	-10.3% *	-1.8 *
138% to less than 400% of FPL						
Employer	6.9	60.8%	7.5	61.1%	0.2%	0.5 *
Medicaid and CHIP	2.0	17.1%	2.5	20.6%	3.5% *	0.6 *
CHAMPUS/Medicare	0.4	3.6%	0.4	3.5%	-0.2%	0.0
Private Non-group	0.2	2.2%	0.7	5.6%	3.4% *	0.4 *
Uninsured	1.9	16.2%	1.1	9.2%	-7.0% *	-0.7 *
At or above 400% of FPL						
Employer	4.7	84.6%	5.2	82.8%	-1.7% *	0.4 *
Medicaid and CHIP	0.2	3.4%	0.3	4.7%	1.2% *	0.1 *
CHAMPUS/Medicare	0.2	3.3%	0.2	3.6%	0.3% *	0.0 *
Private Non-group	0.1	2.5%	0.3	5.3%	2.7% *	0.2 *
Uninsured	0.3	6.1%	0.2	3.6%	-2.5% *	-0.1 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 4. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Race and Ethnicity, 2013 to 2016 (continued)

	Hispanic					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	18.1	36.4%	20.8	39.8%	3.4% *	2.8 *
Medicaid and CHIP	14.9	30.0%	18.2	34.7%	4.6% *	3.2 *
CHAMPUS/Medicare	0.9	1.7%	1.0	1.9%	0.2% *	0.1 *
Private Non-group	1.0	2.0%	2.5	4.7%	2.7% *	1.4 *
Uninsured	14.8	29.8%	9.9	18.9%	-10.8% *	-4.9 *
Below 138% of FPL						
Employer	3.4	14.4%	3.7	16.4%	2.0% *	0.3 *
Medicaid and CHIP	11.2	46.9%	12.5	55.2%	8.3% *	1.3 *
CHAMPUS/Medicare	0.4	1.9%	0.5	2.2%	0.3% *	0.0 *
Private Non-group	0.3	1.1%	0.7	3.1%	2.0% *	0.4 *
Uninsured	8.5	35.8%	5.2	23.2%	-12.7% *	-3.3 *
138% to less than 400% of FPL						
Employer	9.1	48.1%	10.4	48.8%	0.6% *	1.3 *
Medicaid and CHIP	3.5	18.5%	5.2	24.5%	6.0% *	1.7 *
CHAMPUS/Medicare	0.3	1.6%	0.4	1.7%	0.1%	0.1 *
Private Non-group	0.5	2.4%	1.2	5.7%	3.3% *	0.8 *
Uninsured	5.5	29.3%	4.1	19.3%	-10.0% *	-1.4 *
At or above 400% of FPL						
Employer	5.6	80.8%	6.7	80.3%	-0.5%	1.2 *
Medicaid and CHIP	0.2	3.3%	0.4	5.0%	1.7% *	0.2 *
CHAMPUS/Medicare	0.1	1.6%	0.1	1.6%	0.1%	0.0 *
Private Non-group	0.3	4.3%	0.5	6.4%	2.2% *	0.2 *
Uninsured	0.7	10.0%	0.6	6.6%	-3.4% *	-0.1 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 4. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Race and Ethnicity, 2013 to 2016 (continued)

	Other or Multiple Races (Non-Hispanic)					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	12.9	56.1%	14.2	56.9%	0.8% *	1.3 *
Medicaid and CHIP	4.5	19.4%	6.0	23.9%	4.5% *	1.5 *
CHAMPUS/Medicare	0.6	2.4%	0.6	2.5%	0.0%	0.1 *
Private Non-group	1.2	5.2%	2.1	8.3%	3.0% *	0.9 *
Uninsured	3.9	16.8%	2.1	8.4%	-8.4% *	-1.8 *
Below 138% of FPL						
Employer	1.7	22.4%	1.8	22.9%	0.5%	0.1 *
Medicaid and CHIP	3.2	41.6%	4.0	51.6%	10.0% *	0.8 *
CHAMPUS/Medicare	0.3	3.4%	0.3	3.5%	0.1%	0.0
Private Non-group	0.3	4.4%	0.6	8.0%	3.6% *	0.3 *
Uninsured	2.2	28.2%	1.1	14.0%	-14.2% *	-1.1 *
138% to less than 400% of FPL						
Employer	4.5	59.9%	4.7	57.7%	-2.2% *	0.2 *
Medicaid and CHIP	1.1	14.7%	1.7	20.6%	5.9% *	0.6 *
CHAMPUS/Medicare	0.2	2.5%	0.2	2.7%	0.2%	0.0 *
Private Non-group	0.4	5.5%	0.8	9.7%	4.2% *	0.4 *
Uninsured	1.3	17.5%	0.8	9.3%	-8.1% *	-0.6 *
At or above 400% of FPL						
Employer	6.7	85.8%	7.8	85.3%	-0.4%	1.1 *
Medicaid and CHIP	0.2	2.0%	0.3	3.1%	1.1% *	0.1 *
CHAMPUS/Medicare	0.1	1.4%	0.1	1.4%	0.0%	0.0 *
Private Non-group	0.5	5.8%	0.7	7.3%	1.5% *	0.2 *
Uninsured	0.4	5.0%	0.3	2.8%	-2.2% *	-0.1 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 5. Changes in Health Insurance Coverage Among Adults 18-64 by Health Insurance Unit Income and Age Group, 2013 to 2016

	High School Degree or Less					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	39.9	45.8%	40.7	47.3%	1.5% *	0.8 *
Medicaid and CHIP	15.3	17.6%	20.1	23.4%	5.8% *	4.8 *
CHAMPUS/Medicare	3.1	3.5%	3.3	3.8%	0.3% *	0.2 *
Private Non-group	3.0	3.4%	5.9	6.8%	3.4% *	2.9 *
Uninsured	25.9	29.7%	16.0	18.7%	-11.0% *	-9.8 *
Below 138% of FPL						
Employer	7.3	19.7%	7.6	21.8%	2.1% *	0.3 *
Medicaid and CHIP	12.1	32.5%	15.1	43.5%	11.0% *	3.0 *
CHAMPUS/Medicare	1.6	4.2%	1.7	4.8%	0.6% *	0.1 *
Private Non-group	0.8	2.2%	1.6	4.6%	2.4% *	0.8 *
Uninsured	15.4	41.4%	8.8	25.4%	-16.1% *	-6.6 *
138% to less than 400% of FPL						
Employer	19.3	57.4%	19.4	57.0%	-0.4% *	0.1
Medicaid and CHIP	2.8	8.5%	4.4	12.9%	4.4% *	1.5 *
CHAMPUS/Medicare	1.1	3.4%	1.2	3.6%	0.2% *	0.1 *
Private Non-group	1.4	4.0%	2.9	8.5%	4.5% *	1.5 *
Uninsured	9.0	26.7%	6.2	18.1%	-8.6% *	-2.8 *
At or above 400% of FPL						
Employer	13.2	81.5%	13.7	79.9%	-1.6% *	0.5 *
Medicaid and CHIP	0.4	2.4%	0.6	3.6%	1.2% *	0.2 *
CHAMPUS/Medicare	0.4	2.2%	0.4	2.3%	0.2% *	0.0 *
Private Non-group	0.8	5.0%	1.4	8.0%	3.0% *	0.6 *
Uninsured	1.5	9.0%	1.1	6.2%	-2.8% *	-0.4 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 5. Changes in Health Insurance Coverage Among Adults 18-64 by Health Insurance Unit Income and Age Group, 2013 to 2016 (continued)

	Some College					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	31.0	62.6%	30.8	62.7%	0.1%	-0.2
Medicaid and CHIP	4.6	9.3%	7.1	14.5%	5.2% *	2.5 *
CHAMPUS/Medicare	2.0	3.9%	2.0	4.1%	0.1% *	0.0
Private Non-group	2.6	5.3%	4.2	8.6%	3.3% *	1.6 *
Uninsured	9.3	18.8%	5.0	10.1%	-8.7% *	-4.3 *
Below 138% of FPL						
Employer	6.3	38.2%	6.0	38.6%	0.4%	-0.3 *
Medicaid and CHIP	3.4	20.4%	5.1	32.6%	12.2% *	1.7 *
CHAMPUS/Medicare	0.8	4.8%	0.8	4.9%	0.1%	0.0
Private Non-group	0.9	5.7%	1.2	8.0%	2.3% *	0.3 *
Uninsured	5.1	31.0%	2.5	16.0%	-15.0% *	-2.7 *
138% to less than 400% of FPL						
Employer	12.6	66.7%	12.5	65.8%	-1.0%	-0.1 *
Medicaid and CHIP	1.1	5.6%	1.8	9.4%	3.8% *	0.7 *
CHAMPUS/Medicare	0.8	4.2%	0.8	4.4%	0.3%	0.1
Private Non-group	1.0	5.3%	1.9	9.9%	4.6% *	0.9 *
Uninsured	3.4	18.2%	2.0	10.5%	-7.6% *	-1.4 *
At or above 400% of FPL						
Employer	12.1	85.9%	12.3	84.3%	-1.6% *	0.3 *
Medicaid and CHIP	0.2	1.2%	0.3	2.0%	0.8% *	0.1 *
CHAMPUS/Medicare	0.4	2.6%	0.4	2.7%	0.1%	0.0 *
Private Non-group	0.7	4.9%	1.1	7.5%	2.7% *	0.4 *
Uninsured	0.8	5.4%	0.5	3.4%	-2.0% *	-0.3 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 5. Changes in Health Insurance Coverage Among Adults 18-64 by Health Insurance Unit Income and Age Group, 2013 to 2016 (continued)

	Finished College					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	43.0	79.3%	45.4	78.1%	-1.1% *	2.4 *
Medicaid and CHIP	1.5	2.8%	3.3	5.7%	2.9% *	1.8 *
CHAMPUS/Medicare	1.2	2.1%	1.3	2.3%	0.2% *	0.2 *
Private Non-group	3.7	6.8%	5.5	9.5%	2.8% *	1.9 *
Uninsured	4.9	9.0%	2.5	4.3%	-4.7% *	-2.4 *
Below 138% of FPL						
Employer	2.7	39.8%	2.7	39.0%	-0.8% *	0.0
Medicaid and CHIP	0.9	13.6%	2.0	29.4%	15.7% *	1.1 *
CHAMPUS/Medicare	0.3	4.6%	0.3	4.9%	0.3% *	0.0 *
Private Non-group	0.6	8.8%	0.8	11.9%	3.2% *	0.2 *
Uninsured	2.3	33.2%	1.0	14.7%	-18.4% *	-1.3 *
138% to less than 400% of FPL						
Employer	11.3	74.1%	11.3	72.0%	-2.1% *	0.0
Medicaid and CHIP	0.4	2.9%	0.9	5.8%	2.9% *	0.5 *
CHAMPUS/Medicare	0.4	2.5%	0.4	2.8%	0.3% *	0.1 *
Private Non-group	1.3	8.7%	2.1	13.2%	4.4% *	0.7 *
Uninsured	1.8	11.8%	1.0	6.2%	-5.6% *	-0.8 *
At or above 400% of FPL						
Employer	29.0	90.1%	31.4	88.5%	-1.6% *	2.4 *
Medicaid and CHIP	0.2	0.5%	0.4	1.0%	0.6% *	0.2 *
CHAMPUS/Medicare	0.5	1.4%	0.5	1.5%	0.1% *	0.1 *
Private Non-group	1.7	5.4%	2.6	7.4%	2.0% *	0.9 *
Uninsured	0.8	2.6%	0.5	1.5%	-1.1% *	-0.3 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 6. Changes in Health Insurance Coverage Among Workers by Health Insurance Unit Income and Industry Type, 2013 to 2016

	All Workers, 18-64					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	95.3	70.3%	99.5	70.4%	0.0%	4.2 *
Medicaid and CHIP	7.1	5.3%	12.4	8.8%	3.5% *	5.3 *
CHAMPUS/Medicare	2.2	1.6%	2.4	1.7%	0.1% *	0.2 *
Private Non-group	6.4	4.7%	11.9	8.4%	3.7% *	5.5 *
Uninsured	24.4	18.0%	15.2	10.7%	-7.3% *	-9.3 *
Below 138% of FPL						
Employer	10.0	37.4%	10.1	39.0%	1.6% *	0.1 *
Medicaid and CHIP	4.4	16.5%	7.5	28.9%	12.4% *	3.1 *
CHAMPUS/Medicare	0.5	1.9%	0.5	2.1%	0.1% *	0.0
Private Non-group	1.1	4.0%	1.8	7.0%	2.9% *	0.7 *
Uninsured	10.7	40.1%	6.0	23.0%	-17.0% *	-4.7 *
138% to less than 400% of FPL						
Employer	37.2	68.1%	37.8	67.2%	-0.9% *	0.7 *
Medicaid and CHIP	2.4	4.3%	4.2	7.5%	3.2% *	1.9 *
CHAMPUS/Medicare	0.9	1.7%	1.0	1.9%	0.1% *	0.1 *
Private Non-group	2.8	5.1%	5.7	10.2%	5.1% *	2.9 *
Uninsured	11.3	20.7%	7.4	13.2%	-7.5% *	-3.9 *
At or above 400% of FPL						
Employer	48.1	88.7%	51.5	87.1%	-1.6% *	3.4 *
Medicaid and CHIP	0.4	0.7%	0.6	1.1%	0.4% *	0.3 *
CHAMPUS/Medicare	0.8	1.4%	0.9	1.5%	0.0%	0.1 *
Private Non-group	2.5	4.7%	4.4	7.4%	2.7% *	1.8 *
Uninsured	2.5	4.5%	1.7	2.9%	-1.6% *	-0.7 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 6. Changes in Health Insurance Coverage Among Workers by Health Insurance Unit Income and Industry Type, 2013 to 2016 (continued)

	Workers in High-ESI Industries					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	39.5	83.4%	40.0	82.9%	-0.5% *	0.4 *
Medicaid and CHIP	1.3	2.7%	2.1	4.4%	1.7% *	0.8 *
CHAMPUS/Medicare	0.8	1.7%	0.8	1.7%	0.0%	0.0
Private Non-group	1.5	3.1%	2.8	5.8%	2.8% *	1.4 *
Uninsured	4.3	9.1%	2.5	5.1%	-4.0% *	-1.8 *
Below 138% of FPL						
Employer	2.5	48.8%	2.4	50.0%	1.2% *	-0.1 *
Medicaid and CHIP	0.7	13.5%	1.2	24.4%	10.9% *	0.5 *
CHAMPUS/Medicare	0.1	2.1%	0.1	2.3%	0.2%	0.0
Private Non-group	0.2	4.4%	0.3	7.1%	2.7% *	0.1 *
Uninsured	1.6	31.1%	0.8	16.2%	-14.9% *	-0.8 *
138% to less than 400% of FPL						
Employer	14.6	80.4%	14.1	79.6%	-0.8% *	-0.5 *
Medicaid and CHIP	0.5	2.7%	0.8	4.3%	1.6% *	0.3 *
CHAMPUS/Medicare	0.3	1.9%	0.3	1.9%	0.0%	0.0
Private Non-group	0.6	3.4%	1.3	7.1%	3.7% *	0.6 *
Uninsured	2.1	11.6%	1.3	7.1%	-4.5% *	-0.8 *
At or above 400% of FPL						
Employer	22.4	93.1%	23.4	91.5%	-1.6% *	1.0 *
Medicaid and CHIP	0.1	0.4%	0.2	0.7%	0.2% *	0.1 *
CHAMPUS/Medicare	0.4	1.5%	0.4	1.5%	0.0%	0.0 *
Private Non-group	0.6	2.5%	1.2	4.7%	2.2% *	0.6 *
Uninsured	0.6	2.5%	0.4	1.6%	-0.9% *	-0.2 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 6. Changes in Health Insurance Coverage Among Workers by Health Insurance Unit Income and Industry Type, 2013 to 2016 (continued)

	Workers in Low-ESI Industries					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	55.7	63.3%	59.5	63.9%	0.6% *	3.8 *
Medicaid and CHIP	5.8	6.6%	10.3	11.0%	4.4% *	4.4 *
CHAMPUS/Medicare	1.4	1.6%	1.6	1.7%	0.1% *	0.2 *
Private Non-group	5.0	5.6%	9.1	9.8%	4.1% *	4.1 *
Uninsured	20.1	22.9%	12.7	13.6%	-9.3% *	-7.5 *
Below 138% of FPL						
Employer	7.5	34.7%	7.7	36.5%	1.7% *	0.2 *
Medicaid and CHIP	3.7	17.3%	6.3	30.0%	12.7% *	2.6 *
CHAMPUS/Medicare	0.4	1.9%	0.4	2.0%	0.1%	0.0
Private Non-group	0.8	3.9%	1.5	6.9%	3.0% *	0.6 *
Uninsured	9.1	42.2%	5.2	24.6%	-17.6% *	-3.9 *
138% to less than 400% of FPL						
Employer	22.6	62.0%	23.7	61.5%	-0.5% *	1.2 *
Medicaid and CHIP	1.9	5.1%	3.5	9.0%	3.9% *	1.6 *
CHAMPUS/Medicare	0.6	1.6%	0.7	1.8%	0.2% *	0.1 *
Private Non-group	2.2	6.0%	4.5	11.6%	5.6% *	2.3 *
Uninsured	9.2	25.2%	6.2	16.0%	-9.2% *	-3.0 *
At or above 400% of FPL						
Employer	25.7	85.2%	28.1	83.8%	-1.4% *	2.4 *
Medicaid and CHIP	0.3	0.8%	0.5	1.4%	0.6% *	0.2 *
CHAMPUS/Medicare	0.4	1.4%	0.5	1.4%	0.1%	0.1 *
Private Non-group	1.9	6.4%	3.2	9.4%	3.0% *	1.2 *
Uninsured	1.9	6.2%	1.3	3.9%	-2.3% *	-0.5 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 7. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Region, 2013 to 2016

	Northeast					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	28.5	61.9%	27.9	61.1%	-0.8% *	-0.6 *
Medicaid and CHIP	9.6	20.9%	11.4	25.0%	4.1% *	1.8 *
CHAMPUS/Medicare	0.8	1.7%	0.8	1.7%	0.1% *	0.0
Private Non-group	1.7	3.6%	2.5	5.5%	1.9% *	0.9 *
Uninsured	5.5	12.0%	3.1	6.7%	-5.3% *	-2.5 *
Below 138% of FPL						
Employer	3.3	24.6%	3.0	23.9%	-0.7% *	-0.3 *
Medicaid and CHIP	6.6	49.3%	7.5	59.4%	10.1% *	0.9 *
CHAMPUS/Medicare	0.3	2.4%	0.3	2.7%	0.2% *	0.0
Private Non-group	0.4	2.7%	0.4	3.3%	0.6% *	0.1 *
Uninsured	2.8	21.0%	1.4	10.8%	-10.2% *	-1.5 *
138% to less than 400% of FPL						
Employer	9.9	63.6%	9.0	59.9%	-3.6% *	-0.9 *
Medicaid and CHIP	2.6	16.9%	3.3	22.2%	5.4% *	0.7 *
CHAMPUS/Medicare	0.3	2.0%	0.3	2.0%	0.0%	0.0
Private Non-group	0.6	3.9%	1.1	7.1%	3.2% *	0.5 *
Uninsured	2.1	13.6%	1.3	8.7%	-5.0% *	-0.8 *
At or above 400% of FPL						
Employer	15.3	89.8%	15.9	88.1%	-1.7% *	0.6 *
Medicaid and CHIP	0.3	2.0%	0.6	3.1%	1.1% *	0.2 *
CHAMPUS/Medicare	0.1	0.7%	0.2	0.8%	0.1% *	0.0 *
Private Non-group	0.7	4.1%	1.0	5.7%	1.7% *	0.3 *
Uninsured	0.6	3.4%	0.4	2.2%	-1.2% *	-0.2 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 7. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Region, 2013 to 2016 (continued)

	Midwest					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	34.4	61.0%	34.7	62.1%	1.1% *	0.4 *
Medicaid and CHIP	10.7	19.0%	12.4	22.3%	3.2% *	1.7 *
CHAMPUS/Medicare	1.2	2.1%	1.3	2.4%	0.2% *	0.1 *
Private Non-group	2.5	4.4%	3.3	5.9%	1.5% *	0.8 *
Uninsured	7.5	13.4%	4.1	7.3%	-6.1% *	-3.4 *
Below 138% of FPL						
Employer	4.1	23.7%	3.9	24.8%	1.1% *	-0.2 *
Medicaid and CHIP	7.8	45.4%	8.6	55.2%	9.8% *	0.8 *
CHAMPUS/Medicare	0.5	3.0%	0.5	3.4%	0.4% *	0.0
Private Non-group	0.5	3.1%	0.6	3.8%	0.7% *	0.1 *
Uninsured	4.2	24.8%	2.0	12.8%	-12.0% *	-2.2 *
138% to less than 400% of FPL						
Employer	14.7	67.8%	14.2	66.2%	-1.5% *	-0.5 *
Medicaid and CHIP	2.7	12.4%	3.4	15.9%	3.5% *	0.7 *
CHAMPUS/Medicare	0.5	2.2%	0.6	2.7%	0.4% *	0.1 *
Private Non-group	1.0	4.8%	1.5	7.1%	2.3% *	0.5 *
Uninsured	2.8	12.8%	1.7	8.1%	-4.7% *	-1.0 *
At or above 400% of FPL						
Employer	15.7	89.1%	16.7	88.3%	-0.8% *	1.0 *
Medicaid and CHIP	0.3	1.5%	0.4	2.2%	0.7% *	0.2 *
CHAMPUS/Medicare	0.2	1.1%	0.2	1.2%	0.1% *	0.0 *
Private Non-group	0.9	5.3%	1.2	6.3%	1.0% *	0.3 *
Uninsured	0.5	3.0%	0.4	2.0%	-1.0% *	-0.2 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 7. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Region, 2013 to 2016 (continued)

	South					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	51.8	52.4%	54.0	53.5%	1.1% *	2.2 *
Medicaid and CHIP	19.1	19.4%	21.5	21.3%	1.9% *	2.3 *
CHAMPUS/Medicare	3.8	3.9%	4.0	4.0%	0.1% *	0.2 *
Private Non-group	4.1	4.1%	7.7	7.6%	3.5% *	3.6 *
Uninsured	20.0	20.3%	13.7	13.6%	-6.7% *	-6.3 *
Below 138% of FPL						
Employer	7.2	20.3%	7.5	22.0%	1.7% *	0.3 *
Medicaid and CHIP	14.2	40.2%	15.1	44.5%	4.3% *	0.9 *
CHAMPUS/Medicare	1.7	4.8%	1.8	5.2%	0.3% *	0.0
Private Non-group	0.8	2.3%	2.1	6.3%	4.0% *	1.3 *
Uninsured	11.4	32.3%	7.5	22.0%	-10.3% *	-4.0 *
138% to less than 400% of FPL						
Employer	21.6	59.6%	21.9	58.8%	-0.9% *	0.3 *
Medicaid and CHIP	4.4	12.2%	5.6	15.0%	2.8% *	1.2 *
CHAMPUS/Medicare	1.4	3.7%	1.4	3.9%	0.1% *	0.1 *
Private Non-group	1.7	4.7%	3.2	8.7%	3.9% *	1.5 *
Uninsured	7.1	19.7%	5.1	13.7%	-6.0% *	-2.0 *
At or above 400% of FPL						
Employer	23.0	84.6%	24.7	83.0%	-1.6% *	1.6 *
Medicaid and CHIP	0.5	1.7%	0.8	2.6%	0.9% *	0.3 *
CHAMPUS/Medicare	0.7	2.7%	0.8	2.8%	0.1%	0.1 *
Private Non-group	1.5	5.6%	2.3	7.8%	2.2% *	0.8 *
Uninsured	1.4	5.3%	1.1	3.7%	-1.6% *	-0.3 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

Appendix Table 7. Changes in Health Insurance Coverage Among the Nonelderly by Health Insurance Unit Income and Region, 2013 to 2016 (continued)

	West					
	Coverage Distribution within Income Category				Percentage Point Change 2013-2016	Change in Millions of People 2013-2016
	2013		2016			
	Millions	Percent	Millions	Percent		
All Incomes						
Employer	33.7	53.6%	35.0	54.6%	1.1% *	1.3 *
Medicaid and CHIP	12.4	19.7%	17.4	27.2%	7.4% *	5.0 *
CHAMPUS/Medicare	1.7	2.7%	1.7	2.7%	0.0%	0.0
Private Non-group	3.2	5.1%	4.2	6.6%	1.6% *	1.1 *
Uninsured	11.9	19.0%	5.7	8.9%	-10.1% *	-6.3 *
Below 138% of FPL						
Employer	4.7	21.5%	4.5	22.2%	0.7% *	-0.2 *
Medicaid and CHIP	9.1	41.4%	11.6	57.1%	15.7% *	2.5 *
CHAMPUS/Medicare	0.8	3.6%	0.7	3.6%	0.1%	0.0 *
Private Non-group	0.7	3.1%	0.7	3.4%	0.3% *	0.0
Uninsured	6.7	30.5%	2.8	13.7%	-16.9% *	-3.9 *
138% to less than 400% of FPL						
Employer	13.1	58.9%	13.2	57.1%	-1.8% *	0.1
Medicaid and CHIP	3.0	13.5%	5.1	21.9%	8.4% *	2.1 *
CHAMPUS/Medicare	0.6	2.7%	0.6	2.8%	0.1%	0.0 *
Private Non-group	1.2	5.5%	1.8	7.9%	2.5% *	0.6 *
Uninsured	4.3	19.4%	2.4	10.2%	-9.2% *	-2.0 *
At or above 400% of FPL						
Employer	15.9	84.6%	17.3	83.6%	-1.0% *	1.4 *
Medicaid and CHIP	0.3	1.8%	0.8	3.7%	1.9% *	0.4 *
CHAMPUS/Medicare	0.3	1.7%	0.4	1.7%	0.0%	0.0 *
Private Non-group	1.3	6.9%	1.7	8.3%	1.4% *	0.4 *
Uninsured	0.9	5.0%	0.6	2.7%	-2.3% *	-0.4 *

Source: Urban Institute analysis of American Community Survey data from 2013 and 2016 using the Integrated Public Use Microdata Series.⁷

Notes: CHIP = Children's Health Insurance Program. FPL = federal poverty level. Estimates reflect income for the health insurance unit developed by the State Health Access Data Assistance Center⁸ and include adjustments for misreporting of health insurance coverage on the American Community Survey developed by Victoria Lynch et al.⁹

* Change is statistically significant at the 5 percent level.

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A Hot Health Policy Summer

Last summer the administration finalized new rules on short-term plans and approved new state waivers. Litigation continues over the individual mandate, risk adjustment, and ACA “sabotage.”

BY KATIE KEITH

Works of a certain age reminisce about how policy developments used to cool down when the weather heated up. Those days are gone. Last summer the administration of Donald Trump finalized new rules on short-term health plans and approved important new state waivers. Affordable Care Act (ACA) litigation continued—and continued to generate reactions in Congress and the administration—over the individual mandate, risk adjustment, and alleged administration “sabotage” of the ACA.

New Rule Opens The Door Wider To Short-Term Coverage

On August 1 the Departments of Health and Human Services (HHS), Labor, and Treasury released a final rule to expand access to short-term, limited-duration coverage. These plans do not have to comply with the ACA’s market reforms, meaning they can charge higher premiums based on health status, exclude coverage for preexisting conditions, or not cover entire categories of benefits. Short-term coverage is much less expensive than ACA coverage—frequently by as much as 20 percent, according to the Henry J. Kaiser Family Foundation—and enrollment tends to skew younger and healthier.

The final rule allows short-term coverage to be sold for up to 364 days, the same limit that was in effect before the Barack Obama administration issued a 2016 regulation curtailing the maxi-

imum duration to no more than three months. However, the final rule goes further by allowing short-term policies to be renewed or extended for up to thirty-six months. The agencies added a severability clause stating that the rest of the rule would remain in effect even if the thirty-six-month standard is found by a court to be invalid. The rule also requires the issuers of short-term policies to prominently note in their contract and application materials some of the limitations of short-term coverage.

New short-term plans are expected to attract healthy enrollees, which will have the effect of increasing premiums for those who remain in the ACA Marketplaces. The agencies estimate that this will result in higher federal outlays for premium subsidies of about \$28.2 billion during the period 2019–28. They additionally estimate that enrollment in short-term coverage in 2019 will increase by about 600,000 people, most of whom will have been previously enrolled in ACA coverage. The agencies expect enrollment in the ACA-compliant individual market to decrease by 1.3 million and enrollment in short-term coverage to increase by 1.4 million by 2028.

New short-term policies could be available as early as October. States retain full authority to regulate short-term coverage, but there is significant variation in how states regulate these plans. Some states, such as California and Illinois, have responded by passing new legislation to prohibit or restrict short-term plans. However, Gov. Bruce Rauner (R) vetoed Illinois’s legislation

in late August; the California legislation has yet to be signed by Gov. Jerry Brown (D).

Marketplace premiums in most states are expected to be relatively stable for 2019. However, the rule on short-term coverage—combined with another recent rule on association health plans and the zeroing out of the individual mandate penalty—is making 2019 premiums higher than they would have been otherwise.

Litigation Leads To Risk-Adjustment Hiccups

Last summer saw the sudden suspension of the ACA’s risk-adjustment program, then its resumption. Risk adjustment compensates insurers with sicker enrollees by transferring funds from plans with healthier enrollees in the individual and small-group markets. Section 1343 of the ACA directs HHS to develop standards for the risk-adjustment program, including a formula for these transfers, which is issued in annual regulations.

A few insurers, mainly Consumer Operated and Oriented Plans (CO-OPs), have challenged parts of the formula laid out in HHS regulations. Insurers have taken issue in particular with HHS’s decision to calculate transfers using statewide average premiums based on the assumption that the risk-adjustment program must be budget-neutral. Smaller insurers have argued that this advantages larger, higher-premium plans.

In January a district court in Massachusetts upheld HHS’s risk-adjustment formula against a challenge brought by Minuteman Health. One month later, however, a New Mexico district court agreed with New Mexico Health Connections that HHS’s use of a statewide average premium without adequate explanation was arbitrary and capricious; the court set aside this part of the formula from 2014 to 2018. In March HHS asked the New Mexico court to reconsider its decision; an opinion from the court was expected by the end of the summer.

Citing the New Mexico decision, HHS

delayed a report on 2017 risk-adjustment transfers and suspended the risk-adjustment program in early July. Following significant outcry from insurers, HHS released the report and a new final rule on risk-adjustment program methodology for 2017. The rule, which New Mexico Health Connections has challenged, did not substantively change the risk-adjustment formula but better explained HHS's rationale for using a statewide average premium.

HHS then resumed making about \$10.4 billion in risk-adjustment transfers for 2017. In August HHS issued a separate proposed rule regarding its methodology for 2018. For now, HHS appears to be facilitating risk-adjustment transfers for 2017, and the parties await further decisions in the New Mexico litigation.

High-Profile Litigation Over The ACA Continues

Litigation in Texas over the constitutionality of the individual mandate continues to heat up. The lawsuit was brought by twenty Republican state attorneys general or governors, led by Texas, and two individual plaintiffs. They argue that Congress's repeal of the individual mandate penalty in December 2017 renders the mandate no longer a valid exercise of Congress's taxing power. They urge the court to strike down the mandate and, with it, the entire ACA. Democratic attorneys general from sixteen states and the District of Columbia have been allowed to intervene in the case to defend the ACA.

The Department of Justice (DOJ) typically defends federal statutes against legal challenges, but in this case the DOJ agreed with the plaintiffs that the mandate is unconstitutional and asked the court to also strike down the ACA's provisions on guaranteed issue, community rating, and preexisting condition exclusions. The DOJ believes that these provisions, but not the rest of the ACA, are inseparable from the mandate. Following the DOJ filing, the plaintiffs asked that a limited injunction (against the mandate and these three provisions), if granted, apply to only the twenty plaintiff states.

Reed O'Connor, district judge of the United States District Court for the Northern District of Texas, is consider-

ing ruling on the merits of the case (instead of issuing a temporary preliminary injunction); a hearing on the motion for a preliminary injunction was scheduled for September 5. Such an injunction could block enforcement of the entire ACA or major consumer protections in at least twenty states. The hearing coincided with the beginning of Senate confirmation hearings for D.C. Circuit Judge Brett Kavanaugh, who has been nominated to the US Supreme Court. The Texas case was a focal point in those hearings because it may well reach the Supreme Court and because previous decisions suggest that Judge Kavanaugh believes that a president can decline to enforce laws that he or she believes are unconstitutional.

The case is also receiving significant attention in Congress. Democratic Senators introduced a resolution to intervene in the case to defend the ACA. Republican Senators introduced legislation that they assert will protect individuals with preexisting conditions in the event that Judge O'Connor rules for the plaintiffs. Although the bill would prohibit denial of coverage and rating based on health status, it does not prohibit preexisting condition exclusions or rating based on other factors. And it would not reinstate those parts of the ACA that could be struck down. Thus, many consumers, including those with preexisting conditions, could still face higher premiums and out-of-pocket expenses if the plaintiffs prevail.

At the other end of the spectrum of ACA litigation, four cities and two individuals filed a lawsuit against the Trump administration for its "death-by-a-thousand-cuts campaign" to undermine the ACA. Baltimore, Chicago, Cincinnati, Columbus, and the two individuals assert that the administration is violating the Constitution's Take Care Clause by attempting to nullify the ACA through executive action. The plaintiffs point to President Trump's statements and executive orders, recent federal rules on association health plans and short-term plans, and cuts to navigator funding and Marketplace advertising. They ask the court to require the administration to faithfully execute the ACA by reversing many of these decisions.

The lawsuit notwithstanding, HHS continues to make decisions that have

been criticized as undermining the ACA. In July HHS announced that it will cut navigator funding from \$36.8 million for 2018 to \$10 million for 2019. Since the Trump administration took office, the navigator program has been cut by about 84 percent. Navigators will also be required to prioritize assistance to uninsured people who are unaware of their coverage options through the Marketplace, association health plans, or short-term plans. HHS justified these cuts partly based on data described as "problematic" and "unreliable" in a recent Government Accountability Office report.

A coalition of Democratic state attorneys general made similar arguments in a July lawsuit challenging the Trump administration's final rule on association health plans. They maintain that the goal of that final rule is to undermine the ACA and that it will increase the risk of fraud, require states to devote resources to preventing that risk, and increase premiums for those with preexisting conditions. In late August they asked the court to grant their motion for summary judgment and vacate the final rule.

Four New States Approved For 1332 Reinsurance Waivers

Four states—Maine, Maryland, New Jersey, and Wisconsin—received federal approval last summer to establish reinsurance programs through section 1332 innovation waivers. Each state is implementing or funding its program slightly differently. New Jersey, for instance, will use revenue collected under its new state-level individual mandate, while Maryland is assessing insurers the amount they would have paid under the ACA's suspended health insurance tax. The programs range in size from \$93 million in Maine to \$462 million in Maryland for 2019. This brings the total number of states with an approved 1332 waiver to eight. ■

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Health Care Coverage, Access, and Affordability for Children and Parents: New Findings from March 2018

Michael Karpman, Genevieve M. Kenney, and Dulce Gonzalez
September 6, 2018

At a Glance

- Health insurance coverage gains occurred between 2013 and 2018 for children and parents, following implementation of the Affordable Care Act's key coverage provisions.
- These coverage gains have coincided with improvements in health care access and affordability.
- Although parents experienced larger gains in coverage relative to children, parents were three times as likely as children to be uninsured in 2018, and nearly one-third of low-income parents in states that have not expanded Medicaid remain uninsured.

Following the implementation of the Affordable Care Act (ACA), health insurance coverage rates rose sharply among nonelderly parents living with dependent children, and the share of children with coverage increased modestly (Alker and Chester 2015; Gates et al. 2016; Karpman, Gates, et al. 2016; Kenney et al. 2016). Studies have found that the ACA was a driving factor behind these coverage gains. For instance, according to prior research, the expansion of Medicaid eligibility increased coverage for low-income parents and had a “welcome mat” effect that led to increased enrollment of children who were already eligible for Medicaid, consistent with previous research finding evidence of spillover effects from earlier expansions (Aizer and Grogger 2003; Devoe et al. 2015; Dubay and Kenney 2003; Hudson and Moriya 2017; Kenney, Long, and Luque 2010; McMorrow et al. 2017). This increase in health insurance has improved parents' ability to pay for their and their families' health care (McMorrow et al. 2017).

In recent years, however, political support for maintaining the ACA has been tenuous. Several bills to repeal the ACA and establish a per capita cap on federal funding for Medicaid were narrowly rejected in 2017, and reauthorization of the Children's Health Insurance Program (CHIP) was delayed for nearly four months before members of Congress reached an agreement to extend funding for 10 years. Enrollment in private nongroup health insurance has declined as funding for Marketplace outreach and enrollment assistance has been cut and as premiums have risen, with further enrollment declines projected because of the repeal of the federal individual mandate penalty (Congressional Budget Office 2017).¹ Some Medicaid expansion states are implementing policies that condition Medicaid eligibility on participation in work or work-related activities and payment of premiums, while other states are planning to expand Medicaid in the coming year.

In this brief, we provide an update on changes in health insurance coverage and health care access and affordability for parents and their children between 2013 and 2018 using data from the Health Reform Monitoring Survey (HRMS). We then examine differences in coverage status among parents by income and state Medicaid expansion status and the reasons some parents remain uninsured. We also assess the confidence insured parents have in their ability to maintain their current coverage in the coming year.

We find that the gains in coverage, access, and affordability for parents and children that occurred since 2013 have been sustained through March 2018, but significant gaps remain. More than one in five low-income parents are uninsured, with the highest levels of uninsurance found among low-income parents in states that have not expanded Medicaid.

What We Did

We used data from multiple rounds of the HRMS, drawing on questions from the HRMS and the HRMS child supplement (HRMS-Kids), to assess changes in coverage and health care access and affordability for parents ages 18 to 64 and children ages 17 and younger between June/September 2013 and March 2018.² The HRMS-Kids was initially fielded in the second quarter of 2013 to collect information about a randomly selected child in respondents' households, yielding data on 2,400 children for nearly each round fielded between 2013 and 2016 and more than 3,000 children in subsequent rounds that included the HRMS-Kids.

Parents include all nonelderly adult parents and legal guardians living with a dependent child age 17 or younger. When analyzing data on children, we include responses from parents and guardians and from other relatives or nonrelatives reporting on behalf of a child in the household. We weight the HRMS and HRMS-Kids to produce nationally representative estimates for nonelderly parents and children, respectively.

We focus on changes in coverage, access, and affordability between June/September 2013, just before the implementation of the ACA's major coverage provisions, and March 2018, the most recent month for which we have data. We pool June and September 2013 data to increase the sample size and the precision of our mid-2013 estimates. Our analysis focuses on changes in coverage at the time of the survey and during the past year among children and parents. Health care access measures include having a usual source of care at the time of the survey and having had a routine checkup in the past 12 months. Affordability measures include problems paying family or children's medical bills in the past year³ and unmet needs for care because of costs among parents in the past year.⁴ We also assess parents' confidence that children could get medical care if they needed it, which likely reflects perceptions of both access and affordability of care for children.

We then use March 2018 data to assess coverage status by annual family income as a share of the federal poverty level (FPL) and state Medicaid expansion status as of early 2018.⁵ We focus on adults with incomes at or below 138 percent of FPL, nearly all of whom would qualify for Medicaid if their state expanded eligibility under the ACA; adults with incomes between 138 and 400 percent of FPL, who might qualify for premium tax credits to purchase health plans through the health insurance Marketplaces; and adults with incomes of 400 percent of FPL or more, who do not qualify for financial assistance to obtain coverage. We also assess differences in access and affordability at the time of the survey and during the past year by coverage status at the time of the survey and provide estimates of the reported reasons for not having coverage among uninsured parents and confidence in the ability of insured parents to keep their coverage.⁶

We use HRMS and HRMS-Kids survey weights and regression adjustment to control for differences in the demographic and socioeconomic characteristics of the respondents and their children across different rounds of the survey.⁷ This allows us to remove variation in coverage, access, and affordability caused by changes in the observable characteristics of people responding to the survey over time. But the basic patterns shown for the regression-adjusted measures are similar to those based solely on simple weighted estimates.⁸ We emphasize statistically significant changes in

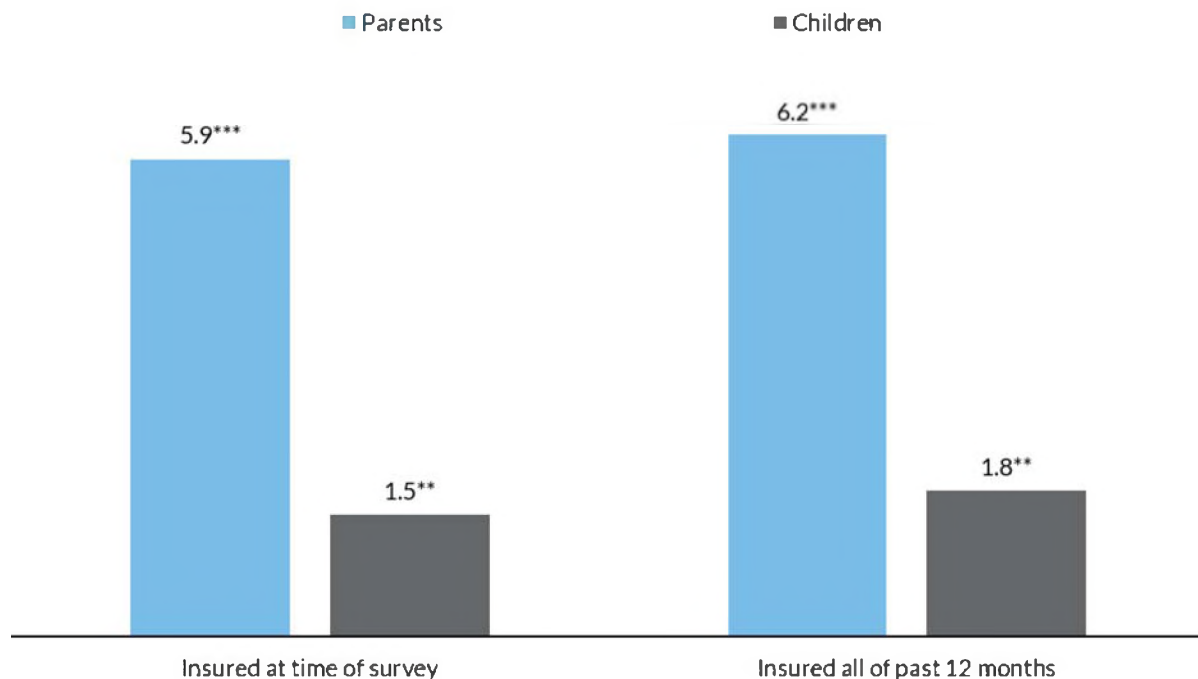
coverage and other outcomes over time, defined as differences that are significantly different from zero at the 5 percent level or lower. Though HRMS estimates capture changes in outcomes since June/September 2013, the estimates do not reflect the effects of some important ACA provisions (e.g., early state Medicaid expansions and the maintenance of eligibility provision for children) but do reflect changes beyond the effects of the ACA that might have affected coverage and affordability (e.g., changes related to labor market conditions).

What We Found

Health insurance coverage gains occurred between 2013 and 2018 for children and parents, following implementation of the Affordable Care Act's key coverage provisions.

Previous analyses of the HRMS and HRMS-Kids data found increases in coverage rates for both children and parents following implementation of the ACA's major coverage provisions (Karpman, Gates, and Kenney 2016; Karpman, Kenney, et al. 2016; Kenney et al. 2014). We found that coverage gains for both groups were sustained through early 2018. Between June/September 2013 and March 2018, the share of parents with coverage at the time of the survey increased 5.9 percentage points, and the share of children with coverage increased 1.5 percentage points (figure 1). There were similar gains in the shares of parents and children who were insured for all 12 months before the survey. Both measures of coverage drawn from the HRMS and HRMS-Kids have remained fairly constant for parents and children since March 2015 (data not shown).

Figure 1. Percentage-Point Increase in Health Insurance Coverage for Parents Ages 18 to 64 and Children Ages 17 and Younger between June/September 2013 and March 2018



Source: Health Reform Monitoring Survey and Health Reform Monitoring Survey Child Supplement (HRMS-Kids), quarters 2 and 3 2013 through quarter 1 2018.

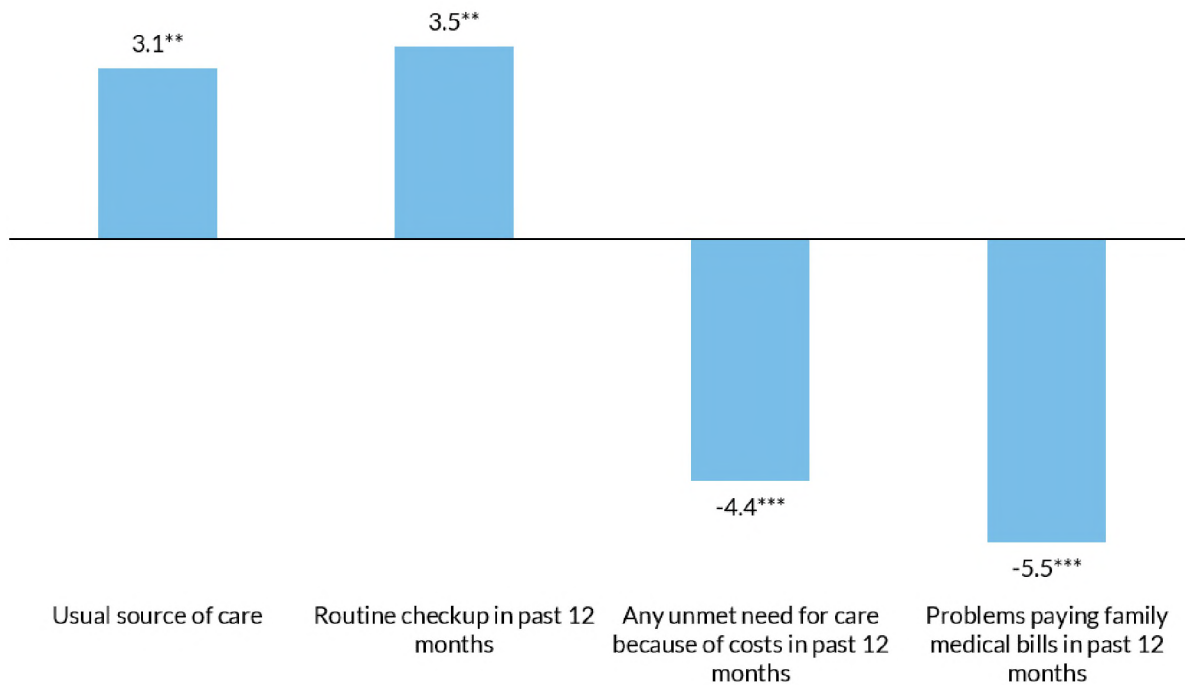
Note: Estimates are regression adjusted.

*/**/** Estimate differs significantly from zero at the 0.10/0.05/0.01 level, using two-tailed tests.

These coverage gains have coincided with improvements in health care access and affordability.

The share of parents with a usual source of care increased 3.1 percentage points between June/September 2013 and March 2018, and the share of parents and children who had a routine checkup in the past 12 months increased 3.5 and 2.3 percentage points, respectively (figures 2 and 3). Health care for parents and children was also more affordable in March 2018 than it was in June/September 2013. The share of parents who reported an unmet need for medical care because of costs in the past year fell 4.4 percentage points, and the share reporting problems paying family medical bills fell 5.5 percentage points. There has also been a decline in the share of adults reporting that they or someone in their family had problems paying children’s medical bills and an increase in the share of parents reporting that they are very or somewhat confident their child could get health care if needed.⁹

Figure 2. Percentage-Point Change in Health Care Access and Affordability for Parents Ages 18 to 64 between June/September 2013 and March 2018

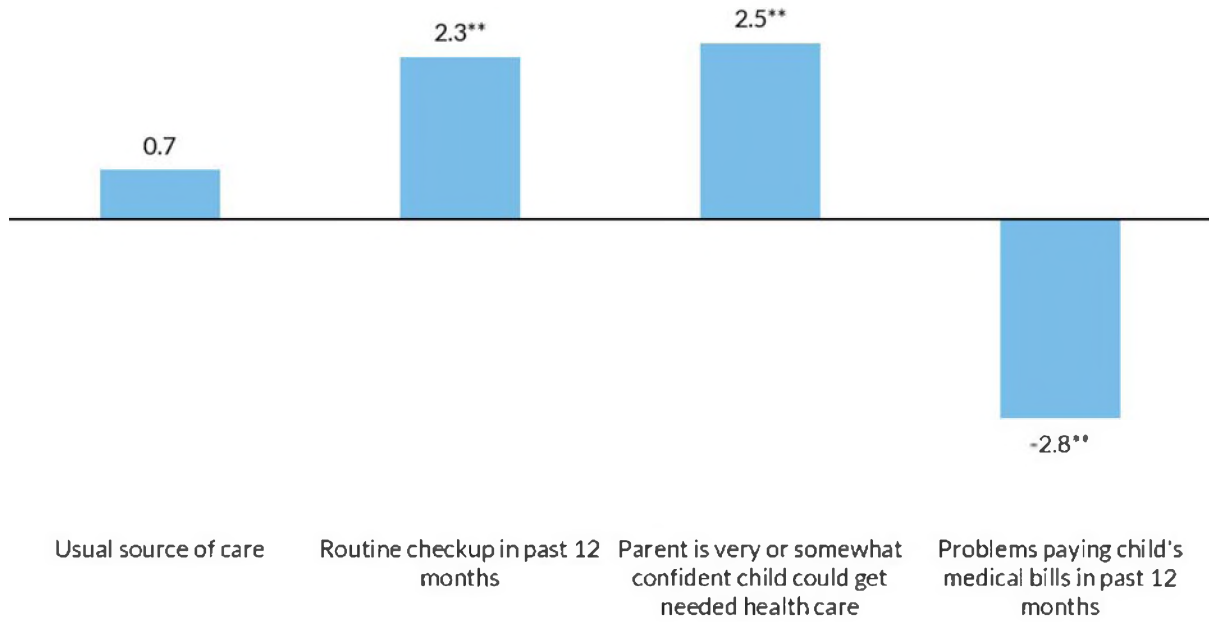


Source: Health Reform Monitoring Survey, quarters 2 and 3 2013 through quarter 1 2018.

Note: Estimates are regression-adjusted.

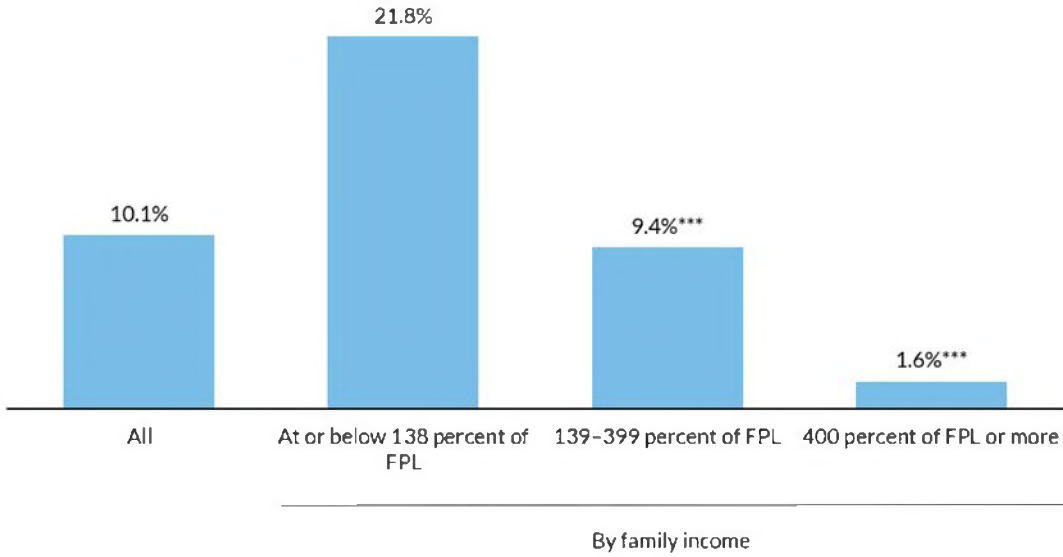
*/**/*** Estimate differs significantly from zero at the 0.10/0.05/0.01 level, using two-tailed tests.

Figure 3. Percentage-Point Change in Health Care Access and Affordability for Children Ages 17 and Younger and Parents' Confidence in Children's Ability to Get Needed Care between June/September 2013 and March 2018



Source: Health Reform Monitoring Survey Child Supplement (HRMS-Kids), quarters 2 and 3 2013 through quarter 1 2018.

Figure 4. Share of Parents Ages 18 to 64 Who Were Uninsured at the Time of the Survey, Overall and by Family Income, March 2018

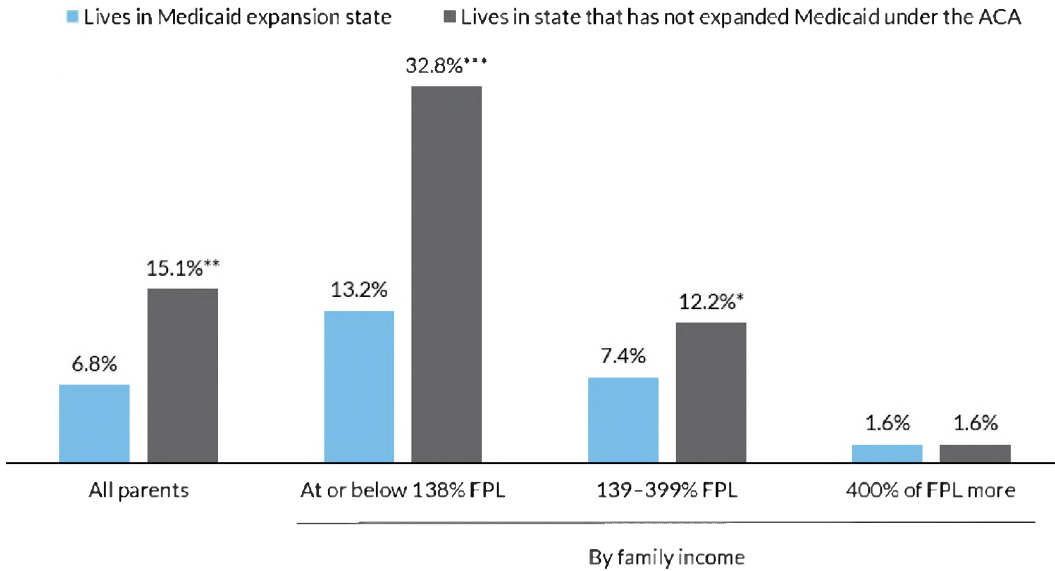


Source: Health Reform Monitoring Survey, quarter 1 2018.

Note: FPL is federal poverty level.

*/**/*** Estimate differs significantly from parents with income at or below 138 percent of FPL at the 0.10/0.05/0.01 level, using two-tailed tests.

Figure 5. Share of Parents Ages 18 to 64 Who Were Uninsured at the Time of the Survey, by State Medicaid Expansion Status and Family Income, March 2018



Source: Health Reform Monitoring Survey, quarter 1 2018.

Note: FPL is federal poverty level. State Medicaid expansion status is as of March 2018.

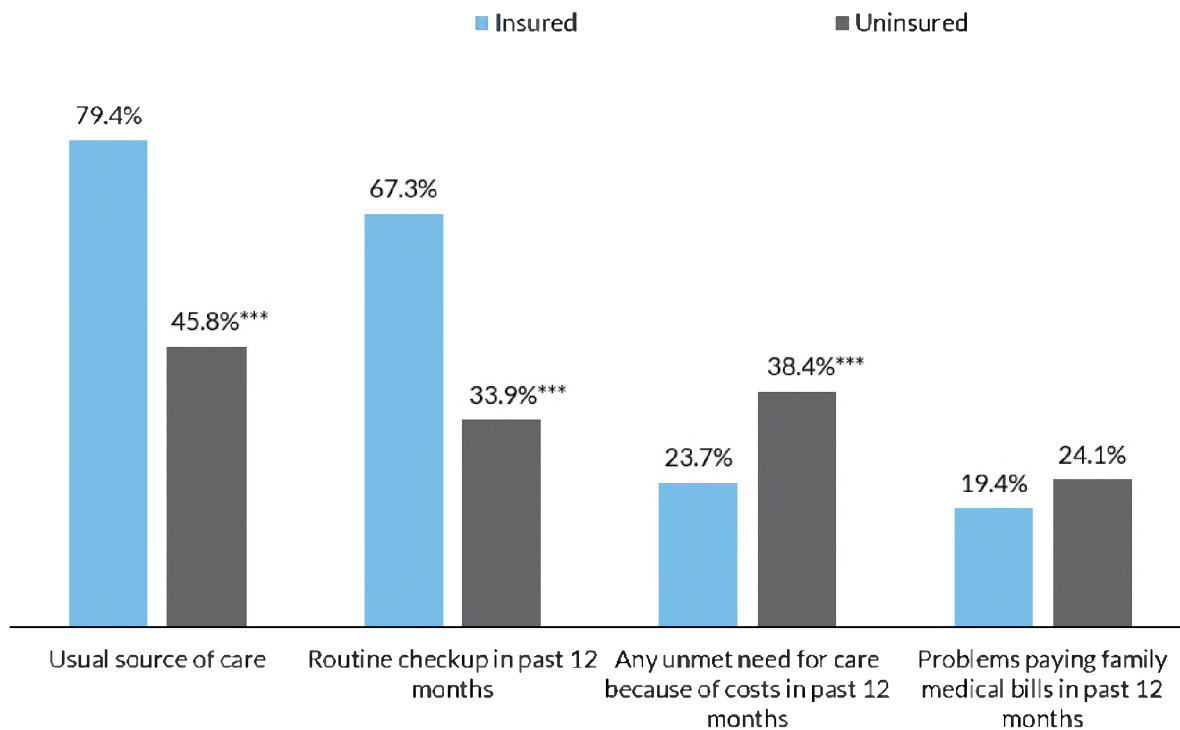
*/**/*** Estimate differs significantly from parents in Medicaid expansion states at the 0.10/0.05/0.01 level, using two-tailed tests.

Uninsurance rates were also higher in nonexpansion states among parents with incomes between 138 and 400 percent of FPL, which is likely because of factors affecting enrollment in private coverage and differences in underlying economic and demographic characteristics independent of changes related to the ACA (Kenney et al. 2016) (figure 5). For instance, less funding for Marketplace outreach and enrollment assistance might be available in nonexpansion states, particularly after federal funding cuts that affected states relying on the federally facilitated Marketplace. The uninsurance rate for parents with incomes above 400 percent of FPL was 1.6 percent in both expansion and nonexpansion states.

Uninsured parents are less likely than insured parents to have a usual source of care or a routine checkup and more likely to have unmet health care needs.

Parents who were uninsured in March 2018 were less likely than insured parents to have a usual source of care (45.8 percent versus 79.4 percent) and to have had a routine checkup in the past 12 months (33.9 percent versus 67.3 percent; figure 6). They were more likely to have unmet needs for care because of costs in the past 12 months. These differences likely reflect differential access to care for the uninsured compared with the insured, but they might also be because of differences between the insured and the uninsured in health-seeking behavior and health care needs and because of geographic variation in the service delivery systems where they live.

Figure 6. Health Care Access and Affordability for Parents Ages 18 to 64, by Coverage Status at the Time of the Survey, March 2018



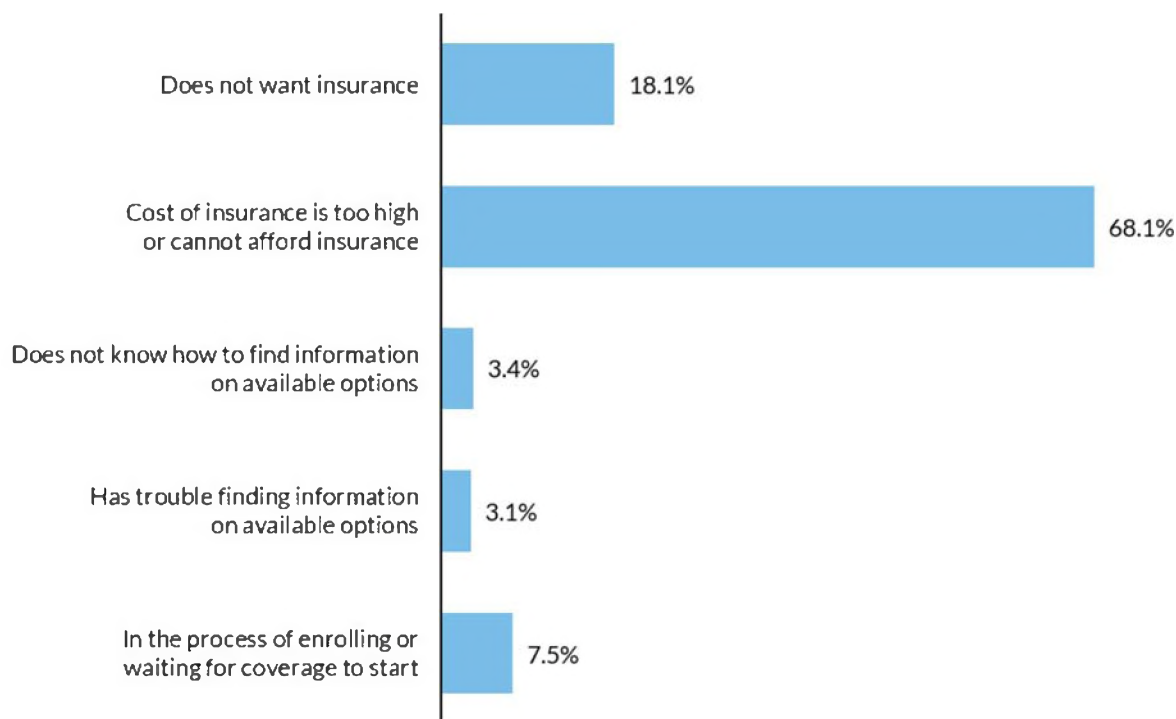
Source: Health Reform Monitoring Survey, quarter 1 2018.

*/**/*** Estimate differs significantly from insured parents at the 0.10/0.05/0.01 level, using two-tailed tests.

Cost is the most common reason given for being uninsured, and insured parents with low incomes are more likely than higher-income parents to lack confidence that they will be able to keep their coverage in the coming year.

More than two-thirds (68.1 percent) of parents who were uninsured in March 2018 reported that they did not have coverage because the cost was too high or they could not afford it (figure 7). About 18.1 percent reported that they did not want insurance, and less than 5 percent of uninsured parents reported not knowing about or having trouble finding information on available options. Other data sources indicate that some uninsured parents are eligible for Medicaid or premium tax credits for Marketplace coverage (Blumberg et al. 2018; Haley et al. 2018). Some of these uninsured parents might not know that they qualify for this financial assistance.

Figure 7. Reasons for Being Uninsured among Uninsured Parents Ages 18 to 64, March 2018

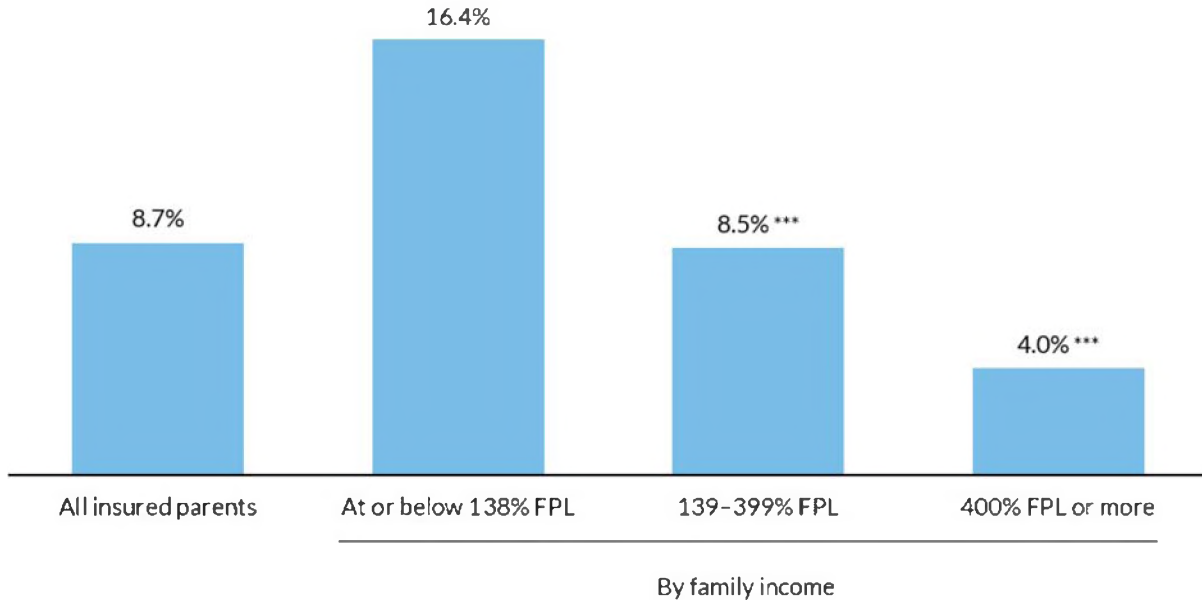


Source: Health Reform Monitoring Survey, quarter 1 2018.

Note: Respondents could report multiple reasons for not having coverage.

Among insured parents, 8.7 percent were not too confident or not at all confident in their ability to keep their current coverage in the coming year (figure 8). Parents with incomes at or below 138 percent of FPL were four times more likely than those with incomes at or above 400 percent of FPL to feel not confident about their ability to maintain their current coverage in the coming year (16.4 percent versus 4.0 percent). But we did not find differences in confidence in keeping coverage by state Medicaid expansion status (data not shown).

Figure 8. Share of Insured Parents Ages 18 to 64 Who Are Not Confident in Their Ability to Keep Their Current Health Insurance Coverage in the Coming Year, Overall and by Family Income, March 2018



Source: Health Reform Monitoring Survey, quarter 1 2018.

Note: FPL is federal poverty level.

*/**/** Estimate differs significantly from parents with income at or below 138 percent of FPL at the 0.10/0.05/0.01 level, using two-tailed tests.

What It Means

The HRMS finds improvements in health insurance coverage and health care access and affordability for parents and children between 2013 and early 2018. Recent analysis of large federal surveys such as the National Health Interview Survey and American Community Survey have found the declines in uninsurance among children slowing or even beginning to reverse in some places since 2015 (Haley et al. 2018, McMorro and Kenney 2018), indicating the importance of continuing to monitor coverage, access, and affordability for children and parents.

In early 2018, large differences remained in coverage among parents based on income and state of residence. Nearly one-third of low-income parents in states that have not expanded Medicaid were uninsured as of March 2018. Cost remains the major barrier to coverage for uninsured parents, and insured parents with low incomes are less certain than higher-income parents that they will be able to maintain their insurance.

Parents' ability to keep coverage will likely have important spillover effects on their children. Studies have found that parents' coverage status is associated with children's coverage status and health care access, including whether children receive recommended well-child visits (Davidoff et al. 2003; DeVoe, Tillotson, and Wallace 2009). In addition, the expansion of coverage under the ACA has been found to improve many financial outcomes (Caswell and Waidmann 2017; Hu et al. 2016),

which might improve child health and well-being through pathways beyond their interactions with the health care system.

Several pending policy changes could affect health insurance coverage for parents and their children going forward. Recent decisions to expand Medicaid in Virginia and Maine are expected to augment recent coverage gains, and upcoming ballot measures in Idaho, Nebraska, and Utah might result in the expansion of Medicaid in additional states.¹¹ Other pending policy changes raise the risk that some of the increases in coverage among parents under the ACA might be reversed. These changes include new state waivers that condition Medicaid eligibility on work or participation in work-related activities and that charge higher premium payments to Medicaid enrollees. In addition, parents with incomes above 400 percent of FPL with unsubsidized private nongroup health insurance might find it increasingly difficult to afford health insurance for themselves and their children that meets the ACA's minimum coverage and benefit standards, as associated premiums are projected to increase further because of the repeal of the ACA's individual mandate penalty. At the same time, new regulations might expand access to health plans that are not required to meet all the ACA's minimum coverage and benefit standards, although it is not clear how much those plans will appeal to families with children.

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About the Series

This brief is part of a series drawing on the HRMS, a survey of the nonelderly population that explores the value of cutting-edge internet-based survey methods to monitor the ACA before data from federal government surveys are available. Funding for the core HRMS is provided by the Robert Wood Johnson Foundation and the Urban Institute. This brief was funded by the David and Lucile Packard Foundation. It draws on the HRMS-Kids, which was launched in partnership with the Center for Children and Families at Georgetown University and is currently funded by the David and Lucile Packard Foundation. The authors are grateful to Joan Alker, Nathaniel Anderson, Tricia

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For more information on the HRMS and for other briefs in this series, visit www.urban.org/hrms.

About the Authors

Michael Karpman is a research associate, Genevieve M. Kenney is a senior fellow and codirector, and Dulce Gonzalez is a research analyst with the Urban Institute's Health Policy Center. The authors gratefully acknowledge Stacey McMorrow for helpful suggestions and assistance on this brief.

Notes

¹ See also "[Year-End Trends in Health Insurance Enrollment and Segment Performance](#)," Mark Farrah Associates, April 27, 2018.

² We focus on estimated changes in coverage because estimates of the level of coverage often vary across surveys because of differences in survey design (State Health Access Data Assistance Center 2013). In some rounds of the survey, the interview month starts a few days before or lasts a few days after the target month.

³ Estimates of the share of adults reporting problems paying a child's medical bills include responses from adults who are not the child's parent or guardian.

⁴ We focus on whether parents did not get one of the following types of care in the past 12 months because they could not afford it: prescription drugs, medical care, general doctor care, specialist care, tests, treatment, follow-up care, or mental health care or counseling.

⁵ States expanding Medicaid by March 2018 are AK, AZ, AR, CA, CO, CT, DE, DC, HI, IL, IN, IA, KY, LA, MD, MA, MI, MN, MT, NH, NV, NJ, NM, NY, ND, OH, OR, PA, RI, VT, WA, and WV. Several of those states, including CA, CT, DC, and MN, expanded Medicaid under the ACA before 2013. Among nonexpansion states, WI has used state funding to expand eligibility to nonelderly adults with incomes up to 100 percent of FPL.

⁶ Though we focus on differences in several measures of health care access and affordability in the past year by coverage status at the time of the survey, we find similar patterns when assessing differences in these measures by coverage status over the past year.

⁷ We control for the variables used in poststratification of both the KnowledgePanel (the nationally representative internet panel maintained by GfK Custom Research from which HRMS samples are drawn) and the HRMS, including gender, age, race and ethnicity, language, education, marital status, presence of children in the household, household income, family income, homeownership status, internet access, urban or rural status, and region. We also control for citizenship status and participation in the previous quarter's survey. For children, we include all the control variables for respondents and controls for the child's gender, age, and race and ethnicity and for the number of children in the household.

⁸ In presenting the regression-adjusted estimates, we use the predicted rate of each measure in each quarter or set of pooled quarters for the same nationally representative population. For this analysis, we base the nationally representative sample on survey respondents for the four most recent rounds of the survey that included the HRMS-Kids. The nationally representative samples include parents and children from quarter 3 2015, quarter 1 2016, quarter 1 2017, and quarter 1 2018.

⁹ In March 2018, 95.8 percent of parents were very or somewhat confident that their child could get health care if the child needed it, up from 93.3 percent in June/September 2013.

¹⁰ "[Medicaid Income Eligibility Limits for Parents, 2002–2018](#)," Kaiser Family Foundation, accessed July 27, 2018.

¹¹ Fred Knapp, "[Nebraska May Join Utah, Idaho in Putting Medicaid Expansion before Voters](#)," Shots, NPR, July 6, 2018.

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Access-To-Care Differences Between Mexican-Heritage And Other Latinos In California After The Affordable Care Act

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ABSTRACT We examined changes in health insurance coverage and access to and use of health care among adult (ages 18–64) Latinos in the US before (2007–13) and after (2014–16) implementation of the main provisions of the Affordable Care Act. Data from the California Health Interview Survey were used to compare respondents in the two periods. We used multivariable and decomposition regression analyses to investigate the role of documentation status in access disparities between Mexicans and other Latinos in California. Our findings show that after the implementation of these provisions in California, insurance coverage increased for US- and foreign-born Latinos, including undocumented Latinos. Our decomposition analyses show that after implementation, disparities between Mexicans and other Latinos declined with respect to having coverage and a usual source of care. Without the implementation of these provisions in 2014, these disparities would have been 5.76 percent and 0.31 percent larger, respectively. In contrast, legal documentation status was positively associated with disparities between Mexicans and other Latinos in having coverage and physician visits. If Mexican Latinos had had the same share of undocumented immigrants as other Latinos, disparities in health insurance coverage would have declined by 24.17 percent.

According to the 2016 US census, Latinos account for 39.1 percent of California's population.¹ Only New Mexico had a greater percentage Latino population (48.5 percent) in 2016. Nationwide, Latinos are the largest minority group, and by 2060 one in every three US residents is projected to be Latino.² The Affordable Care Act (ACA) has raised new research and policy awareness about the potential consequences of health insurance eligibility for access to and use of health care among Latinos.^{3–7}

Prior research has examined access to and use of health care among Latinos.⁷ Most of this work has either studied just one Latino heritage group (for example, Mexican Americans or Puerto

Ricans) or combined Latinos when comparing them with other racial/ethnic groups.⁸ Few studies have examined differences across Latino groups.^{9–11} Research that has investigated changes in access to care among Latinos after implementation of the main provisions of the ACA—such as the health insurance mandate, federal subsidies for health insurance, and elimination of restrictions on preexisting conditions—showed that the law has contributed to closing the coverage gap across different Latino heritage groups.^{3,5} To our knowledge, though, no study has investigated the role of documentation status in explaining differences between Mexicans and other Latinos. The focus on Mexican Latinos is particularly salient since 33.7 million Latinos

in the US are of Mexican heritage, and they are the largest group (64 percent) of US Latinos.¹²

Studies have shown that immigrants born in Mexico are less likely to access, use, and spend financial resources on health care, compared to US-born Mexican Americans, other Latinos, and non-Latino whites.^{11,13} Because of measurement challenges, less is known about the effects of documentation status on disparities in access to care.¹⁴ With some exceptions, studies that have focused on undocumented immigrants have used small samples, had inadequate measures, and grouped all Latinos together to analyze the effect of documentation status on access and use.^{7,15}

Undocumented immigrants are ineligible to participate in the ACA's health insurance expansions.^{16,17} Until the Great Recession of 2008–09, undocumented immigrants from Mexico outnumbered those from other Latin American countries.¹⁸ Since 2009 the number of non-Mexican undocumented immigrants has increased rapidly.¹⁹ How the expansion of the health programs that were part of the ACA has affected undocumented Latinos remains an open question.

To help fill this gap in the literature, this study analyzed differences in health insurance coverage and access to and use of health care between Mexicans and other Latinos in California. We specifically studied how differences among documented and undocumented Latino immigrants have changed following implementation of the main provisions of the ACA on January 1, 2014. Using statewide survey data from California, we tested the hypothesis that health insurance coverage and access to and use of health care would increase among US-born and documented Latinos. The ACA made health insurance more affordable through expanding eligibility for Medicaid and subsidizing the purchase of insurance on the state and federal health insurance Marketplaces. At the same time, lacking health insurance became costly because of the penalties associated with the health insurance mandate. As of 2019, however, this penalty will no longer exist at the federal level.

Since undocumented immigrants were excluded from the ACA's main provisions, we hypothesized that documentation status would continue to be one of the main factors associated with disparities between Mexicans and other Latinos. Undocumented immigrants are overrepresented among Mexican Latinos. Considering how little evidence exists about health insurance coverage and health care access and use among undocumented Latinos—particularly before and after the implementation of the ACA—our study provides useful and timely evidence for the ongoing

debate on the likely effects of health care reform in the US.

Study Data And Methods

DATA We used data for the period 2007–16 from 54,248 adults (ages 18–64) who responded to the California Health Interview Survey. This is a random-digit-dialed survey via landline and cell phones of a sample of the noninstitutionalized population in California. The survey has collected data continuously during two-year cycles since 2007. Its data are collected in English, Spanish, and other languages. The survey methods have been described elsewhere.²⁰

HEALTH INSURANCE COVERAGE AND HEALTH CARE ACCESS AND USE Our study outcomes included four dichotomous measures. The first was health insurance coverage: Survey participants were asked whether they were currently insured. Access was measured by whether participants had a usual place to go when sick, other than the emergency department (ED). Health care use was measured by whether participants had had at least one physician visit and at least one ED visit during the previous year.

LATINO HERITAGE GROUPS Participants were categorized by Latino or Hispanic ethnicity and nativity. The populations of interest for this study were Latinos of Mexican heritage ($n = 42,403$) and other Latinos ($n = 11,845$). In the former category, we included all Latinos who either reported being born in Mexico or identified themselves as a US-born Latino of Mexican heritage. All other Latino heritage groups were classified as “other Latinos.” For the descriptive analyses, we distinguished among other Latinos from Guatemala, El Salvador, other Central American countries, Puerto Rico, and South America and those from other Latino groups to characterize California's Latino population.¹⁸ Latinos from Puerto Rico were analyzed separately from other Latino heritage groups since they are US citizens by birth.^{9,21} The “other Latinos” category included those who did not identify with a specific Latino heritage group or who identified with more than one such group.

All Latinos were initially classified as US-born, naturalized US citizen, or foreign-born noncitizen. Noncitizen Latinos who answered yes to the question “Are you a permanent resident with a green card?” were classified as legal permanent residents. Previous studies have estimated that approximately 98 percent of foreign-born people from Latin America in the US who are noncitizens without green cards are undocumented.²² Thus, foreign-born Latinos who were not US citizens or legal permanent residents were classified as undocumented. This approach has been

used in other peer-reviewed studies.^{11,23}

EXPLANATORY VARIABLES The analyses controlled for socioeconomic and demographic characteristics including sex; marital status; age; education; English language use and proficiency; income as a percentage of the federal poverty level; employment status; health insurance coverage; self-reported health status; physician-diagnosed chronic conditions; urban, suburban, or rural residence; California region; and—for foreign-born Latinos—time in the US.

STATISTICAL ANALYSES We used the implementation of the ACA's main provisions on January 1, 2014, as a cutoff for the statistical analyses. We combined multiple cycles of the California Health Interview Survey for pooled cross-sectional analyses using data files for 2007–13 for the pre-ACA period and for 2014–16 for the post-ACA period. We provide descriptive statistics of variables with a comparison of means pre and post ACA. Subsequently, we used Pearson's chi-square analyses to compare differences across the seven Latino heritage groups. Multivariable logistic regression models were used to estimate differences in health insurance coverage and access to and use of health care after we controlled for the explanatory variables described above.

The Blinder-Oaxaca decomposition method was used to parse health care disparities between Mexicans and other Latinos into two components: disparities due to observed characteristics and those related to unobserved heterogeneity. This method has been used to study racial/ethnic disparities in health insurance coverage and health care access and use.^{8,10,21} The first part of the outcome differential is explained by group differences in levels of observed explanatory variables across the two categories. The second part represented differences that could be interpreted as unobserved heterogeneities between reference and comparison groups. Given the binary nature of our outcome measures, we used the nonlinear decomposition methods proposed by Tamas Bartus²⁴ and Robert Fairlie.²⁵ Stata, version 14, was used for the statistical analyses. To account for the complex survey design of the California Health Interview Survey and the pre-post study design, the analyses used survey weights and design variables that were combined to reflect the 2007–13 and 2014–16 periods.

LIMITATIONS Our study had several limitations. First, we used a repeated cross-sectional design, which limited our ability to observe individual-level differences over time.

Second, our method for identifying documentation status is based on reports of having legal permanent resident status or being a US citizen rather than on a question directly assessing doc-

umentation status, which might have led to some response bias. However, studies that investigated the magnitude of this bias in the California Health Interview Survey have found it to be within acceptable margins and homogeneous across survey years.²⁶

Third, the pre-post ACA analyses did not apply to the early Medi-Cal (California Medicaid) expansion that was part of the Low-Income Health Program known as Bridge to Reform or the 2016 expansion of Medi-Cal benefits to undocumented immigrants in California.²⁷

Fourth, time effects for yearly economic changes were not controlled for in the multivariable analyses, to avoid collinearity with the pre-post comparison.

Fifth, the external validity of our findings to other US states is limited because of California's unique demographic and policy environment.

Study Results

Uninsurance rates declined from the pre to the post period for all Latino groups, including undocumented Latinos, and the differences were significant (exhibit 1). Public health insurance coverage increased for all Latino groups, and these differences were also significant. By contrast, private insurance coverage declined for US-born and US citizen (naturalized) Latinos. In terms of health care access and use, a significantly greater share of US-born, naturalized, and undocumented Latinos reported having had at least one ED visit, and a significantly greater share of naturalized, legal permanent resident, and undocumented Latinos reported having a usual source of care.

COMPARISONS BY LATINO HERITAGE GROUP

Mexican Latinos were the largest Latino heritage group both pre and post ACA. Chi-square tests for each measure showed significant differences across Latino groups in both periods (exhibit 2). Insurance coverage and a usual source of care increased for all Latino groups post ACA.

MULTIVARIABLE ANALYSES Once confounding factors were taken into account, Latinos were more likely to report having insurance coverage after, than before, the ACA (exhibit 3). The odds of having coverage among foreign-born Latinos were relatively similar between Mexicans and other Latinos, compared to US-born Latinos. Documented Mexicans and other Latinos were more likely to have coverage, compared to undocumented Mexicans and other Latinos.

The results of the logistic regression analyses included controls for potential confounders in all models but are not shown for brevity. They are available in the appendix.²⁸ Income as a percentage of poverty and English proficiency are in-

EXHIBIT 1

Selected characteristics of Latino adults in California before and after implementation of the main provisions of the Affordable Care Act, by citizenship and nativity status, 2007–16

Characteristic	US-born citizen (%)		Foreign-born (%)				Undocumented (%)	
	Pre	Post	US citizen		LPR		Pre	Post
			Pre	Post	Pre	Post		
Latino heritage								
Mexican	76.57	76.3	74.59	73.47	80.55	80.51	82.23	78.94*
Other Latino	23.43	23.70	25.41	26.53	19.45	19.49	17.77	21.06
Health care outcomes								
At least one MD visit	77.76	77.09	79.11	78.87	72.23	72.68	59.34	60.05
At least one ED visit	21.63	24.55**	16.23	19.30*	14.67	16.20	12.91	15.84*
Usual source of care	74.62	76.39	78.47	82.78*	67.02	72.91**	54.35	59.79**
Health insurance type								
None	21.73	13.82****	24.97	13.78****	38.47	21.03****	55.92	48.02***
Public	20.45	35.23****	16.83	33.44****	23.53	44.19****	28.18	38.67****
Private	57.82	50.94****	58.20	52.78**	38.00	34.79	15.90	13.24
Explanatory variables								
Female	49.20	49.10	49.80	55.52**	48.87	49.59	48.69	47.30
Married	35.46	29.70***	68.94	65.36	63.39	58.36*	45.33	44.78
Age (years)		***		****		****		****
18–29	49.80	53.57	12.45	8.42	15.89	13.14	29.14	14.48
30–39	19.67	20.00	21.00	15.60	28.75	20.43	42.15	42.47
40–49	15.56	12.31	32.75	29.65	32.14	33.50	21.84	30.60
50–64	14.98	14.12	33.80	46.33	23.21	32.93	6.87	12.44
Education		***		*				
Less than high school	10.95	8.67	38.52	40.75	58.62	61.59	64.11	64.15
High school graduate	37.41	33.98	28.71	23.99	21.58	20.47	24.15	23.52
College or more	51.64	57.34	32.77	35.26	19.80	17.94	11.74	12.33
English use and proficiency								
Speak very well/well	98.44	98.12	60.45	58.30	33.13	31.83	16.06	18.52
Speak not well/not at all	1.56	1.88	39.55	41.70	66.87	68.17	83.94	81.48
Income (percent of poverty)		***						
0–138%	25.14	30.76	32.47	36.12	53.68	52.04	74.21	72.35
139–250%	21.15	22.08	28.17	26.88	28.39	29.32	18.18	19.73
251–400%	20.73	19.32	19.36	19.35	9.82	12.61	5.13	5.65
More than 400%	32.99	27.84	20.00	17.65	8.10	6.04	2.47	2.27
Years in the US								
0–4	— ^a	— ^a	0.59	0.17****	5.29	6.94****	14.01	7.02****
5–9	— ^a	— ^a	2.82	1.55	9.11	7.34	25.59	12.95
10–14	— ^a	— ^a	6.63	4.96	12.01	12.26	28.33	27.28
15 or more	— ^a	— ^a	89.96	93.32	73.60	73.47	32.07	52.75

SOURCE Authors' analysis of data for 2007–16 from the California Health Interview Survey. **NOTES** The pre period is 2007–13. The post period is 2014–16. A full list of explanatory variables, including self-reported health status, chronic conditions, urban versus rural residence, and California region, is in the online appendix (see note 28 in text). Significance was measured using t-tests for continuous variables and chi-square tests for categorical variables. LPR is legal permanent resident (for example, a green card holder). MD is physician. ED is emergency department. ^aNot applicable. * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$ **** $p < 0.001$

cluded in exhibit 3 since previous research has identified these factors as important predictors of access to and use of health care.^{6,7} Latinos with incomes of 251 percent of poverty or more were more likely to have health insurance coverage, compared to those with incomes of 0–138 percent of poverty. Latinos with limited English proficiency were less likely to have coverage, compared to those with greater proficiency.

Latinos were less likely to have had a physician visit after than before the ACA. Differences in the odds of having a physician visit across Latino categories were not significant, with one excep-

tion: Latinos with incomes above 400 percent of poverty were more likely to have had a physician visit, compared to those with incomes of 0–138 percent of poverty. Similarly, the odds of having had an ED visit across Latino categories were not significantly different. Compared to Latinos with private insurance, uninsured Latinos were less likely and Latinos with public insurance were more likely to have had an ED visit. Latinos with limited English proficiency were also less likely to have had an ED visit, compared to those who were proficient in English.

The odds of foreign-born Mexican Latinos' and

EXHIBIT 2

Health care outcomes and insurance status of Latino adults in California before and after implementation of the main provisions of the Affordable Care Act, by heritage group, 2007-16

	Mexico	Guatemala	El Salvador	Other Central American	Puerto Rico	South America	Other Latino	p value
PRE (2007-13)								
Outcome variables								
Had health insurance	67.6%	57.9%	60.6%	64.9%	87.2%	80.2%	79.0%	****
Had at least one MD visit	72.9	66.1	73.1	73.2	85.0	79.9	80.1	****
Had at least one ED visit	16.9	13.2	17.6	16.0	30.9	21.2	25.5	****
Had usual source of care	69.6	61.2	68.6	72.0	77.7	75.5	78.2	****
Share of total Latino adults	82.2	2.6	4.4	1.9	1.3	2.9	4.7	— ^a
POST (2014-16)								
Outcome variables								
Had health insurance	77.8%	61.0%	76.7%	78.4% ^A	94.1%	80.3%	88.2%	****
Had at least one MD visit	72.4	60.6	75.2	75.9	82.3	80.8	82.8	***
Had at least one ED visit	18.6	23.8	19.7	28.0	39.2	26.1	31.6	***
Had usual source of care	73.2	64.0	72.2	78.6	88.2	79.5	79.3	**
Share of total Latino adults	78.9	2.7	4.5	1.6	1.3	2.4	8.6	— ^a

SOURCE Authors' analysis of data for 2007-16 from the California Health Interview Survey. **NOTES** Significance was measured using joint significance chi-square tests in each period. MD is physician. ED is emergency department. ^aBecause this information was added for descriptive purposes, tests for pre-post significance changes were not performed. ** $p < 0.05$ *** $p < 0.01$ **** $p < 0.001$

other Latinos' having a usual source of care, compared to US-born Latinos, were similar (exhibit 3). Documented Mexicans and other Latinos were more likely than their undocumented peers to have a usual source of care. Latinos with no insurance and those with public insurance were less likely to have a usual source of care, compared to Latinos with private insurance. Latinos with incomes above 138 percent of poverty were more likely to have such a source of care, compared to those with incomes of 0-138 percent of poverty. Latinos with limited English proficiency were less likely to have a usual source of care, compared to those with greater proficiency. An interaction terms analysis that tested for documentation status in the post-ACA period had mostly nonsignificant results (we omitted the results for brevity, but they are available upon request).

DECOMPOSITION ANALYSES The main objective of our study was to parse out disparities into observed and unobserved factors that affect having health insurance coverage and access to and use of health care between Mexicans and other Latinos. Exhibit 4 shows the results of the decomposition analysis. Covariates were adjusted for in all models. (For brevity, these are not shown in exhibit 4, but they are available in the appendix.)²⁸

Seventy-two percent of Mexicans and 87 percent of other Latinos had health insurance coverage (exhibit 4). Observed factors explained 79 percent of cross-sectional differences in health insurance coverage between the two

groups. However, unobserved heterogeneity accounted for the remaining 21 percent of cross-sectional differences across groups. ACA implementation was negatively associated with disparities in health insurance coverage (-5.76 percent). In other words, without the implementation of the ACA's main provisions in 2014, disparities between Mexicans and other Latinos would have been 5.76 percent larger. By contrast, documentation status was positively associated with disparities in health insurance coverage (24.17 percent). Thus, if Mexican Latinos had had the same share of undocumented immigrants as other Latinos, disparities in health insurance coverage would have declined 24.17 percent. Income and English proficiency were also positively associated with disparities in health insurance coverage.

For physician visits, 73 percent of Mexicans and 80 percent of other Latinos reported having had a visit. Observed factors accounted for 93 percent of the differences between the groups. Documentation status, lacking health insurance coverage, and having an income equal to or above 251 percent of poverty were positively associated with disparities in physician visits. In contrast, having an income of 139-250 percent of poverty was negatively associated with disparities in physician visits.

Eighteen percent of Mexican Latinos and 20 percent of other Latinos reported having had an ED visit. Observed factors explained 73 percent of differences between the groups. Lacking health insurance coverage and English

proficiency were positively associated with disparities in ED visits. In contrast, having public health insurance coverage was negatively associated with the disparities.

Seventy-one percent of Mexican Latinos and 82 percent of other Latinos had a usual source of care. Observed factors explained 98 percent of differences between the groups. ACA implementation and having income of 139–250 percent of poverty (compared to 0–138 percent) were negatively associated with disparities in having a usual source of care. Lacking health insurance and having public health insurance, income equal to or above 251 percent of poverty (compared to 0–138 percent), and English proficiency were positively associated with disparities in having a usual source of care.

Discussion

Previous research has shown that Latino heritage groups differ in terms of demographic and socioeconomic characteristics.⁷ These differences are associated with differences in health insurance coverage and access to and use of care across the groups.^{10,11,21} Latinos were less likely before the ACA to be insured and to report optimal levels of health care access and use.^{4,7} Pre-post ACA differences were even more pronounced among foreign-born Latinos.^{6,11} Recent studies that used national data have found that health insurance coverage and access to care after the ACA differ significantly among Latino heritage groups.^{3,5} Our study confirms these findings and shows that differences across the groups have narrowed after the implementation of the ACA in California.

Since the ACA was passed in 2010, California has maximized opportunities to expand health insurance coverage among eligible people. In this study we hypothesized that health insurance coverage and access to and use of health care would increase after the ACA, since the law made health insurance more affordable. Our study

EXHIBIT 3

Odds ratios of Latinos' likelihood of having health insurance coverage and health care access and having used care in California, by selected characteristics, 2007–16

Characteristic	Health insurance	MD visits	ED visits	Usual source of care
HAD HEALTH INSURANCE				
Pre period (ref)				
Post period	1.83****	0.86**	1.06	1.08
LATINO HERITAGE AND CITIZENSHIP				
US-born (ref)				
Foreign-born Mexican Latinos				
Documented	0.67**	1.04	0.91	0.61***
Undocumented	0.28****	0.91	0.89	0.58****
Foreign-born other Latinos				
Documented	0.61***	1.27	1.23	0.67**
Undocumented	0.28****	1.03	1.08	0.58**
HEALTH INSURANCE TYPE				
Private (ref)				
Public	— ^a	0.35	1.59****	0.67****
No insurance	— ^a	0.25	0.74**	0.27****
INCOME (PERCENT OF POVERTY)				
0–138% (ref)				
139–250%	0.92	1.14*	0.94	1.22***
251–400%	1.49****	1.20	0.95	1.21**
More than 400%	2.66****	1.46****	0.99	1.48****
ENGLISH USE AND PROFICIENCY				
Speak very well/well (ref)				
Speak not well/not at all	0.64****	0.84	0.69****	0.68****

SOURCE Authors' analysis of data for 2007–16 from the California Health Interview Survey. **NOTES** The exhibit shows the results of a multivariable logistic regression analysis. Covariates were adjusted for in each category; a full list of covariates and confidence intervals is in the online appendix (see note 28 in text). The pre (2007–13) and post (2014–16) periods refer to before and after implementation of the main provisions of the Affordable Care Act. MD is physician. ED is emergency department. Documented is foreign-born US citizen or legal permanent resident. ^aNot applicable. * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$ **** $p < 0.001$

people through the expansion of eligibility for Medi-Cal to young adults enrolled in the Deferred Action for Childhood Arrivals (DACA) program and their parents, or through locally managed health plans such as Healthy San Francisco or My Health LA.¹⁴ Some of these programs have limitations that keep them from constitut-

EXHIBIT 4

Decomposition analysis: parsing out disparities between Mexicans and other Latinos in California, 2007–16

	Health insurance	MD visits	ED visits	Usual source of care
PREDICTED PROBABILITY				
Mexican Latinos	0.72	0.73	0.18	0.71
Other Latinos	0.87	0.80	0.20	0.82
DIFFERENCE IN PREDICTED PROBABILITY				
Total difference (percentage points)	−0.15	−0.08	−0.02	−0.11
Observed factors	79%	93%	73%	98%
Unobserved factors	21%	7%	27%	2%
EXPLANATORY VARIABLES				
Health insurance coverage				
Pre ACA (ref)				
Post ACA	−5.76%****	−0.02%	0.93%	−0.31%****
Documentation status				
Documented (ref)				
Undocumented	24.17%****	6.41%****	2.29%	0.63%
Health insurance type				
Private (ref)				
Public	— ^a	3.51%	−30.60%****	6.12%****
None	— ^a	36.35%****	28.26%***	31.92%****
Income (percent of poverty)				
0–138% (ref)				
139–250%	0.44%	−2.00%****	3.87%	−2.18%***
251–400%	1.50%****	0.70%***	−1.92%*	0.78%****
More than 400%	29.17%****	20.04%****	10.98%	16.44%****
English use and proficiency				
Speak very well/well (ref)				
Speak not well/not at all	22.03%****	11.50%	11.76%****	20.81%****

SOURCE Authors' analysis of data for 2007–16 from the California Health Interview Survey. **NOTES** Positive or negative coefficients indicate the share of explanatory variables that are positively or negatively associated with disparities in outcomes between Mexicans and other Latinos. Covariates were adjusted for in each category; a full list of covariates with coefficients and standard errors is in the appendix (see note 28 in text). Observed and unobserved differences might not add to 100 percent because of rounding. MD is physician. ED is emergency department. Documentation status is explained in the notes to exhibit 3. ^aNot applicable. * $p < 0.10$ *** $p < 0.01$ **** $p < 0.001$

eligible for Medicaid benefits, or when their private policies became noncompliant with essential health benefit regulations under the ACA.

Our descriptive analyses show that health insurance coverage and access to and use of health care were heterogeneous across Latino heritage groups in California. Differences were observed between the pre- and post-ACA periods: Higher shares of Latinos reported health insurance coverage and a usual source of care in the post-ACA period. In our multivariable analyses, we found that documented and undocumented Latinos had similar odds of reporting a usual source of care. However, no significant differences were identified in the odds of reporting a physician or ED visit.

We found evidence that ED use increased marginally for undocumented Latinos after the ACA. However, mean values of ED use in the pre and post periods for undocumented Latinos remained lower than those for US-born and documented Latinos. These findings are consistent

with the results of other studies and may suggest that health care use is mostly linked to medical need.^{3,5} Need could also be a factor related to the lack of significant differences between US-born, documented, and undocumented Latinos in the odds of having had a physician visit. Interestingly, the decomposition analyses showed that observable characteristics accounted for a large proportion of disparities in having physician visits and a usual source of care between Mexicans and other Latinos.

We also hypothesized that legal status would continue to be one of the main factors associated with disparities between Mexicans and other Latinos, since undocumented immigrants are overrepresented among Mexican Latinos. Undocumented immigrants are ineligible for the ACA's health insurance programs, which preserve inequities in health care access. Unsurprisingly, we found that undocumented immigrants had the lowest odds of having health insurance coverage or a usual source of care throughout

our study period. The decomposition analyses showed that documentation status was positively associated with disparities in health insurance coverage and physician visits. Interestingly, it was not a significant predictor of disparities in having a usual source of care or ED visits, which confirmed our findings from the multivariable analyses.

Previous research has shown that socioeconomic and demographic factors influence access to and use of health care among Latinos.⁷ We identified poverty status and English proficiency as robust predictors that contributed to disparities in health insurance coverage, reporting a physician visit, and having a usual source of care across Latino heritage groups. In fact, the contributions of poverty status and English proficiency to disparities in health insurance coverage were comparable in magnitude to that of documentation status. These findings have important policy implications, since the potential benefits of addressing the legal status of Latinos in the US in terms of reducing health care disparities could be comparable to socioeconomic changes such as reducing poverty and improving English proficiency.

Policy Implications

California was an early adopter of the ACA's Medicaid expansion, being one of the few states that received a waiver to begin the expansion in 2011.²⁷ One of the main challenges that the state encountered with the ACA implementation was the health insurance eligibility among its foreign-born population, especially undocumented immigrants. California has the largest undocumented population in the country: Approximately one-quarter of all undocumented immigrants in the US live in the state.²⁹ Our study showed that lack of legal status remains an important barrier to health insurance coverage and access to and use of health care in California.

State and local programs that offer coverage options to some undocumented immigrants in California might have reduced the divide between US-born, documented Latinos and their undocumented peers. While the programs funded by the state and local governments have been beneficial, much more could be done. Proposals to expand Medi-Cal eligibility to all low-income undocumented residents in California or allow undocumented immigrants to purchase coverage in the state health insurance Marketplace (Covered California) should be further investigated. Nationwide, states and local governments with large minority and immigrant populations can learn from California's experience of coverage expansion to its underserved populations.

Approved legislation and executive actions that eliminate the ACA's health insurance mandate and undercut the law's operation have led to uncertainty about the future of health care financing and access. Some states are already preparing to preserve some of the effects of the mandate by creating state mandates.³⁰ Policy proposals to create a state mandate in California should be further studied to create mechanisms that lead to sustained improvements in health insurance coverage and access to care for all Californians.

Conclusion

Our study provides evidence that in its early years of implementation, the ACA was associated with a positive impact on health insurance coverage among Latinos, the largest ethnic population group in California. Our study suggests that the ACA reduced disparities between Mexicans and other Latinos. However, differences in outcomes remain, as a result of observed disparities in income, English proficiency, and documentation status between Mexicans and other Latinos. ■

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Auto-Enrollment Into Individual Market Health Insurance Coverage

SEPTEMBER 2018

KEY POINTS

- An auto-enrollment mechanism needs a way to identify eligible uninsured individuals and their eligibility for premium subsidies, to assign the individual to a particular health plan and collect any required premiums, and to provide consumer communication and opt-out mechanisms.
- If the logistical challenges can be overcome, auto-enrolling uninsured individuals into individual market coverage has the potential to help improve the risk pool and put downward pressure on premiums.
- Auto-enrollment is likely to be more effective if individuals can be enrolled into coverage that is no additional cost to them.
- An effective auto-enrollment program for the individual market would increase insurance participation rates among those who are healthy.



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Introduction

Goals of the Affordable Care Act (ACA) include providing access to affordable health insurance and reducing the numbers of uninsured. Although attaining high enrollment numbers and a balanced risk pool are key to achieving these goals,¹ enrollment in the ACA individual market has been lower and more skewed to higher-cost enrollees than initially expected. And the elimination of the individual mandate penalty included in the ACA to encourage enrollment among healthy individuals threatens to reduce enrollment and deteriorate the risk pool further.

Incorporating an auto-enrollment feature has been proposed by some as a way to increase enrollment and achieve a more balanced risk pool. This issue brief provides insights on the potential and challenges of using auto-enrollment in the individual health insurance market. It first explores current uses of auto-enrollment and then discusses in more detail what would be needed to implement auto-enrollment in the individual market. In particular, an auto-enrollment mechanism needs a way to identify eligible uninsured individuals and their eligibility for premium subsidies, to assign the individual to a particular health plan and collect any required premiums, and to provide consumer communication and opt-out mechanisms.

Current Uses of Auto-Enrollment

Employer-Sponsored Retirement Savings Plans

Auto-enrollment is currently used by some employers for retirement savings plans, such as 401(k) plans, and can increase plan participation significantly.² New hires are automatically enrolled and contributions are deducted from their paychecks. In order to disenroll, the employee must take action to opt out. While auto-enrollment has been found effective for increasing

¹ American Academy of Actuaries, *An Evaluation of the Individual Health Insurance Market and Implications of Potential Changes*, January 2017.

² See, for example, Brigitte C. Madrian and Dennis Shea, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *The Quarterly Journal of Economics*, November 2001, 116(4): pp.1149-87.

participation, many employees remain at the default contribution level and in the default asset allocation. In other words, the default contribution level and asset allocation have an anchor effect.³

It can be less administratively difficult for employers to implement auto-enrollment in retirement savings plans than in health insurance plans. Retirement savings plans do not need to consider issues such as other sources of coverage, coverage of spouses and dependent children, and plan characteristics when multiple health plans are offered (e.g., benefits covered, cost-sharing requirements, geographic area and provider networks), and whether/how premiums vary by enrollee. Aside from complicating the auto-enrollment process, to the extent that these factors result in a high degree of opt-outs or plan switching from the default health plan, the increased administrative costs of auto-enrollment could be significant.

Employer-Sponsored Health Plans

According to The Kaiser Family Foundation and Health Research & Education Trust Employer Health Benefits Survey, 31 percent of all firms offering health benefits in 2017 automatically enrolled eligible employees in health benefits after completing any required waiting periods.⁴ The same study shows that auto-enrollment varies by the size of the firm.

Auto-enrollment among small employers (<50 employees)

Prior to the enactment of the ACA, small employers offering health insurance coverage to their employees had an incentive to maximize the number of employees participating in their health plans. In particular, many states and nearly all insurers had some type of participation requirements that an employer had to meet in order to be issued a policy. These participation requirements were intended to reduce the adverse selection that would occur if only workers with higher health costs enrolled in coverage. Where allowed, some insurers varied premium rates by participation levels. Insurers would require wage and tax forms to ensure that only bona fide employees were being insured as well as to verify participation requirements. All of these procedures were done to better match the risk being assumed by the insurer to the premium rate being charged.

The ACA eliminated small employer incentives to maximize participation rates by requiring that insurers enroll all small employers applying for coverage during the annual open enrollment period, even if they do not meet traditional participation requirements. ACA small group premiums can't vary by participation levels; premiums can vary only by certain group characteristics: age, area, tobacco use, and benefit plan. The ACA risk adjustment program transfers payments across insurers within the small group market to reflect differences in risk that aren't reflected in premiums, including the variation in risk caused by different participation levels.

³ Ibid.

⁴ The Kaiser Family Foundation and Health Research & Education Trust, [Employer Health Benefits: 2017 Annual Survey](#) (Figure 3.10), 2017.

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TABLE 1. Auto-Enrollment by Firm Size, Among Firms Offering Health Benefits, 2017

Firm Size	Percentage Using Auto-Enrollment
3-49 Employees	35%
50-199 Employees	13%
200-999 Employees	8%
1,000-4,999 Employees	11%
5,000+ Employees	18%
All Firms	31%

SOURCE: The Kaiser Family Foundation and Health Research & Education Trust, [Employer Health Benefits: 2017 Annual Survey](#), 2017.

In 2017, more than one-third of firms with 3-49 employees used auto-enrollment, higher than the rate for larger firms (see Table 1). One factor likely contributing to this higher rate is that small employers generally offer fewer health plan options than larger employers, thus making auto-enrollment easier to implement.

Auto-enrollment among medium and large employers (>50 employees)

Among larger employers offering health benefits, the use of auto-enrollment generally increases by employer size, but industry can be even more important than an employer’s size in determining likelihood of an employer engaging in auto-enrollment.⁵ For instance, employers in the technology, utility, and finance industries are more likely to auto-enroll employees into health coverage than employers in the retail and hospitality industries, or those with large seasonal workforces. The “default” plan is most commonly a low benefit option, typically a high-deductible health plan with an account feature. Opt-out opportunities are provided and employers generally do not require proof of coverage to opt out of the employer’s health plan. Due to the increasing cost of health coverage, many employers that have historically done auto-enrollment have moved to require active elections each year.

The ACA initially included a requirement for employers with more than 200 employees to automatically enroll new employees into one of its health plans. Adequate notice to employees was also required, as was the opportunity for employees to opt out of any coverage in which they were automatically enrolled. No final regulations or guidance were released and the provision was repealed in 2015 prior to becoming effective.

Barriers to further expansion of auto-enrollment among employers include high administrative costs, the difficulty of determining alternative coverage sources, and the greater complexity when coverage extends to spouses and dependent children or when multiple plans are offered. Industries with high opt-out rates would face the administrative costs of initially enrolling employees and setting up payroll deduction mechanisms, as well as the costs of reversing those mechanisms for those who opt out. Administrative costs would also be higher in industries with high turnover rates. If auto-enrollment is implemented without a corresponding affordability test, many new hires may end up with significant financial commitments, potentially leading to higher opt-out rates. Health plans typically cover employees and their spouses and dependent children, but any auto-enrollment default likely would be for employees only because the employer may not know of the presence of a spouse or dependent children or their access to coverage. There are also duplicate coverage issues associated with auto-enrollment, such as access to coverage elsewhere via a spouse or other coverage source.

Communication to the employee is critical in an auto-enrollment environment. The default plan and the payroll deduction must be clearly communicated. If the default plan is not comprehensive in coverage or uses a network in which an employee’s provider does not participate, employees may face unexpected

⁵ Information regarding auto-enrollment among medium and large employers was gathered through informal discussions with employee benefit consultants.

out-of-pocket expenses. Opt-out provisions have to be clearly stated. Currently, employees enroll during an open enrollment period that is prior to the effective date of the coverage. Auto-enrolled employees may not be able to change plans after the enrollment period ends, so it is important they get information regarding their plans and any payroll deductions prior to that.

Medicaid and Medicare

In 2016, two states introduced auto-enrollment programs for portions of their Medicaid populations. Louisiana began using data from the Supplemental Nutritional Assistance Program (SNAP) to determine income eligibility for Medicaid and to enroll those eligible.⁶ South Carolina began using auto-enrollment for a demonstration program for Medicare-Medicaid dual eligibles. Individuals age 65 and older who are eligible for both Medicare and Medicaid and have not already selected an integrated plan among those offered are assigned one using an algorithm to identify the plan that best meets their needs.⁷ Results of the programs in Louisiana and South Carolina have not been published to date.

Medicare uses auto-enrollment for certain individuals. Individuals already receiving Social Security or Railroad Retirement Benefits (RRB) at least four months before being eligible for Medicare are automatically enrolled in both premium-free Part A and Part B, which requires a premium. People who are automatically enrolled have the choice of whether they want to keep or opt out of Part B coverage. Individuals who are not receiving Social Security or RRB benefits are not automatically enrolled. The Medicare Part D prescription drug program offers a low-income subsidy program that provides premium and cost-sharing subsidies to eligible enrollees. Dual-eligible beneficiaries and certain other low-income beneficiaries are automatically enrolled in a zero-premium Part D plan if they haven't already joined a plan.

The Centers for Medicare and Medicaid Services (CMS) introduced an auto-enrollment program allowing Medicare Advantage organizations (MAOs) to offer seamless conversion for their commercial and Medicaid enrollees into Medicare Advantage (MA) plans upon reaching Medicare eligibility. Approved MAOs would identify eligible aged and disabled individuals 90 days prior to Medicare eligibility, inform individuals of conversion enrollment 60 days prior to the MA effective date, and allow individuals to opt out before coverage begins. Twenty-nine MAOs received approval and over 15,000 newly eligible beneficiaries were enrolled for the 2015 plan year.⁸ In October 2016, however, CMS responded to concerns about the program from beneficiaries, providers, and advocacy groups by suspending new approvals in order to further review the program.⁹

Takeaways From Current Auto-Enrollment Programs for Health Insurance

Experience from current auto-enrollment programs suggests several conditions are needed to facilitate its implementation. These include:

The availability of information to identify eligible individuals. Employers are able to identify and enroll their employees, although they may not have spouse or dependent children information or information on whether employees have coverage from another source. State and federal governments can access public program data to identify eligible individuals.

The ability to assign individuals to appropriate plans. The enrolling entity needs to be able to assign individuals into a plan. Assignment is straightforward when only one plan is offered, but gets more complicated when more plan choices are available. Employers can choose one of their lower-cost options for their auto-enrollment default. More vulnerable populations may require a more complicated process, such

6 Louisiana Department of Health, "[Louisiana Receives Approval for Unique Strategy to Enroll SNAP Beneficiaries in Expanded Medicaid Coverage](#)," June 1, 2016; [Medicaid Expansion Annual Report 2016/2017](#), June 30, 2017.

7 South Carolina Department of Health and Human Services, "[Healthy Connections Prime Passive Enrollment Scheduled to Begin April 2016: Seniors in South Carolina now have a new health care option](#)," Jan. 22, 2016.

8 Centers for Medicare and Medicaid Services, "[Seamless Conversion Enrollment—Policy and Data of Approved Medicare Advantage Organizations](#)," Oct. 21, 2016.

9 Centers for Medicare and Medicaid Services, "[Seamless Enrollment of Individuals upon Initial Eligibility for Medicare](#)," Oct. 21, 2016.

as the algorithm used in South Carolina’s dual-eligible program plan assignment, to better ensure they are enrolled in an appropriate plan. To the extent it is available, it may be appropriate for such algorithms to incorporate information on age, income, existing provider relationships, specific medical needs, and plan enrollment history. Processes also need to be set up for individuals so they can opt out or change plans.

A method to collect necessary premiums. Under an employer plan, any required premium contributions can be deducted from the employee’s paycheck. Under Medicare, any required premiums can be deducted from a beneficiary’s Social Security benefits. The availability of zero-premium plans, such as under the Medicare Part D low-income subsidy program, eliminates the need to collect premiums.

Reasonable administrative burden. Identifying eligible individuals, assigning them to appropriate plans, collecting any required premiums, and allowing for opt-outs and plan changes can be administratively complex and costly. These burdens can be higher in populations that experience a lot of turnover, for instance employers in certain industries, and in populations with higher opt-out rates.

Implementing Auto-Enrollment in the Individual Market

Identifying Uninsured Individuals

As noted above, auto-enrollment programs work best when information is available to identify potential enrollees. For the individual market, there is not an existing data source for identifying individuals without other coverage. Even if a data source were available, it would likely need to be updated fairly frequently due to the residual and transitional nature of the individual market.

One option proposed is to use tax filing data. The IRS requires individuals to report their health insurance coverage for the tax filing year. The health insurance coverage information could be

used to identify uninsured individuals who could be eligible for auto-enrollment. However, tax data only show coverage status during the prior year. It would not necessarily reflect coverage status at the time of auto-enrollment, which could be during the next open enrollment period. At that point, the coverage information would be at least a year old and an additional step could be necessary to ensure that individuals lacking coverage are offered coverage for the next year. Using tax filing data could be more effective if open enrollment were to coincide with the end of the tax filing season. No information would be available for people who don’t file tax returns.

Income information from tax filings is currently used to determine eligibility for ACA premium tax credits. Some auto-enrollment proposals would specifically target uninsured individuals who would be eligible for a zero-premium plan due to premium subsidies. This approach will be discussed in more detail below.

Another approach would be to tie coverage to other programs—for instance, to auto-enroll individuals upon entering an educational program, obtaining a driver’s license or passport, or obtaining a loan. Such methods may not capture a large number of eligible enrollees, may disadvantage financially vulnerable consumers, and coverage and subsidy status information may not be available. Although coverage information would be available when people receive health services, signing up people at the point of medical service, such as at a hospital, would result in the worst form of adverse selection.

The most comprehensive method would be to have one entity responsible for tracking the insured status of the entire population. The entity would need to create and maintain a database of the entire population and each individual’s insurance status. All insurers, self-insured employers (perhaps through third-party administrators), Medicare, Medicaid, and any other state and federal health insurance programs would need to report all members (including

spouses and dependent children) covered by their plans to this entity, preferably on a monthly basis. This information could be used to determine coverage information for each person in the database. Unless the database includes the entire U.S. population, using for instance a near-universal source such as Social Security records, all uninsured people would not be captured in the data. Such a comprehensive database would be very difficult and expensive to set up and maintain. In addition, there could be data privacy and cybersecurity concerns.

Instead of focusing on the entire population, a less comprehensive data collection method would be to require insuring entities to report information to a central source on individuals who are losing coverage. This could include, for instance, individuals who are losing coverage because they are leaving a job or are losing dependent coverage upon turning age 26. Auto-enrollment efforts could concentrate on this population. To be most effective, however, it would need to be determined whether people losing coverage had already gotten new coverage.

Plan Assignment and Premium Collection

Methods for assigning identified uninsured individuals into health plans would need to be developed. These could include randomly assigning individuals to plans with premiums below a certain threshold. Once individuals are assigned to a plan, the insurer would be responsible for collecting any premium owed. Premium subsidies would be collected from the government and any additional premium would have to be collected from the insured. Unlike employers, which can deduct premiums from employees' paychecks, collecting premiums directly from individuals can be more challenging. Insurers would need to communicate premium requirements to the individuals, but would not have a way to ensure those payments are made. If uninsured dependents are auto-assigned to child-only policies, the insurer would have to determine who has financial

responsibility for these dependents so they could be billed for the coverage. Individuals declining to pay any additional premium would have their coverage terminated retroactively. This increases administrative costs, and claims costs may already have been paid but were not covered by premiums. If healthier people are more likely to opt out and higher-cost people retain coverage, auto-enrollment could worsen the risk pool rather than improve it. Enrolling individuals into zero-premium plans, as discussed below, would reduce administrative concerns and would increase the likelihood that auto-enrollment leads to an improved risk pool.

Focusing auto-enrollment on young adults no longer eligible for dependent coverage has been suggested. One such approach would be to auto-enroll individuals age 27 to 30 into catastrophic plans using a tax credit (currently, premium tax credits can't be used toward catastrophic plans). The young adults coming off dependent coverage would need to be identified in order to accomplish the auto-enrollment and to determine whether other coverage is available and whether they are eligible for a tax credit. Incorporating more young adults into the ACA market could help improve the risk pool. Under current ACA rules, however, catastrophic coverage is risk-adjusted separately from the metal plans (i.e., platinum, gold, silver, bronze), meaning pricing for insurers could be more complicated and metal level plans wouldn't necessarily see premium reductions. A benefit of this approach is that it could familiarize young adults with insurance coverage and increase the likelihood that they will continue to purchase coverage in the future.

Auto-Enrollment Into Zero-Premium Plans

Because collecting premiums from auto-enrolled individuals can be difficult, current auto-enrollment programs are typically limited to those with zero-premium options or when the entity can withhold the premium from a payment to the individual. One way to avoid this

problem in an individual market auto-enrollment mechanism would be to apply it only to people who receive a high enough premium subsidy to pay the entire premium. For instance, because the termination of cost-sharing reduction (CSR) payments to insurers increased premiums, and therefore premium tax credits, the Kaiser Family Foundation estimated that more than 4 million subsidy-eligible uninsured could purchase a zero-premium bronze plan 2018.¹⁰ Finding an effective method of enrolling these individuals into coverage would likely improve the risk pool and put downward pressure on premiums. Re-imposing an individual mandate financial penalty, at either the federal or state level, and directing that penalty toward the purchase of a health insurance plan would increase the number of individuals who could purchase a zero-premium plan.¹¹ Fewer individuals would be eligible for zero-premium bronze plans if silver premiums were lower, for instance if the federal government resumes paying plans for CSRs.

Under this method, the auto-enrollment system could use IRS insurance coverage information to determine who is uninsured and IRS or state tax income information to determine whether the uninsured person qualifies for a premium subsidy. Currently, IRS data are used to determine eligibility for ACA premium tax credits, which are available for individuals with household incomes between 100 and 400 percent of the federal poverty line (FPL). Tax credits are based on the premium of the second-lowest silver plan, which varies by rating area and age. Tax credits phase down with income and are not available for individuals above 400 percent of FPL. If the current year's income is significantly different, the individual may be asked to repay some or all of the tax credit.

Individuals with lower incomes may be able to be assigned to zero-premium plans, but it is less likely that individuals with higher incomes could

be. The availability of zero-premium bronze plans depends on the difference in cost between the second-lowest silver premium and the lowest bronze premium and may not be available in all rating areas. Individuals with incomes between 100 and 250 percent FPL are eligible for cost-sharing reductions, but only if they enroll in a silver plan. As a result, some individuals with low incomes would have lower total premium and out-of-pocket costs by enrolling in a silver plan rather than a zero-premium bronze plan with higher cost-sharing requirements.

Other proposals would replace the current premium subsidy structure with a flat premium tax credit or an age-based flat premium tax credit. A flat tax credit would be simpler to administer but could result in the tax credit being able to purchase differing plan designs for individuals depending on their age. Under current rating rules, premiums may vary by a 3:1 ratio between ages 21 and 64, with the slope of the premiums dictated by federal (and sometimes state) regulation. The flat tax credit could also vary by age, but unless it varies by age with exactly the same slope as the premium curve, the credits could be used to purchase different plan designs for individuals depending on their age. A flat tax credit would also pay for different benefit plans by geographic area, because premiums vary by geographic area and state. If insurers have to develop and maintain many plans in order to have plans that can be purchased with tax credits at every age/rating area, this will add to administrative expenses.

Once identified, individuals could be enrolled in coverage with premiums at or below the tax credit. The amount of premium tax credit required to purchase the lowest available premium varies by geographic area and age (see Table 2). If the tax credit is not enough to purchase a bronze plan, then the plan could be designed with variable cost-sharing so that the

¹⁰ Matthew Rae, Larry Levitt, and Ashley Semanskee, "How Many of the Uninsured Can Purchase a Marketplace Plan for Less Than Their Shared Responsibility Penalty?" Kaiser Family Foundation issue brief, November 2017.

¹¹ After being automatically enrolled, an individual would not be subject to any financial penalty for that plan year, and therefore might be less likely to be eligible for a zero-premium plan the following year.

premium would equal the available subsidy. This could require higher deductibles and a higher maximum out-of-pocket limitation than currently allowed (the 2018 out-of-pocket maximum is \$7,350). For instance, one study found that plans would need to have very low actuarial value (AV), with some deductibles over \$20,000 per person, in order for older adults to be covered by a \$3,000 tax credit.¹² If the premium subsidies are not sufficiently generous, the insured may be unable to afford the required cost-sharing.

TABLE 2. Lowest Available Bronze Premiums at Ages 27 and 62, 2018, Selected Cities

2018 Lowest Available Bronze Premium	Age 27	Age 62
Pittsburgh, Pa.	\$2,388	\$6,546
Nashville, Tenn.	\$3,456	\$9,474
Omaha, Neb.	\$5,232	\$14,343

SOURCE: American Academy of Actuaries Individual and Small Group Markets Committee calculations based on the Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE), [“Health Plan Choice and Premiums in the 2018 Federal Health Insurance Exchange.”](#) ASPE Research Brief, October 30, 2017

Similar to how Medicare randomly assigns certain beneficiaries eligible for the Part D low-income subsidy to zero-premium plans, individuals could be randomly assigned among a set of plans provided by issuers with premiums at or below the tax credit. Rules to determine what insurance plan to assign people to would have to be developed in a way that would not create anti-selection against any particular insurer and might also need to incorporate enrollee medical needs. Insurers offer different plan designs and networks and have different cost structures. For a specific price point corresponding to the tax credit, the plans available from different insurers will have different cost-sharing structures and different networks. Having standardized plans would reduce the differences in plan offerings, but insurers would still have different premiums for similar plan designs due to different network

and cost structure differences. With random assignment, it could be difficult to ensure that individuals in similar circumstances are enrolled into plans that are of similar value or that individuals are enrolled in the plans that best meet their needs.

Auto-enrolled individuals would need to be contacted to make them aware of their coverage, and to inform them of their ability to opt out and their responsibility to notify the insurer if they get other coverage such as employer- or government-based programs. The insured may potentially have to pay back the value of the tax credit to the government at tax time if they do not notify their insurer to cancel coverage when obtaining employer or other government coverage, or of an increase in income in the case of income-related tax credits. It will be critical to inform these individuals which plan they have been assigned to and where to locate the network directory. Individuals may be assigned to plans that do not include their existing providers (this may be less of an issue for previously uninsured individuals if they didn’t have a regular source of care). There may need to be a “window” between this notification and the final enrollment to allow individuals to switch insurers or plans so as to get into plans that better meet their needs.

Facilitated Enrollment

Rather than directly auto-enrolling eligible individuals into coverage, a system could be put in place that facilitates enrollment. For instance, insurance navigators could reach out to individuals identified as potentially being uninsured and eligible for premium subsidies. These navigators could work with the individuals to confirm their coverage status and tax credit eligibility, provide information on available insurance choices, and enroll them in a plan. Although this approach would be resource-intensive and would add administrative cost, it could reduce the complexities and uncertainty

¹² Linda Blumberg, [“What Can Consumers Purchase with the Age-Related Tax Credits in the Empowering Patients First Bill?”](#) Urban Institute, March 2017. This study examined tax credits proposed under the Empowering Patients First bill: \$1,200 for people ages 18-34; \$2,100 for people ages 35 to 49; \$3,000 for people ages 50 and older; and \$900 per child up to age 18. The study also assumed that allowable age rating variation would expand from 3:1 to 5:1.

regarding whether an individual is still uninsured, enrolling them into a plan that meets their needs, setting up opt-out mechanisms, and collecting required premiums.

Summary

Auto-enrolling uninsured individuals into individual market coverage has the potential to help improve the risk pool and put downward pressure on premiums. However, there are significant challenges to making auto-enrollment work in the individual market. There is not an existing framework or comprehensive data source to identify individuals (and their spouses and dependent children) eligible for coverage who are not eligible for coverage elsewhere. In addition, because there is not an easy way to automatically collect individual market premiums, such as

withholding from a check, auto-enrollment is likely to be more effective if individuals can be enrolled into coverage that is no additional cost to them. This involves calculating the premium subsidy for the individual or family and identifying coverage that can be purchased with the available subsidy.

A key to an effective auto-enrollment program for the individual market is for enrollment to increase insurance participation rates among those who are healthy. If only those with higher health costs are targeted through auto-enrollment (such as enrolling individuals when they receive health services), or if healthy individuals have higher opt-out rates, then it is less likely the risk pool will improve.

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By Walter A. Zelman and Lucien Wulsin

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OVERVIEW

California's Efforts To Cover The Uninsured: Successes, Building Blocks, And Challenges

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ABSTRACT During the last century, California policy makers tried multiple approaches to achieve the goal of affordable health coverage for all: employer and individual requirements, single payer, and hybrids. All failed, primarily because of the amount of financing needed to cover the large numbers of uninsured Californians and the supermajority vote requirements for tax increases. These failures, however, provided important lessons for state and national reform efforts. More immediate success was achieved with incremental reforms, such as child health insurance, Medicaid section 1115 waivers, and the creation of purchasing pools. These reforms, as well as the experience derived from the broader coverage expansion efforts, contributed to the intellectual and policy frameworks that underlay major national reforms and created building blocks for the state's successful implementation of the Affordable Care Act. That act allowed California to meet its greatest need: the financing required to make a truly sizable dent in the numbers of uninsured Californians.

A century ago Gov. Hiram Johnson proposed to extend health care coverage to all Californians. Over the ensuing hundred years, many governors and legislative leaders have pursued similar or somewhat less ambitious goals.¹

In the course of those efforts, policy makers explored multiple options in the coverage expansion tool chest: mandates on employers, individuals, or both; single payer; Medicaid expansions; insurance reforms; and other initiatives. Most efforts sought approval via the legislative process; a few were offered as ballot measures. Because of the state's unique financing rules, some combined the legislative and ballot measure approaches. All wrestled with fundamental coverage expansion issues: the respective roles of government and the private sector, financing (who pays), coverage (what services are covered), rising costs (how, if at all, they are controlled), and

equitable access (how to ensure access to care for those who cannot afford it).

When major coverage expansions seemed politically or economically unattainable—for example, during the state's recurrent budget crises—California reformers pursued incremental coverage expansions for specific groups (such as children and pregnant women), insurance reforms that protected specific groups (for example, small businesses with employees who had high-cost medical conditions), or policies (such as employer mandates) that did not compound the state's budget challenges.

Coverage expansion initiatives sometimes took bipartisan routes. Republican governors Hiram Johnson, Earl Warren, and Arnold Schwarzenegger led expansion efforts. Even conservative governors such as Ronald Reagan, George Deukmejian, and Pete Wilson were supportive of some coverage expansions via Medicaid and other incremental measures. In recent

decades, however, with the exception of Governor Schwarzenegger's role in 2007–08, California's reform efforts have become partisan affairs. Democrats support; Republicans oppose.

The recent California story has also been one of legislative rather than gubernatorial leadership. Republican governors (Governor Schwarzenegger again was the exception) have opposed major coverage expansions; Democratic governors have not prioritized the goal.

Of the multiple challenges to major coverage expansions, financing has been the most intractable. California is marked by demographic characteristics commonly associated with large numbers of uninsured residents. Its hourglass economy features a high percentage of low-wage, low-income people and a relatively large number of very high-income people. There is a predominance of small businesses, and a very modest level of union penetration, compared to large urban states in the East and upper Midwest. The state has a large flex workforce of seasonal, part-time, and gig workers; a prominent agricultural sector; a sizable immigrant population; and a significant number of undocumented workers. Because of these factors, in 1987, 64.6 percent of Californians younger than age sixty-five had employer-sponsored coverage, compared to 70.1 percent nationwide, and 17.6 percent of Californians in that age group were uninsured, compared to 13.7 percent nationwide. By 2011 the percentage of Californians under sixty-five with employer-sponsored coverage had fallen to 51.8 percent, compared to 55.3 percent nationwide, and the percentage uninsured had climbed to 22 percent.² In 2013 only nine states had a higher percentage of uninsured residents than California did.³

Taken together, these factors indicated that without major financial assistance from the federal government, achieving any major coverage expansion would be an uphill battle. Such efforts would also confront the restrictions of Proposition 13 (passed in 1978), which rolled back local property taxes and required a two-thirds legislative vote to increase state and local taxes, and Proposition 4 (passed in 1979), which imposed stiff limits on state and local government expenditures.

Given these ground rules, California's effort to achieve significant coverage expansions has been one of lofty goals, widespread support, and considerable policy creativity, arrayed against formidable financing and procedural challenges.

All major coverage expansion efforts were defeated. But many provided invaluable lessons about the different paths to the goal and helped create the building blocks to successful implementation of the Affordable Care Act (ACA).

In this article we review the last half-century of California's efforts to achieve major coverage expansions. Online appendix 1 highlights the important milestones in these efforts.⁴ We focus on three approaches: employer mandates, single payer, and public-private hybrids. We also note significant incremental reforms. Throughout the review we focus on lessons learned for California and the nation.

Employer Mandates

Between 1979 and 2001 the percentage of uninsured nonelderly California adults rose from 11 percent to almost 20 percent. The percentage of uninsured workers rose from 15 percent to almost 25 percent.¹ These trends resulted from the related factors of rising health care costs that were well above inflation rates and declining offer rates of employer-sponsored coverage.⁵ The growing problem was highlighted in a series of studies by E. Richard Brown of the University of California Los Angeles (UCLA) Fielding School of Public Health and coauthors, which emphasized that 80 percent of the uninsured were workers and their families.⁶ These developments focused advocates of coverage expansions on the centrality of employer-sponsored coverage and the need to maintain and expand it.

Major efforts to impose an employer coverage requirement occurred in 1989–92 and 2003–04. Inspiration for this approach came from Hawaii's employer mandate, the 1988 passage of an employer mandate in Massachusetts (never implemented and later repealed), and, to a lesser extent, short-lived employer mandate legislation in Oregon.

California's employer mandate proposals took different forms. Some required employers to insure only full-time employees, not their dependents; others offered an attractive "pay" option by which employers could pay the state or a county to cover the costs of insuring their employees. Designations of small employers and of part-time, seasonal, and other flex employees who would be exempt from the mandate also varied.

CALIFORNIA ASSEMBLY, 1989 Two initiatives stand out because of the prominence of their authors and the intensity of the efforts. Under AB-350 (Brown), a proposal by Assembly Speaker Willie Brown and others and the first in a series of related bills (during 1989–92), coverage would be private, with no new cost to the state's General Fund—a near imperative given the restrictions imposed by Propositions 13 and 4 a decade earlier. To ease small business concerns, the measure exempted many smaller employers. To emphasize its mainstream nature, Speaker Brown frequently noted the similarity between

his proposal and that promoted by President Richard Nixon in the early 1970s.⁷

The measure was supported by consumer groups, some unions, and the California Medical Association. Opposition was led by employers, in spite of the exemptions for many small employers. Other weighty opponents were large agribusiness interests, many of which did not offer coverage for their field workers, and out-of-state commercial insurers, which disliked the proposed reforms to their insurance underwriting practices and feared the imposition of rate regulations.

A public feasibility study conducted by two state agencies⁸ concluded that while the mandate would increase coverage for full-time workers of low-wage, midsize employers, it would not make significant inroads into coverage for small-business employees, part-time workers, seasonal workers, dependents, or the self-employed—all of whom had very high uninsurance rates. Since the great majority of large and midsize employers already offered coverage for their full-time workers, the proposal, with its many exemptions, would not reduce the numbers of the uninsured as much as hoped.

The feasibility study also highlighted the fact that that an employer mandate would require a federal Employee Retirement Income Security Act (ERISA) waiver.⁸ The US Supreme Court, in *Standard Oil v. Agalsud*, had affirmed in 1981 that ERISA preempted state regulation of employer self-insured plans and had invalidated Hawaii's employer mandate as applied to large self-insured employers that were not covering their workforce in compliance with the new Hawaii mandate. Congress subsequently approved a waiver, but only for Hawaii. A California mandate would require a similar congressional waiver, a daunting legislative challenge.

The feasibility study also recommended that the employer mandate be paired with both insurance underwriting reforms (to ensure that employers could purchase and retain health insurance regardless of the medical condition of their employees) and cost-containment measures (to slow the rate of increase in premiums).⁸ The state would enact insurance reforms; cost containment would prove more elusive.

After the Brown proposal was defeated in the legislature, proponents qualified the proposal as a ballot measure. It was defeated by a margin of two to one. Among the opponents were some consumer groups that preferred a single-payer solution—a division among reform proponents that would undermine later efforts as well.⁷

CALIFORNIA SENATE, 2003 In 2003 Senate President John Burton's version of the employer mandate, SB-2, cleared the state legislature and

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was signed by Gov. Gray Davis, a Democrat. It would apply to employers with as few as twenty employees and limit the employee share of premiums for low-wage working families to 5 percent of wages. Like Speaker Brown's earlier proposal, it entailed no tax dollars, but it proposed to cover more of the state's uninsured.⁹ This version of the mandate was also supported by the California Medical Association and drew stronger support from unions and leading consumer advocates.

But even with broader support, Burton's legislation was repealed by the state's voters, suffering a narrow 51–49 defeat in a referendum spearheaded by the employer community, which warned that the mandate would be a “job killer.”¹⁰

POTENTIAL FOR EMPLOYER MANDATES In the end, neither of the employer mandate proposals could surmount the multiple hurdles of public concerns over job impacts, the opposition of employers, and the need for and difficulty of securing an ERISA waiver. However, even if an employer mandate proposal had succeeded, it would have fallen well short of universal coverage. That goal would require coverage of many more employees, especially those in small firms as well as part-time, seasonal, and temporary employees; the self-employed; and workers' dependents. Such a coverage expansion would demand state public financing that would remain unattainable, both politically and economically.

Still, the predominance of employer-sponsored coverage made ongoing employer purchasing of (or otherwise paying for) employee coverage an imperative. It would remain a central feature of almost all California and national universal coverage proposals.

Single Payer

A constant in California's search for major coverage expansions has been the determined advocacy by some stakeholders for a single-payer system. At times, its supporters accepted alternative

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paths to coverage expansions, but their support for single payer never waned.

Single payer has drawn sustained support from the California Nurses Association, some smaller associations of physicians, many consumer advocates, and key legislative leaders. Their proposals have included broad coverage of all or nearly all Californians, payroll and income taxes to finance such coverage, unrestricted choice of providers, and provider rate regulation to control costs. They sought to lower administrative costs by eliminating private insurers. Opposition has come from Republicans, employers, insurers, and many providers and has focused on the sizable tax increases required, fears of regulatory pressures on payments to providers, and lack of trust in government. Many Democrats, otherwise attracted to the concept, have doubted the feasibility of achieving such a massive health care overhaul. Such views underlay the sometimes fierce clashes between single-payer advocates and Democratic supporters of less sweeping approaches to coverage.

The earliest version of single payer, introduced in 1945 with the leadership of Governor Warren, aimed at covering all workers and their families. Strongly opposed by business and physician groups, it failed—as would three more coverage expansions offered by Governor Warren.¹

The early 1970s saw a series of single-payer efforts. But given Governor Reagan's staunch opposition to a tax-supported system, these initiatives stood out more as mirrors of the national debate that pitted the advocacy of Sen. Edward Kennedy (D-MA) of a tax-supported single-payer approach against President Nixon's advocacy of an employer requirement; expansion of Medicaid; and subsidies for others not covered by employers, Medicare, or Medicaid¹¹ (which was

similar in many respects to plans advocated later by Democratic Presidents Bill Clinton and Barack Obama).

Despite the ideological divide, an agreement was negotiated in 1971 between Governor Reagan and Democratic legislative leaders to expand Medi-Cal (California Medicaid) to cover poor adults not then eligible for a federal Medicaid match (as they were not disabled). This solely state-funded Medi-Cal expansion was repealed by the legislature and Gov. Jerry Brown in 1982–83 during a severe recession. It was not restored until 2014, with implementation of the ACA.

Subsequent efforts to enact single-payer proposals met similar fates. A 1990 proposal developed by the consumer group Health Access and E. Richard Brown of UCLA,¹² failed to secure the necessary two-thirds vote for its financing in either chamber of the legislature.

In 1994, with no realistic hope of legislative success, single-payer advocates qualified a measure to enact it via the ballot initiative process. Proposition 186 offered comprehensive benefits to every Californian, financed by increased income taxes and a new payroll tax on employers. It would have eliminated private insurance and regulated provider rates. It lost three to one due in large part to a strong opposition campaign financed by the insurance industry and employer community.¹³

A 2006 effort (SB-840), championed by Sen. Sheila Kuehl, a Democrat, was adopted by the legislature without any financing, but it was vetoed by Governor Schwarzenegger.¹⁴

In 2017 the Healthy California Act (SB-562), another version of single payer, was introduced by Sen. Ricardo Lara and Sen. Toni G. Atkins, both Democrats, and cleared the California Senate. But to the chagrin of its advocates, Democratic Assembly Speaker Anthony Rendon held it in the Assembly because of the absence of financing provisions.¹⁵ A report by the California Legislative Analyst's Office determined that it would cost \$200 billion in new taxes—an amount equal to all current state taxes.¹⁶ The bill's sponsors retained a group of financing experts, who recommended financing the measure with a gross receipts tax, an interesting new wrinkle on how to finance single payer.¹⁷ A gross receipts tax taxes each business a percentage of its gross revenues. California and many cities in the state already have small gross receipts taxes in place—for example, on insurers.

The challenge of financing single payer remains a daunting one, especially at the state level. Major hurdles stand in the way of obtaining federal waivers for incorporating Medicare, Medicaid, and self-insured employers into a

state-controlled program and in winning approval by policy makers and the state's voters of major increases in state taxes.

If current national Republican efforts to undermine the ACA succeed, the door to other options, including single payer, may reopen. However, if the ACA survives, preserving and building on it appears to be the more likely and viable course for California.

Public-Private Hybrids

While many reform advocates remained focused on employer mandates or single payer, other California policy makers and analysts developed alternatives that we refer to as public-private hybrids. These hybrids laid important groundwork for subsequent state and national efforts. They were supported, at different times, by some employers, unions, insurers, and consumer groups and by California's physician and hospital communities. Although they were the favorite of none, they were sometimes acceptable as a second choice to supporters and opponents of the private employer mandate or the public single payer.

MOVING BEYOND THE EMPLOYER MANDATE In 1989 Assemblyman Burt Margolin, a Democrat and chair of the Assembly Insurance Committee, introduced AB-328 as a companion measure to Speaker Brown's employer mandate.¹² The hybrid proposal foreshadowed major elements of President Clinton's Health Security Act and President Obama's ACA. It featured expanded Medicaid coverage for the low-income working poor, premium assistance subsidies for people lacking employment-sponsored coverage, insurance underwriting reforms that included guaranteed issue and renewal for people with preexisting conditions, and a state purchasing pool for individual purchasers and small employers. It added requirements that people have insurance or pay a percentage of their income for coverage and that all employers not covering their employees pay a percentage of payroll for their full-time-equivalent workers. It added public financing via the state's cigarette tax and an appropriation from the General Fund. Taken together, these provisions covered far more of California's uninsured than earlier employer mandate proposals.¹

Given the impossibility of securing a two-thirds vote in each legislative house (most Republicans remained firmly opposed), the measure employed a two-track strategy in which the legislation's proposed financing would be submitted to voters for ratification and approval.¹²

The proposal failed because of the anticipated veto of Republican Governor Deukmejian. But many of its components would eventually be

California seized multiple opportunities to tap federal funding or its own resources to enable incremental coverage expansions.

approved separately or incorporated into other coverage expansions. A state purchasing pool and underwriting reforms were enacted in 1992. (For more details on these reforms, see the "Incremental Reforms" section below.) Other features would emerge as core elements of the Schwarzenegger-Nunez proposal in California (discussed in the next section); the ACA; and, to a lesser extent, President Clinton's Health Security Act.

GETTING CLOSER TO THE AFFORDABLE CARE ACT In 2007 Governor Schwarzenegger offered a sweeping coverage expansion proposal, largely modeled on Massachusetts's health reform, known as Chapter 58, signed into law in 2006 by Republican Governor Mitt Romney. Assembly Speaker Fabian Nunez, a Democrat, led the effort in California. Similar to the Margolin proposal, this combined a Medicaid expansion with premium assistance and a state purchasing pool and included mandates on employers, employees, and individuals. As was the case with several prior legislative efforts, the need for a two-thirds vote forced supporters into a two-track strategy that included the submission of a financing package to voters.

The proposal had far stronger institutional support than the Margolin measure had enjoyed, offering centrist ideas that, it was hoped, would find traction on both ends of the political spectrum.¹⁸ However, it was strenuously opposed on the left by the California Nurses Association and other single-payer advocates, and on the right by California's employer community and the Republican Party. Many Senate Democrats offered only lukewarm support. After narrow approval in the Assembly, it died in the Senate Health Committee, chaired by single-payer leader Senator Kuehl.

The Schwarzenegger-Nunez proposal failed where Chapter 58 in Massachusetts, with nearly identical policy prescriptions, succeeded. Both efforts were led by moderate Republican gover-

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nors with Democratic support. Both states had Democratic legislative majorities with substantial histories of seeking coverage expansions. But California faced a much larger financial lift, as a result of its much greater percentage of uninsured people. Massachusetts also had high per capita Medicaid spending, which allowed it to secure a favorable Medicaid section 1115 waiver to finance its expansion. In contrast, California's Medicaid spending per subscriber was quite low, which gave it insufficient financial flexibility to use section 1115 waiver financing. The need to submit California's financing provisions to voters in November 2008 created an additional formidable challenge, especially given growing concerns about the nation's economy.

Both Governor Schwarzenegger and Speaker Nunez had worked hard to mobilize supporters and win converts. But neither had the clout of Senator Kennedy, who played a critical role in uniting health reformers in Massachusetts.

Still, the Schwarzenegger-Nunez effort, while unsuccessful, may have helped cement a growing policy consensus that a hybrid system built on a combination of mandates, Medicaid expansion, and subsidies was the most financially viable and the least disruptive path to major coverage increases. Following on Chapter 58 in Massachusetts, the Schwarzenegger-Nunez effort may also have furthered the perception that an individual mandate (historically favored by Republicans) was acceptable to Democrats as part of a major coverage expansion. This would make it easier for President Obama and Democratic congressional leaders to turn a growing policy consensus into political reality.

MANAGED COMPETITION: MERGING REGULATION AND COMPETITION In 1991, after the Margolin-led effort but well before the

Schwarzenegger-Nunez effort, John Garamendi, California's Democratic insurance commissioner, convened a task force to craft a new universal coverage proposal. With Governor Wilson certain to oppose major coverage legislation, and Democrats hoping for a presidential victory in 1992, Garamendi's focus was as much on Washington, D.C., as on California.^{19,20}

The plan drew on the managed competition framework developed by two professors, Alain Enthoven of Stanford University and Richard Kronick of the University of California San Diego.²¹ All Californians would be enrolled in basic health coverage through a purchasing cooperative that would feature multiple competing health plans offering comparable products to individual purchasers. People would pay extra for plans that were more expensive than the lowest-cost plan. Financing would be largely via an employer payroll tax, supplemented by payments from employees and other individuals based on their ability to pay.¹²

The plan took most employers out of the business of purchasing their employees' coverage, put almost all Californians into the same system of obtaining coverage, and envisioned the purchasing cooperative as fostering a competitive marketplace based on price and quality. The plan also combined the health components of auto insurance, workers' compensation, and group and individual health insurance into twenty-four-hour coverage, which would reduce insurance costs for employers and consumers.^{19,20}

The legislation embodying the Garamendi proposal called only for a commission to develop the proposal into a full legislative plan. Approved by the legislature, it was vetoed by Governor Wilson. But, as with the other hybrids, many of its constructs—especially the prominence given to purchasing cooperatives—would emerge as core components in the Health Security Act and reemerge, in more limited form, in the Schwarzenegger-Nunez proposal and the ACA.

INCREMENTAL REFORMS While failing to enact broad coverage expansion proposals, California seized multiple opportunities to tap federal funding or its own resources to enable a variety of incremental coverage expansions. Some of these occurred before, and some after, ACA enactment.

In the mid- and late 1980s, consistent with the new Medi-Cal matches available under federal legislation, California expanded eligibility for Medi-Cal to pregnant women and infants. The state approved legislation covering prenatal care and deliveries regardless of the immigration status of the expectant mother. Ultimately, California's coverage eligibility for pregnant women and infants reached 322 percent of poverty.

Today just 1.6 percent of California's births are uninsured.²²

In 1992 California adopted insurance reforms for small employers—including guaranteed issue and renewal and limits on preexisting condition exclusions and premiums—based on employees' health status. To enhance the purchasing power of small employers, it approved legislation that established a purchasing pool for employers of two to fifty people. Over the years, the pool served a variety of purposes and a number of different populations, including small employers, the medically uninsurable, children, and pregnant women. The purchasing pool for small employers closed in 2006 as a result of declining enrollment and participation of health plans, several of which experienced severe adverse selection.²³ But experience with a pool proved invaluable. Pool staff members played critical roles in developing the Schwarzenegger-Nunez proposal, and the expertise and experience gained in that effort proved highly beneficial in the creation and operation of Covered California, the state's ACA Marketplace.

In the mid-1990s California expanded eligibility for Medi-Cal to low-income working parents under the newly enacted section 1931b of the Social Security Act, a component of federal welfare reform legislation. This reached working parents with incomes of up to 100 percent of poverty.²⁴

After the passage of the federal Children's Health Insurance Program in 1997, California enacted Healthy Families (now subsumed into Medi-Cal) for children with family incomes up to 266 percent of poverty. Over a million children enrolled. By 2014 only 5 percent of California's children were uninsured.²⁵

From 1995 through 2015 California worked creatively with its counties and the federal government on a series of Medicaid section 1115 waivers to reduce Medi-Cal costs and expand coverage for the state's uninsured with incomes of up to 200 percent of poverty, at county option. In January 2014 nearly 700,000 low-income Californians covered through these waivers were seamlessly transitioned into Medi-Cal through the ACA's coverage expansion.²⁶

California also broke new ground in addressing the coverage needs of its 1.5 million uninsured and undocumented working families. In 2015, with uninsurance rates for undocumented residents at 55 percent,²⁷ the state extended full-scope Medi-Cal to an estimated 180,000 undocumented children up to age nineteen.²⁸ As a result, by late 2016 the share of uninsured California children had fallen to 3 percent—among the lowest percentages in the nation.²⁹

The ACA did not get California to universal coverage, but with some help from California's own resources, it is bringing California very close.

Lessons Learned

The story of California's effort to achieve major coverage expansions is one of persistence and policy ingenuity encountering daunting challenges. Along with those challenges came a series of lessons learned.

Money matters. Given the high percentage of uninsured Californians, financial hurdles were sizable. Any major coverage expansion would require public funding that was unattainable both economically, and politically.

Process matters. Two-thirds legislative vote requirements and Proposition 4 spending limits were an ever-present constraint, forcing state policy makers into convoluted two-step legislative and ballot initiative solutions.

Stakeholder opposition matters. California's large- and small-business communities—including major agricultural interests—opposed almost all employer mandate initiatives with effective “job killer” campaigns. Insurer and provider communities often joined with employers to defeat single-payer efforts. While the health care industry supported coverage for the uninsured, it differed sharply with consumer advocates on the types of reforms that each found acceptable.

Gubernatorial leadership matters. In thirty-one of the fifty-two years since 1966, California has had Republican governors, and all but Governor Schwarzenegger opposed major coverage expansions. Neither of the two Democratic governors—Gray Davis (in office for five years) and Jerry Brown (in office twice for a total of sixteen years thus far)—ever put major coverage expansions high on their agendas. More consistent and persistent gubernatorial leadership might have produced greater progress.

Party differences and partisanship matter.

Many Republicans united against major reform efforts. Democrats struggled with the sharp differences between single-payer advocates and those willing to accept less comprehensive reforms.

Viewed through longer lenses, what California produced in policy expertise mattered, in building the evidence base and consensus for effective policy solutions. California stakeholders and policy makers—supported by California’s large health care foundations—worked through the complexities of employer and individual mandates, mastered the intricacies of Medicaid waivers, implemented critical insurance reforms, created hybrid models that merged elements of multiple approaches, and developed expertise in purchasing pools that enabled the state to operate one of the nation’s most effective ACA Marketplaces.

And in the end, California’s effort to approach universal coverage got what the state needed the most, and what it could not produce by itself: the financing—via Medi-Cal expansion and Marketplace subsidies—to ensure the affordability of coverage for a large portion of those Californians without employer-provided insurance. In short, the ACA. The nationwide law did not get California to universal coverage, but with some help from California’s own resources, it is bringing California very close.

The numbers are compelling. From the mid-1970s until 2014, California’s uninsurance rates

grew steadily,^{1,2} while in three years under the ACA, those rates fell from about 17 percent (7 million nonelderly uninsured) to roughly 7 percent (2.5 to 3 million uninsured).³⁰ About 5.5 million Californians are newly enrolled in Medi-Cal and about 1.3 million in Covered California.³¹ The percentages of underinsured people fell at least as dramatically.³²

The numbers are even more striking when we consider that, based on simulations, of the three million nonelderly Californians who remain uninsured, close to 60 percent are not eligible for Covered California or Medi-Cal because of their immigration status.³³ These people were not covered under the ACA. While some California legislators wanted to offer coverage to this group, the state Legislative Analyst’s Office estimated that the new net cost of doing so would be approximately \$3 billion in year one, and could grow thereafter. It was not included in the most recent California budget.³⁴

Conclusion

California continues to explore how to cover those who remain uninsured while preserving the gains of the ACA. Additionally, it needs to better control costs, improve the affordability of Marketplace coverage, and improve the quality and efficacy of treatments. These items remain high on California’s policy agenda. ■

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By Richard M. Scheffler, Daniel R. Arnold, and Christopher M. Whaley

Consolidation Trends In California's Health Care System: Impacts On ACA Premiums And Outpatient Visit Prices

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ABSTRACT California has heavily concentrated hospital, physician, and health insurance markets, but their current structure and functioning is not well understood. We assessed consolidation trends and performed an analysis of “hot spots”—markets that potentially warrant concern and scrutiny by regulators in terms of both horizontal concentration (such as hospital-hospital mergers) and vertical integration (hospitals' acquisition of physician practices). In 2016, seven counties were high on all six measures used in our hot-spot analysis (four horizontal concentration and two vertical integration measures), and five counties were high on five. The percentage of physicians in practices owned by a hospital increased from about 25 percent in 2010 to more than 40 percent in 2016. The estimated impact of the increase in vertical integration from 2013 to 2016 in highly concentrated hospital markets was found to be associated with a 12 percent increase in Marketplace premiums. For physician outpatient services, the increase in vertical integration was also associated with a 9 percent increase in specialist prices and a 5 percent increase in primary care prices. Legislative proposals, actions by the state's attorney general, and other regulatory changes are suggested.

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Increases in the market concentration of health care providers and insurers have been examined nationally.¹⁻³ Studies suggest that increases in market concentration are associated with increases in prices and premiums.²⁻¹² However, we also know that the local markets for health care differ dramatically. At the state level, laws and regulations, as well as the mix of providers and insurers, make markets in each state vastly different.

The health care system in California has several characteristics that distinguish it from the rest of the country.¹³ The state contains some of the nation's most densely populated urban areas, but it is mostly rural. Its health care system has a high level of integration and managed care. More than 60 percent of care is provided through a fully or highly integrated care system.¹⁴⁻¹⁶ The

supply of doctors and nurses in California is slightly above national averages. For example, California has 380 physicians per 100,000 population, whereas the US has 295 per 100,000.¹⁷ Although per capita health care spending in California was the fifteenth-lowest in the US in 2014,¹⁸ it has been increasing—in large part because of the successful implementation of the Affordable Care Act (ACA) in California.¹⁵

This article explores three features of California health care markets. First, we measure trends from 2010 to 2016 in the horizontal concentration of insurers and providers (such as hospital-hospital mergers and acquisitions) and vertical integration—particularly, ownership of physician practices by hospitals. Second, we estimate the association of market concentration and vertical integration with ACA Marketplace premi-

ums and outpatient office visit prices. Finally, we discuss policy implications for California's Office of the Attorney General, the legislature, and other regulators in the state.

Study Data And Methods

DEFINING MARKET CONCENTRATION AND MARKET SHARE

We measured market concentration by computing Herfindahl-Hirschman Indices (HHIs) for insurance, hospitals, primary care physicians, and specialist physicians in California. For each measure, we calculated these HHIs by summing the squared market shares of firms. For example, if a market included two firms, one with 80 percent of the market and the other with 20 percent, the HHI of the market would be 6,800 (or 80^2 plus 20^2). The Horizontal Merger Guidelines of the Department of Justice (DOJ) and Federal Trade Commission (FTC) consider markets with HHIs below 1,500 to be unconcentrated, those with HHIs of 1,500–2,500 to be moderately concentrated, and those with HHIs above 2,500 to be highly concentrated.¹⁹ In the context of mergers, the DOJ/FTC guidelines state, “Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power.”¹⁹ Both mergers in moderately concentrated markets that would lead to an increase in the HHI of more than 100 points and mergers in highly concentrated markets resulting in an increase in the HHI of 100–200 points “potentially raise significant competitive concerns and often warrant scrutiny,” according to the guidelines.¹⁹

Our market shares for hospitals included only short-term general hospitals.²⁰ Additionally, we treated hospital systems as a single firm because they bargain with insurers as a single unit.²¹ We calculated the market share of hospitals and health insurers using inpatient admissions and commercial enrollment (for both fully and self-insured employer groups), respectively. For specialist and primary care groups, we calculated market shares using the number of physicians in each group. Physician organizations owned by a group medical practice, hospital, or health care system (which always included at least one hospital) were treated as a single firm. Our measure of specialist market share included four specialties—cardiology, hematology/oncology, orthopedics, and radiology. These four specialties were chosen because the sample sizes were sufficiently large (at least 10,000 physicians nationally) in our physician data source. Data sources used to calculate these measures included the American Hospital Association (AHA) Annual Survey Database, for hospitals; the Man-

aged Market Surveyor provided by Decision Resources Group (formerly HealthLeaders-Interstudy), for health insurers; and the SK&A Office Based Physicians Database provided by QuintilesIMS, for physicians (this data source is now known as IQVIA). We measured the level of vertical integration as the percentage of physicians in practices owned by hospitals.²² We chose to use the SK&A database instead of the AHA database to measure the level of vertical integration because the former provides a more conservative estimate (by 4 percentage points) of the number of physicians in hospital-owned practices, according to a recent study.²³

ANALYSIS Using multivariate linear regression, we estimated the association between Marketplace premiums and our measures of horizontal concentration and vertical integration in the market, using data for 2014–17 on premiums from the Covered California website.²⁴ We analyzed the benchmark premiums—those for the second-lowest-cost silver plan in each rating area—for a forty-year-old person. Rating areas are counties or combinations of counties in California through which Covered California sells health insurance. There were nineteen rating areas established by the California State Legislature in September 2013. Because the premiums available were at the rating area level, we correlated them with rating area-level HHIs (that is, we used rating area-level market shares in HHI calculations) rather than county-level HHIs.

The dependent variable in our model was the benchmark premium for a forty-year-old person in a rating area for a particular year. The independent variables in the model were the natural log of hospital HHI (mean centered), the percentage of all physicians in practices owned by hospitals (mean centered), an interaction term between these two measures, the natural log of insurer HHI, the natural log of the average weekly wage in rating areas, and year dummy variables to control for secular trends. All market concentration measures were lagged by one year because Marketplace premiums are set prospectively. There were seventy-six observations in the regression (nineteen rating areas multiplied by four years, 2014–17).

In separate regressions, we also estimated the association between market concentration and physician prices, separately for primary care physicians and specialists. The physician prices we analyzed came from medical claims data for 2011–16 collected from self-insured employers from multiple industries, including professional services, retail, local government, technology, and manufacturing. The database we used contained 70.9 million California claims for 2011–16 and included data for every county in the state.

From the claims data, we identified all procedures performed in an office-based setting by primary care physicians and specialists. For each procedure, identified by *Current Procedural Terminology* (CPT) codes, we calculated the mean price per procedure in each county and year. These prices represented the market-level prices used as the dependent variable in our model.

We then examined the association between market concentration and office visit prices using the log-transformed county-level price for each procedure and year, which allows for a percentage interpretation of our results. To measure market concentration, we used the log-transformed primary care physician or specialist HHI, the log-transformed insurer HHI, and the percentage of physicians (either primary care or specialists) in practices owned by a hospital. All market concentration measures were lagged by one year. We included fixed effects for CPT code, county, and year.

LIMITATIONS The study had several limitations. First, we could not rule out potential endogeneity or omitted variable bias between concentration/integration and prices/premiums. While our price regressions used CPT code, county, and year fixed effects to ameliorate concerns of omitted variable bias, our Marketplace premium model included year fixed effects only. And while lagging our concentration measures by a year should have helped reduce the concern of endogeneity, it did not eliminate the possibility.

Second, we report results for a single state. As

we stated above, California's health care market differs from those of other states in a number of ways. Hence, our results might not be generalizable to other states. Finally, we did not measure the effects of integration on quality and utilization.²⁵ If care were more expensive while also more comprehensive, overall utilization and spending could decrease as prices increase.

Study Results

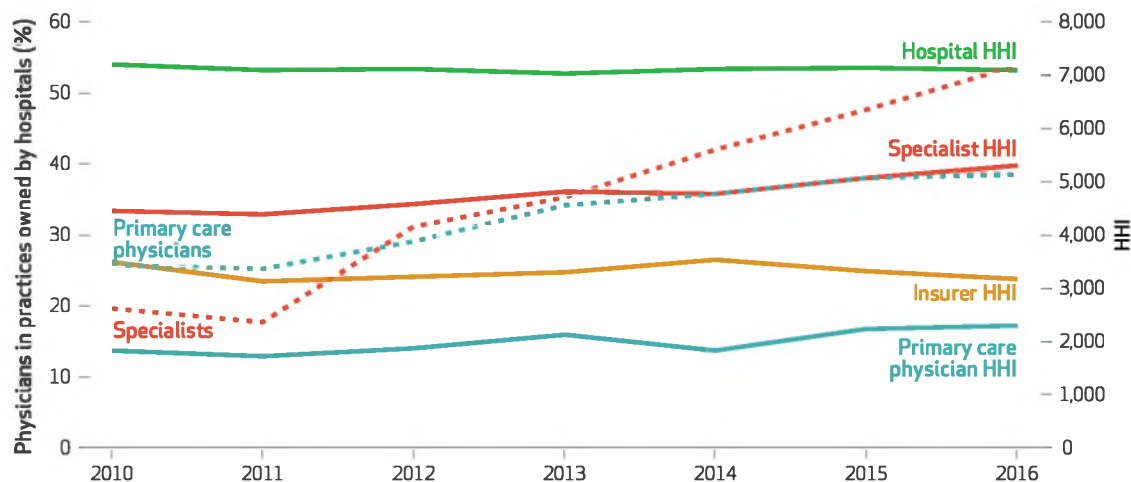
Hospitals in the forty-one counties with populations of less than 500,000 were highly concentrated during the entire study period (exhibit 1), with an average HHI of more than 7,000. (See online appendix figures A2–A4 for results for other counties.)²⁶ The insurer market was also highly concentrated, with an average HHI of more than 3,000 during the study period. For physician markets, the specialist HHI was more than 5,000, while the primary care physician HHI was just under 2,300 (exhibit 1).

There was a dramatic increase in vertical integration, with the percentage of physicians in practices owned by hospitals increasing from about 25 percent in 2010 to more than 40 percent by 2016 (data not shown). The percentage of primary care physicians in practices owned by hospitals increased from 26 percent to 38 percent in this time period, while the percentage of specialists in such practices increased from 20 percent to 54 percent (exhibit 1).

We also examined the average trends in hori-

EXHIBIT 1

Horizontal concentration and vertical integration in selected California counties, 2010–16



SOURCE Authors' analysis of data for health insurers from the Managed Market Surveyor provided by Decision Resources Group (formerly HealthLeaders-Interstudy), for hospitals from the American Hospital Association Annual Survey Database, and for physicians from the SK&A Office Based Physicians Database provided by QuintilesIMS. **NOTES** Herfindahl-Hirschman Indices (HHIs) indicate market concentration and are explained in the text. The figure shows unweighted data for forty-one California counties with populations of less than 500,000. Specialists include physicians in the fields of cardiology, oncology, radiology, and orthopedics. The dashed lines refer to percentages of primary care physicians and specialists in practices owned by hospitals.

zonal concentration and vertical integration for all counties, calculated at the county level and weighted by the population of each county to produce a statewide weighted average (appendix figure A1).²⁶ The population-weighted HHI for insurers was the highest among all of the horizontal measures (about 2,400), with virtually no change over the study period. The population-weighted HHI for hospitals was slightly lower and also showed little change. Most of the hospital and insurer consolidation in California took place before our study period.²⁷ The population-weighted HHIs for specialists and primary care physicians increased by 17 percent and 19 percent, respectively, in the period but remained below 1,500. The statewide average level of vertical integration, as measured by the percentages of physicians in practices owned by hospitals, increased at a rate similar to that for the forty-one counties with populations of less than 500,000.

To analyze levels of and changes in market concentration, we constructed a map of “hot spots”—markets that potentially warrant concern and scrutiny by regulators in terms of both

horizontal concentration and vertical integration (exhibit 2). It should be noted that our vertical integration threshold is not codified in the DOJ/FTC guidelines, as the horizontal concentration threshold is.

Only two counties had a market concentration score (or “hot spot rating”) of 6 in 2010. This increased to seven counties in 2016 (see appendix table A1 for a list of all counties and appendix figure A5 for a map of counties by name).²⁶ Similarly, only two counties had a score of 5 in 2010, compared to five counties in 2016.

We measured increases in the horizontal concentration and vertical integration scores. (Appendix figure A6 summarizes and displays the changes in our hot-spot map.)²⁶ For horizontal concentration, an increase in the score was recorded if the county had an HHI above 2,500 and a change in HHI that was greater than 200 points—in line with the DOJ/FTC Horizontal Merger Guidelines. For vertical integration, an increase in the score was recorded if the county went from below the median value in 2010 to above it in 2016.²⁸ During this period, out of a maximum score of 6, the highest score was 4. This indicates that the county’s horizontal concentration or level of vertical integration increased on four of the six measures.

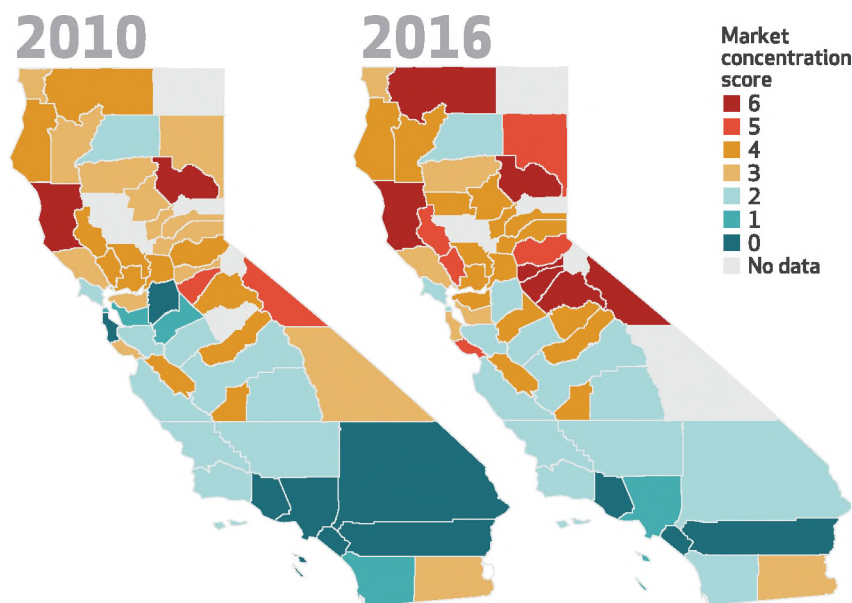
Four counties—Amador, El Dorado, Santa Cruz, and Siskiyou—each had a score of 4, which indicates that they had had the greatest change in terms of our six measures (appendix figure A6).²⁶ Of additional concern are the six counties—Calaveras, Humboldt, Kings, San Mateo, Stanislaus, and Tuolumne—that had a score of 3.

Appendix table A2²⁶ reports the results of our analysis of the relationship between benchmark Marketplace premiums and our measures of horizontal concentration and vertical integration. Our results suggest that hospital concentration was positively associated with Marketplace premiums. A 10 percent increase in the market concentration of hospitals was associated with a 1.8 percent increase in premiums; this is expressed as an elasticity of 0.182. Our measure of insurer concentration was also positively associated with premiums. The elasticity of 0.204 indicates that a 10 percent increase in insurer concentration was associated with a 2.0 percent increase in premiums. Importantly, the interaction term between hospital concentration and the level of vertical integration was positive and significant ($p < 0.05$). This means that the association between hospital concentration and premiums was larger when a high percentage of the physicians in a rating area were working in practices owned by hospitals.

The association between hospital concentra-

EXHIBIT 2

Horizontal concentration and vertical integration scores for selected California counties, 2010 and 2016



SOURCE Authors’ analysis of data sources provided in exhibit 1. **NOTES** Each county has a market concentration score based on six measures: the average Herfindahl-Hirschman Indices (HHIs) (explained in the text) for hospitals, insurers, primary care physicians, and specialists; and the percentages of primary care physicians and specialists (explained in the notes to exhibit 1) working in practices owned by hospitals. Higher index values indicate greater concentration. Counties are assigned one point for each HHI greater than 2,500 and for the percentage of primary care and specialist ownership greater than 33.23 percent and 32.35 percent, respectively (the medians for the period 2010–16). Higher scores indicate greater market concentration. The scores can also be interpreted as a thermal gradient, with the cool colors indicating counties that warrant lower concern and scrutiny by regulators and the hotter colors indicating counties that warrant increasingly more.

tion, the level of vertical integration, and Marketplace premiums is highlighted in exhibit 3. At a hospital HHI of 3,500, the predicted average monthly Marketplace premium for a forty-year-old person was about \$375 in 2017. When the hospital HHI increased to 5,000, the predicted premium rose to about \$400 (a 7 percent increase) if the percentage of physicians in practices owned by hospitals was 35 percent (the sample mean). If this percentage was 55 percent (the sample maximum), the predicted average monthly premium increased by even more—to about \$419 (a 12 percent increase). This suggests that the association between hospital HHI and premiums varies with the percentage of physicians in practices owned by hospitals (an interaction effect) and that the impact of hospital concentration on premiums becomes larger as vertical integration increases.

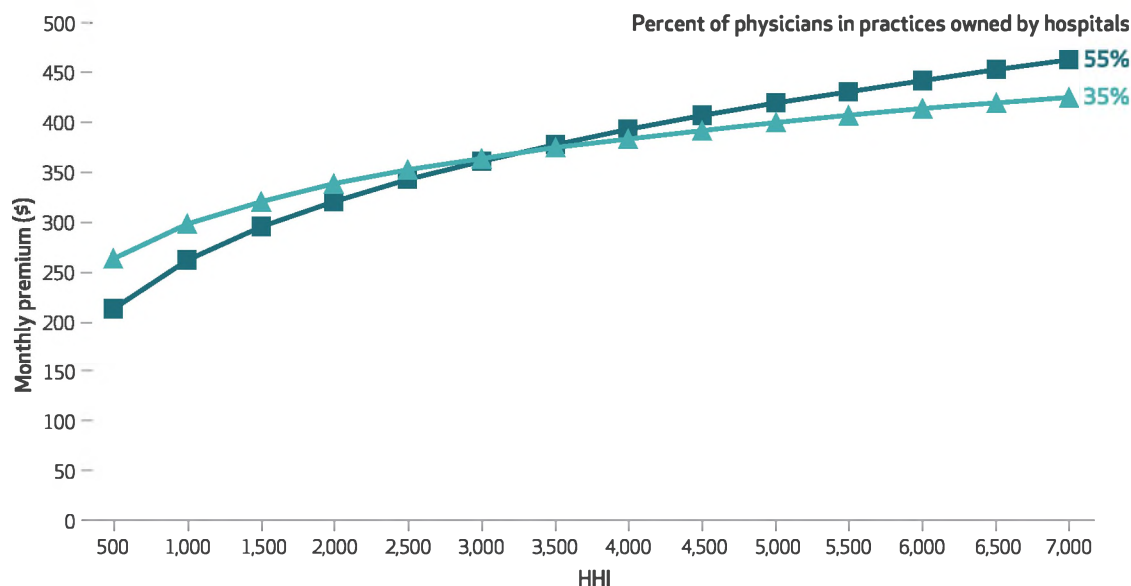
Turning to the association between market concentration and physician prices, we found that higher levels of insurer concentration were associated with lower primary care prices (see appendix table A3 for the regression output).²⁶ Primary care physician concentration, however, was positively associated with prices. Most important, we found a positive and highly significant ($p < 0.01$) relationship between the level of

vertical integration and primary care prices. Our results for specialist prices were somewhat different. We found no association between the concentration of insurers or specialists and specialist prices. However, there was again a positive and highly significant ($p < 0.01$) relationship between the level of vertical integration and specialist prices.

The positive relationship we found between vertical integration and physician prices aligns with the findings of other studies.^{3,4} The magnitude of its relationship is shown in exhibit 4. When the percentage of specialists in practices owned by hospitals was 35 percent (the county-level sample mean over our study period), the predicted specialist price in 2017 was about \$110. When the percentage increased to 100 percent (the county-level sample maximum over our study period), the predicted specialist price increased to about \$120—a 9 percent increase. When the percentage of primary care physicians in practices owned by hospitals increased from 33 percent (the county-level sample mean over our study period) to 100 percent (the county-level sample maximum), the predicted primary care price in 2017 increased from about \$80 to \$84—a 5 percent increase.

EXHIBIT 3

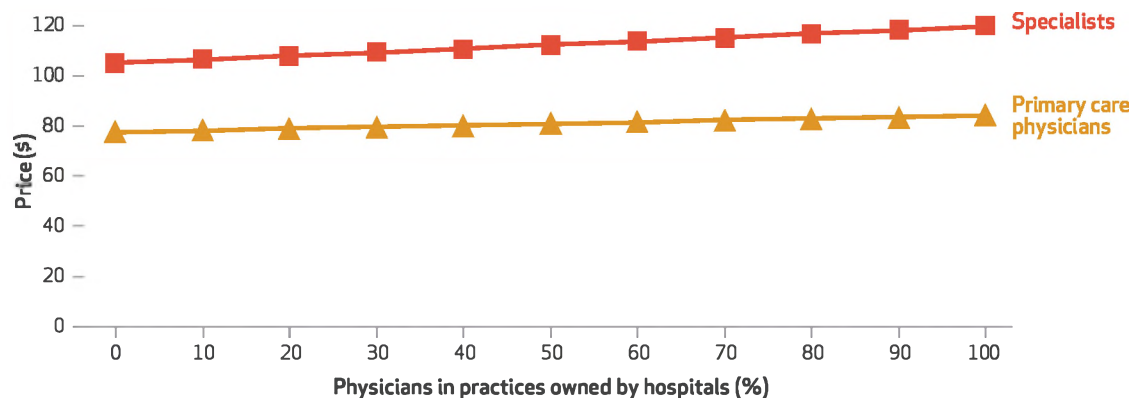
Predicted monthly benchmark premiums in California, by hospital market concentration, and physicians in practices owned by hospitals (maximum and mean), 2017



SOURCE For health insurers, authors' analysis of data sources provided in exhibit 1; for premiums, authors' analysis of data from Covered California. Data and research [Internet]. Sacramento (CA): Covered California; [cited 2018 Aug 21]. Available from: <http://hbex.coveredca.com/data-research/>. **NOTES** The benchmark premium is the premium for the second-lowest-cost silver plan in each rating area (explained in the text) for a forty-year-old person. HHI is Herfindahl-Hirschman Index (explained in the text). The regression coefficients used to produce this exhibit are in appendix table A2 (see note 28 in text). All continuous independent variables not shown in the exhibit were held at their sample means, and the year dummy variable was set to 2017.

EXHIBIT 4

Predicted outpatient office visit prices for primary care and specialist physicians, by percent of physicians in practices owned by hospitals, 2016



SOURCE For health insurers, authors' analysis of data sources provided in exhibit 1; and for prices, data obtained from a large group of self-insured employers. **NOTES** The regression coefficients used to produce this exhibit are presented in appendix table A3 (see note 28 in text). All continuous independent variables not shown in the exhibit were held at their sample means, the year dummy variable was set to 2016, and the county fixed effect was set to San Francisco.

Discussion

The most dramatic changes in hospital, physician, and insurer markets in California from 2010 to 2016 are seen most clearly in our measures of vertical integration—the percentages of primary care physicians and specialists in practices owned by hospitals. In 2016 more than 40 percent of physicians worked for practices owned by hospitals. Hospitals' desire to increase referrals has been advanced by researchers as a plausible explanation for why they pursue acquiring physician practices.^{3,29,30} Additionally, physicians working in a hospital-owned practice can add a hospital facility fee, which raises prices.³¹ Although there was little change in the market concentration of insurers and hospitals during our study period, both were highly concentrated according to the DOJ/FTC Horizontal Merger Guidelines and warrant high levels of concern and scrutiny by regulators. Any further consolidation, either horizontal or vertical, may need to be carefully examined.

There was significant variation in market concentration across the fifty-eight counties in California. Our hot-spot analysis shows that certain counties were high on all six measures of horizontal concentration and vertical integration. Moreover, some of these counties had an HHI increase of more than 200, which signals the need for regulatory scrutiny. This information can be used by California's Office of the Attorney General, the legislature, and other regulators to examine further consolidations and other actions that might increase market concentration or vertical integration.

An important result of our analysis is the com-

binated effect of hospital concentration and vertical integration on Marketplace premiums. Hospital concentration was positively associated with premiums, and the impact of hospital concentration on premiums became larger as vertical integration increased.

Our measure of vertical integration, the percentage of physicians in practices owned by hospitals, was positively and significantly correlated with primary care and specialty physician prices. This suggests that increased and special attention should be given to the acquisition of physician practices by hospitals in California.

Such acquisitions are not California-specific: From 2010 to 2016 the national share of office-based physicians who worked in organizations owned by hospitals increased from 30 percent to 48 percent.³² Other states have already taken regulatory actions to address this trend. One such action is taking place in Washington State, where the State Attorney General's office filed suit against Franciscan Health System to unwind acquisitions of and affiliations with physician organizations that allegedly violated antitrust laws and harmed consumers via anticompetitive health care prices.³³ The results of the St. Luke's case in Idaho are also relevant.³⁴ In this case, the judge took into account the benefits of vertical integration but found that the hospital's purchase of physician practices would give the hospital too much market power. Instead of allowing the hospital to purchase practices, he suggested that the benefits of vertical integration could be achieved by contracting, which would give the other hospitals in the area the ability to work with these physicians as well.

What can be done in the California legislature to deal with the effects of market concentration and integration on health care prices and premiums? Three important bills have been introduced in the legislature but have not yet passed. The first is SB-932 (2016), which proposes that any merger or consolidation would need to be approved by the director of the California Department of Managed Health Care and involve public hearings to ensure that the change would not have adverse effects on competition, health care costs, access, or quality of care in the state. SB-932 would also prevent hospitals from making anticompetitive demands when negotiating with health plans and insurers.³⁵ More recently, AB-595 (2017) would similarly require the director to review and approve health care plan or provider mergers based on whether they would have adverse effects on competition, health care costs, access, or quality of care.³⁶ Finally, SB-538 (2017) focuses on preventing anticompetitive practices among large hospital chains by instituting new rules for how hospital systems can contract with health plans, such as prohibiting hospital systems from requiring plans to include all of a system's hospitals in a contract.³⁷

California's health care markets are at a pivotal point. Rapid integration and consolidation may have significant benefits. Care coordination and quality improvement are possible, but so are significant increases in the cost of care.³⁸ There is also a large variation in quality across California, as measured by the California Regional Health Care Cost and Quality Atlas.³⁹ It would be very

useful to understand the relationship between quality and market concentration. Evidence provided by our study sheds light on what has been happening in California's health care markets. Our work highlights areas that should be of concern to regulators, policy makers, payers, and consumers.

Conclusion

Three aspects of hospitals' acquisition of physician practices in California and across the country are notable. First is the horizontal aspect of this consolidation, which needs to be scrutinized. For example, if a hospital system controls the market for orthopedists, it can raise prices for orthopedic surgery. Second is the cross-market power in hospital and physician service markets. For example, if a dominant hospital system acquires enough physician practices in a specialty, it can add significantly to its market power. Finally, the key and perhaps most important competitive threat is the ability of the acquiring hospital system to either foreclose rivals or significantly increase their costs. For example, lack of access to the patients of an acquired primary care practice by a rival hospital would be a vertical restraint that would limit competition.

The potential impact of hospitals' acquisition of physician practices calls for careful and detailed examination.⁴⁰ Improved economic and legal theories need development so that these acquisitions' potential efficiency and quality improvement can be weighed against the costs.^{41,42} ■

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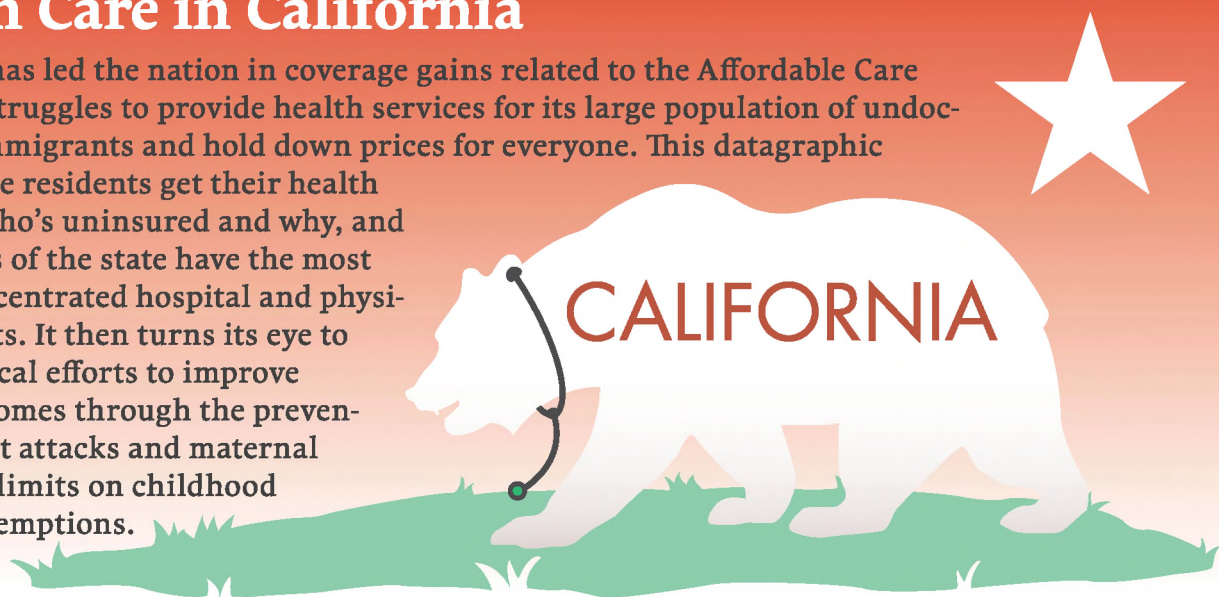
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DATAGRAPHIC

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Health Care in California

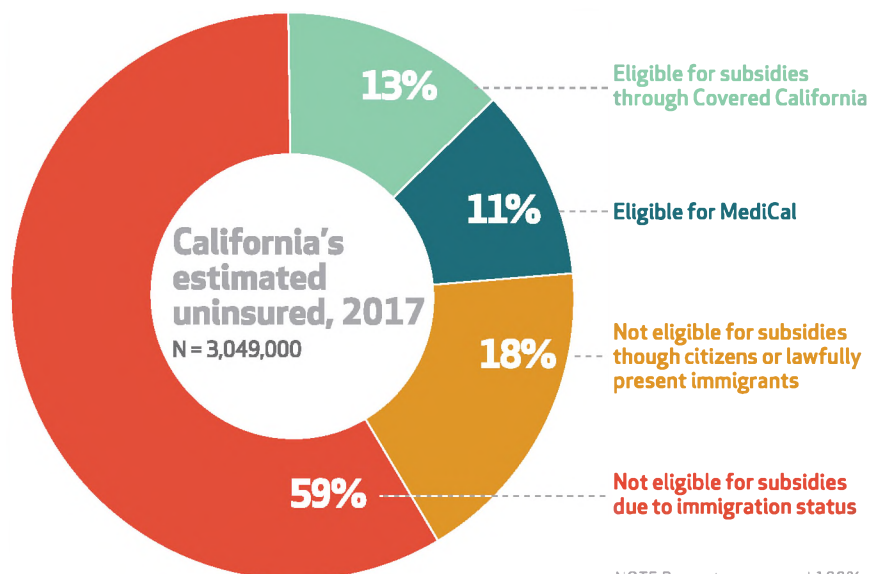
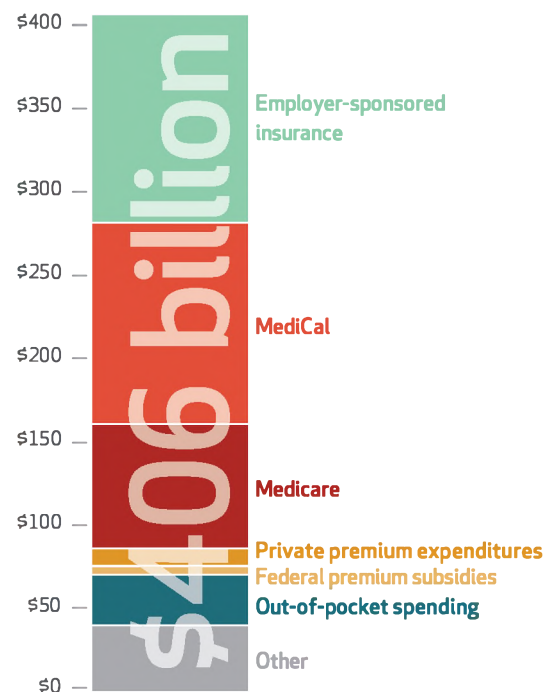
California has led the nation in coverage gains related to the Affordable Care Act, but it struggles to provide health services for its large population of undocumented immigrants and hold down prices for everyone. This datagraphic shows where residents get their health coverage, who's uninsured and why, and which areas of the state have the most heavily concentrated hospital and physician markets. It then turns its eye to state and local efforts to improve health outcomes through the prevention of heart attacks and maternal deaths and limits on childhood vaccines exemptions.



HEALTH CARE SPENDING AND THE UNINSURED

About 3 million Californians under age 65, or 7 percent of the population, lacked insurance in 2017. Over half of these were ineligible because they were undocumented immigrants. Overall, health care spending in California totals about \$400 billion in 2017 with over half coming from Medicare, Medicaid, and other public sources. Employer-sponsored coverage accounted for the largest share of private health care spending.

California's health care expenditures by source of funds

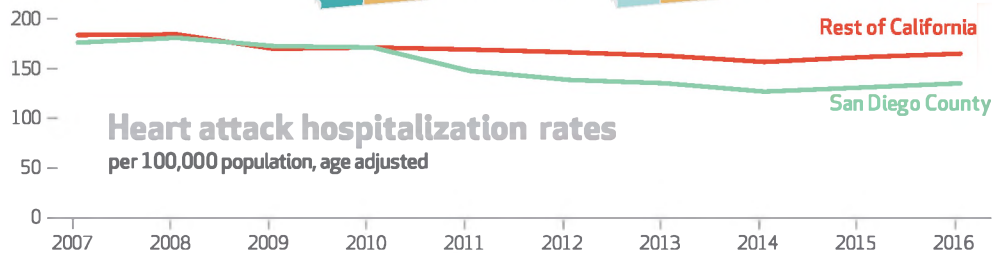
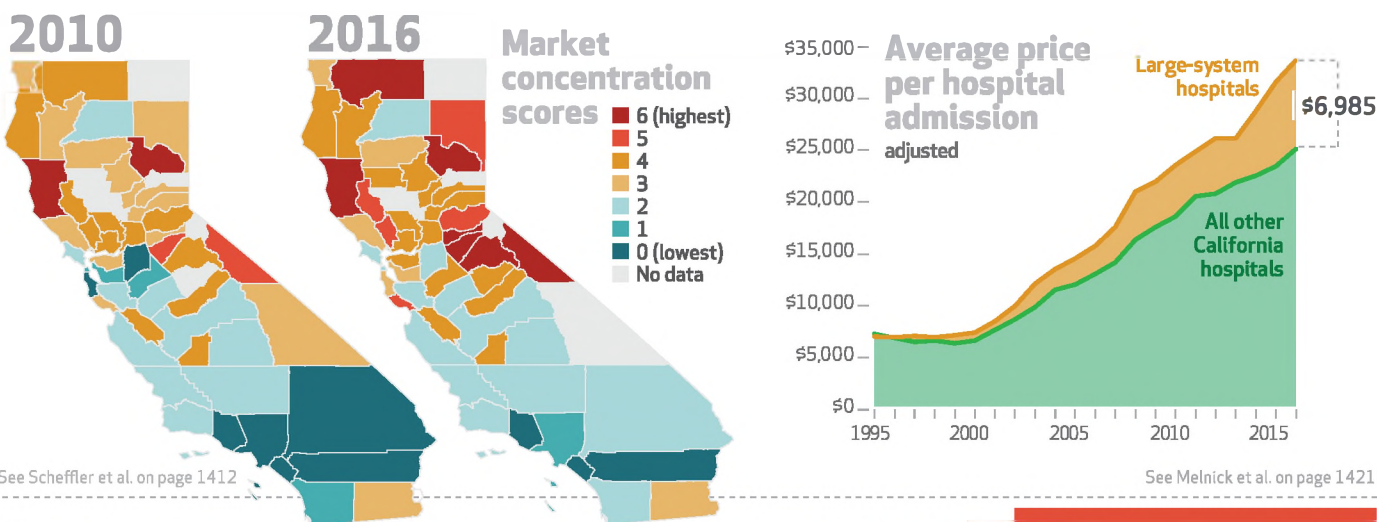


See Bindman et al. on pages 1369-70

NOTE Percentages exceed 100% because of rounding.

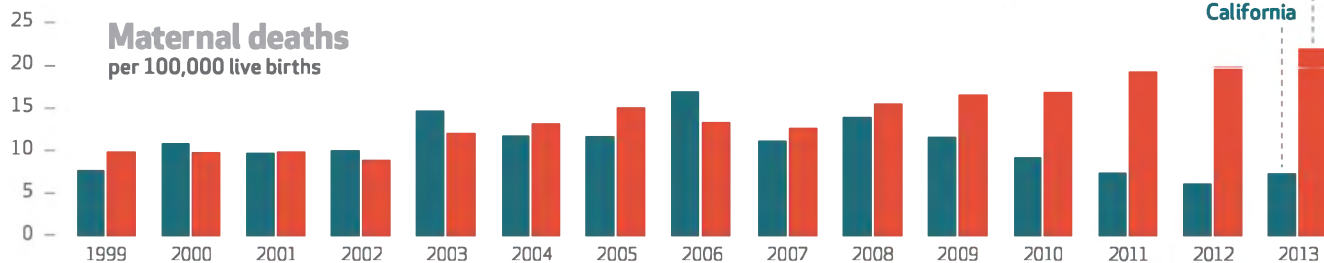
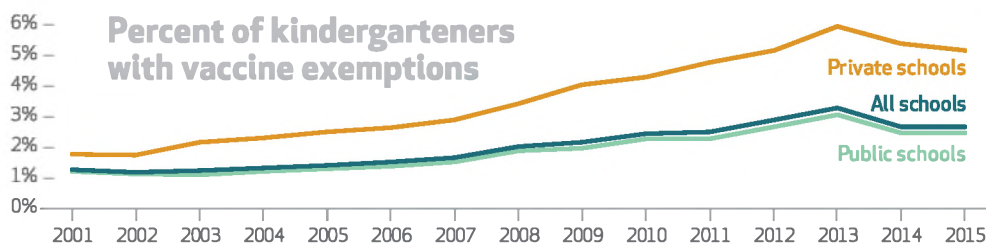
THE LEGACY OF CONSOLIDATION: RISING PRICES

The consolidation of hospitals and physician practices in California has made it difficult for the state to control rising health care costs. For instance, growth in the price per admission for hospitals in the two largest multihospital systems far surpassed that for all other hospitals over the past two decades. Similarly, a rising trend of hospitals purchasing physician practices was associated with higher ACA premiums and increases in specialty and primary care prices. Between 2010 and 2016, a growing number of counties had high "concentration scores" on an index that reflects various measures of hospital, physician, and insurance concentration.



IMPROVEMENTS IN HEALTH INDICATORS

Statewide and local initiatives have helped improve various health outcomes in California. In San Diego, a public-private partnership that disseminates evidence-based practices to improve hypertension, lipid, and blood sugar control was associated with a lowering of hospitalizations due to heart attack. Vaccine exemptions for school children declined—reversing a decade-long increase—after the state began requiring that health care providers counsel parents seeking exemptions. Meanwhile, across California, maternal mortality rates began to fall after the state launched a series of data-driven quality improvement projects.



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Impacts of the Elimination of the ACA's Individual Health Insurance Mandate Penalty on the Nongroup Market in New York State

Preethi Rao, Christine Eibner, Sarah A. Nowak



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Preface

In this report, the authors use RAND's COMPARE microsimulation model to estimate the effects of the elimination of the Affordable Care Act's individual mandate penalty in New York State. New York's health care landscape is different than most states', in that New York has community rating on its nongroup market and opted to offer a Basic Health Program to individuals who would otherwise be eligible for subsidies on the nongroup market.

The research described in this report was performed under a subcontract to Wakely Consulting Group from a health insurance provider, and the publication was prepared with internal RAND funding. This research was conducted within RAND Health, a division of the RAND Corporation. A profile of RAND Health, abstracts of its publications, and ordering information can be found at www.rand.org/health.

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Summary

In December 2017, the Tax Cuts and Jobs Act was signed into law, eliminating the penalty associated with the Patient Protection and Affordable Care Act's (ACA's) individual health insurance mandate, effective January 1, 2019. The elimination of the individual mandate penalty is likely to have unique impacts on the nongroup insurance market in the state of New York. New York is different from other states in both its regulation of the nongroup market and in its comprehensive public coverage programs serving low-income individuals. In particular, New York has full community rating on the nongroup market and is one of two states to offer a Basic Health Program, called the Essential Plan (EP) in New York, to certain qualifying low-income individuals. We estimate that, for 2019, elimination of the individual mandate penalty in New York will lead to a 23–25 percent increase in premiums in the nongroup market, and a 37 percent reduction in enrollment in the nongroup market. Due to New York's full community rating and existence of the EP, its nongroup market is particularly susceptible to adverse selection when the individual mandate penalty is removed. We predict that, among the unsubsidized population, young, healthy individuals will leave the nongroup market in much higher numbers than their older, sicker counterparts, leading to the steep increases in premiums. Additionally, we find that subsidized individuals, including the young and healthy, will remain enrolled at high rates. Relative to other states, New York's subsidized population is small; many EP enrollees would be eligible for subsidized nongroup coverage in most other states. To understand the unique impacts of the EP in New York, we also consider a scenario in which both the individual mandate penalty and the EP are eliminated. This scenario allows us to determine the effect of eliminating the mandate penalty, if the EP were not contributing to New York's susceptibility to adverse selection. In this scenario, we find that premiums increase by 7–10 percent relative to the ACA being in full effect, which suggests that the existence of the EP has important implications for how elimination of the individual mandate penalty in New York affects its nongroup risk pool. Elimination of the EP in addition to the individual mandate leads to smaller increases in premiums relative to elimination of the individual mandate penalty alone.

Acknowledgments

We gratefully acknowledge Jodi Liu, Lynn Blewett, and Carter Price, who provided thoughtful reviews of this analysis.

Abbreviations

ACA	Affordable Care Act
APTC	Advance Premium Tax Credit
CBO	Congressional Budget Office
CHIP	Children's Health Insurance Program
CSR	cost-sharing reduction
EP	Essential Plan
FPL	federal poverty level

Introduction

In December 2017, the Tax Cuts and Jobs Act (P.L. 115-97) was signed into law. The act eliminated the penalty associated with the Patient Protection and Affordable Care Act's (ACA's) (P.L. 111-148) individual health insurance mandate, effective January 1, 2019. The Congressional Budget Office (CBO) estimated that, at the national level, eliminating the individual mandate penalty would reduce health insurance enrollment for those age 65 and younger by 7 million in 2020 and 13 million by 2027, and increase premiums in the nongroup market by around 10 percent (CBO, 2017). Our analysis uses the RAND COMPARE microsimulation model to estimate the impacts of the removal of the ACA's individual mandate penalty on New York's nongroup market. We define the nongroup market as including all ACA-compliant plans sold both on and off New York State of Health, which is New York's health insurance marketplace. Together, ACA-compliant marketplace and non-marketplace plans comprise a single insurance risk pool, and are hence jointly affected by adverse selection, which occurs when younger and healthier people leave the market, increasing premiums for remaining enrollees.

The elimination of the individual mandate penalty is likely to have unique impacts on New York. This is because New York is different from other states both in its regulation of the nongroup market and in its comprehensive public coverage programs serving low-income individuals. Most importantly, New York has full community rating, requiring insurers to charge all adults¹ purchasing nongroup plans the same premiums regardless of age or tobacco use status (Centers for Medicare and Medicaid Services, Center for Consumer Information and Insurance Oversight, 2017). Most other states use the maximum rate bands allowed under the ACA—3:1 for age rating and 1.5:1 for tobacco use. In 2017, New York had an estimated 243,000 nongroup enrollees in the marketplace, 59 percent (about 143,000) of whom received Advance Premium Tax Credits (APTCs) (NY State of Health, 2017a). Total nongroup enrollment in New York, including both marketplace and off-marketplace plans, was approximately 308,000 in 2017, according to data from Wakely Consulting Group (2017).

In addition, New York is one of two states (the other is Minnesota) that uses an option under the ACA to offer a Basic Health Program for individuals with incomes between 139 and 200 percent of the federal poverty level (FPL), who would otherwise be eligible to purchase subsidized coverage through the marketplace. The Basic Health Program option was included in

¹ Most children in nongroup plans are effectively charged lower premiums than adults, as New York's rating rules establish that premiums for a family plan with one adult and one or more children are 1.7 times the cost of a plan for a single adult, and a plan for two adults and one or more children costs 2.85 times the cost of a plan for a single adult.

the ACA to allow states to provide more affordable and continuous health insurance coverage for low-income residents. New York calls its Basic Health Program the Essential Plan (EP); in addition to covering marketplace-eligible individuals with incomes between 139 and 200 percent FPL, the EP provides coverage for individuals who are legally present, but ineligible for Medicaid, with incomes up to 138 percent FPL. The EP is either free or costs \$20 per month per individual, depending on a family's income (NY State of Health, 2017b). Enrollment in the EP was 665,000 in 2017 (NY State of Health, 2017a). Approximately 385,000 of EP enrollees would have otherwise been eligible for a subsidized nongroup marketplace plan offered in NY's health insurance marketplace (NY State of Health, 2017a). The EP has been successful at insuring low-income individuals; only one other state—Massachusetts—has lower uninsurance rates² for non-elderly individuals with incomes below 200 percent FPL in the nation (Kaiser Family Foundation [KFF], 2018a). New York receives federal funding for its EP, which is calculated as 95 percent of the APTCs and cost sharing reductions (CSRs)³ that would have been provided to the individuals had they been enrolled in the second-lowest-cost silver plan available on the marketplace.

New York's EP creates important implications for the nongroup market following the elimination of the individual mandate penalty. In particular, New York's EP is not risk-adjusted with the nongroup market (Medicaid and CHIP Learning Collaborative, 2015). As described above, without the EP, more than half of the population that is eligible for New York's EP would be eligible to enroll in the marketplaces and receive subsidized coverage through APTCs (NY State of Health, 2017a). Compared with other states (besides Minnesota), the EP reduces the number of APTC-eligible individuals in the nongroup risk pool.

The objective of this work was to understand the impact of eliminating the individual mandate penalty on premiums, enrollment, and the likelihood of individuals disenrolling from the nongroup market in New York State. New York's nongroup market is particularly susceptible to adverse selection following repeal of the individual mandate penalty because of New York's full community rating and the existence of the EP, which effectively reduces the size of the population receiving subsidies in New York's nongroup marketplace. We expect subsidized enrollees to be less likely to exit the nongroup market than unsubsidized enrollees following the elimination of the individual mandate penalty. This is because subsidized enrollees receive health insurance at a relatively low cost and are protected from premium increases that

² New York's uninsurance rate for this population was 9 percent in 2016. It was tied with three other states—Oregon, Rhode Island, and Vermont—for the second-lowest spot. Massachusetts's uninsurance rate for this population was 8 percent.

³ CSR payments were not being made at the time of this writing; nonpayment is taken into consideration in the model. However, the CSR pass-through funding for the EP is in litigation and may change pending the outcomes of future lawsuits.

may accompany the penalty's elimination. Therefore, subsidized enrollees may help stabilize nongroup premiums, and New York's EP may decrease the market's stability.

To better understand the unique impact of the EP in New York, we examined the combined impact of eliminating both the individual mandate penalty and the EP. We modeled the nongroup market in New York State in 2019 under three scenarios: a "baseline ACA" scenario, an "ACA, no individual mandate" scenario, and an "ACA, no individual mandate, no EP 139–200 percent FPL" scenario. The "baseline ACA" scenario reflects ACA regulations in effect in calendar year 2018. Because the federal government is no longer making CSR payments, we assumed that these costs are loaded on to the price of a silver plan (KFF, 2017). This decision has minimal effect in New York State, as most CSR-eligible individuals are enrolled in the EP. However, those with incomes between 200 and 250 percent of FPL are eligible for CSRs in New York (effectively increasing the silver plan's actuarial value from 70 to 73 percent), and we assumed that this cost of reduced out-of-pocket payments for CSR-eligible individuals was loaded onto the silver plan premium.⁴ The "ACA, no individual mandate" scenario is the same as our baseline ACA scenario, except that we eliminated the individual mandate penalty. In the "ACA, no individual mandate, no EP 139–200 percent FPL" scenario, we eliminated both the individual mandate penalty and the EP for individuals with incomes between 139 and 200 percent FPL. Those in the EP with incomes between 139 and 200 percent of FPL are the population covered by the EP that would be eligible for subsidies in the absence of the EP, and would therefore be most likely to enter the nongroup market without the EP in place. In this scenario, we retain the EP for individuals with incomes at or below 138 percent FPL. We include this scenario to understand in more detail the unique impact of the EP on the effect of eliminating the individual mandate penalty. In addition to these three main scenarios, we included a "no ACA" scenario, in which the ACA was never implemented, as a validation for the model in the appendix.

We used the RAND COMPARE model, which is a microsimulation model that uses economic theory, nationally representative data, and evidence from past experience to estimate how consumers and businesses will respond to health policy changes (Cordova et al., 2013). The model includes a synthetic population of individuals, families, health expenditures, and firms derived from data from the April 2010 wave of the 2008 Survey of Income and Program Participation (U.S. Census Bureau, undated); the 2010–2011 Medical Expenditure Panel Survey (U.S. Department of Health and Human Services, undated); and the 2009 Kaiser Family Foundation/Health Research and Educational Trust Employer Health Benefits Survey (KFF, 2018e; HRET, 2017). While the data sources predate the implementation of the ACA, we update them to reflect population growth based on factors reported by the U.S. Census Bureau, and to

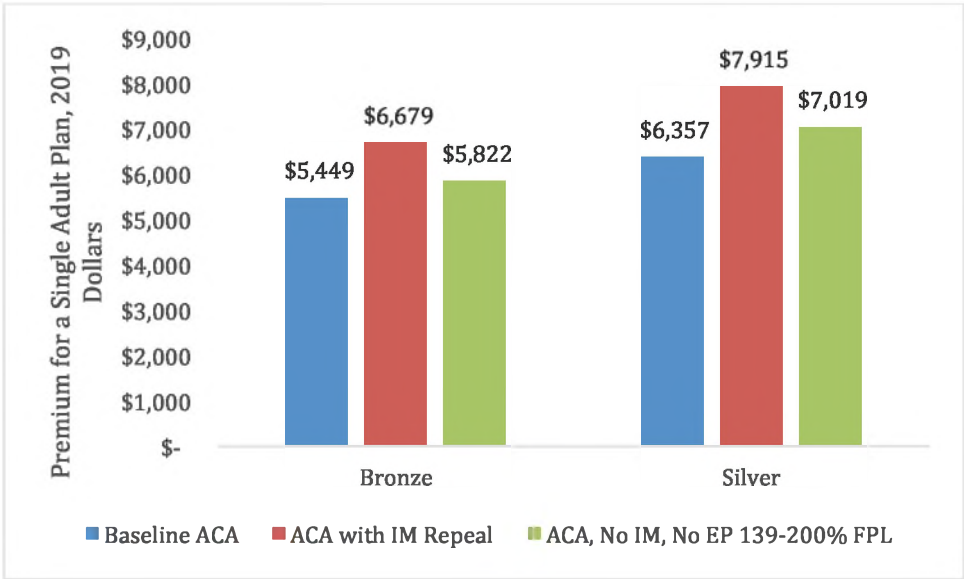
⁴ We note that the elimination of federal funding for CSRs has an additional impact on New York State: Part of the funding for the EP has come in the form of pass-through funding that would have been spent on CSRs for the EP. As of July 2018, the state will continue to receive these payments for its EP (Sullivan, 2018), but the ultimate outcome is uncertain.

reflect health care cost growth using the Centers for Medicare and Medicaid Services National Health Expenditures Accounts. We made adjustments to the national model using 2016 data from the American Community Survey (U.S. Census Bureau, 2018) and 2017 nongroup enrollment data from New York State (NY State of Health, 2017a) and Wakely Consulting Group (2017). This created a 2017 New York baseline from which we modeled three scenarios for which we made projections for 2019. When modeling individuals' responses to the individual mandate penalty, we assumed that people are aware of the penalty and consider the cost of this penalty when making decisions. As a result, fewer people opt to get insurance when the penalty is reduced to \$0. The methods and data sources that we used to derive our estimates, including a longer discussion of the individual mandate response function and adjustments we made to model the New York market, are described in an appendix.

Results

Figure 1 shows our estimates for nongroup premiums in New York State under (1) a baseline ACA scenario, (2) with the elimination of the individual mandate penalty, and (3) with the elimination of both the individual mandate penalty and the EP for individuals with incomes between 139 and 200 percent FPL in 2019. We estimate that the elimination of the individual mandate penalty will cause premiums in the nongroup market to increase by approximately 23 percent for bronze and 25 percent for silver plans relative to what premiums would be under our baseline ACA scenario. Because we account for the ACA’s statutory risk adjustment requirement, which transfers funding from health plans with lower-than-average actuarial risk to health plans with higher-than-average actuarial risk, we assume that the ratios between bronze, gold, and platinum premiums are fixed.⁵ This leads us to estimate that premium increases for gold and platinum plans will be the same as the estimated increase for bronze plans—23 percent. Premium changes for silver differ from other metal tiers because we assume that the CSR costs are loaded onto silver plans. Note that the federal government stopped paying CSRs in 2018, and the costs of the CSRs were loaded onto the silver rates (KFF, 2017).

Figure 1. Projected 2019 Individual Market Premiums in New York



⁵ As of July 9, 2018, the Centers for Medicare and Medicaid Services has temporarily suspended risk adjustment payments pending a decision on the appropriate risk adjustment methodology. The analyses presented in this report assume that such payments are in place.

We estimate that if both the individual mandate penalty and the EP for individuals between 139 and 200 percent FPL were eliminated, premiums in the nongroup market would increase by about 7 percent for bronze plans and by 10 percent for silver plans, relative to what premiums would be under our baseline ACA scenario. Again, we assume that the ratios between bronze, gold, and platinum premiums are fixed. Our approach for modeling premiums within COMPARE is described in more detail in the appendix.

The EP makes the New York nongroup market particularly susceptible to adverse selection following repeal of the individual mandate penalty. This is because the EP reduces the number of individuals eligible to receive subsidies on the nongroup market. Figures 2 and 3 show that nongroup enrollees who receive subsidies are far more likely to remain enrolled than unsubsidized nongroup enrollees. In fact, the rates at which young and healthy *subsidized* enrollees exit the nongroup market are similar to the rates at which older, sicker *unsubsidized* individuals exit the market. Therefore, we find that subsidized enrollees can have a significant stabilizing influence on the nongroup market.

Figure 2. Predicted Probability That Individuals Will Disenroll from the Nongroup Market, by Age, Health Status, and Subsidy Eligibility with the Elimination of the Individual Mandate Penalty, 2019

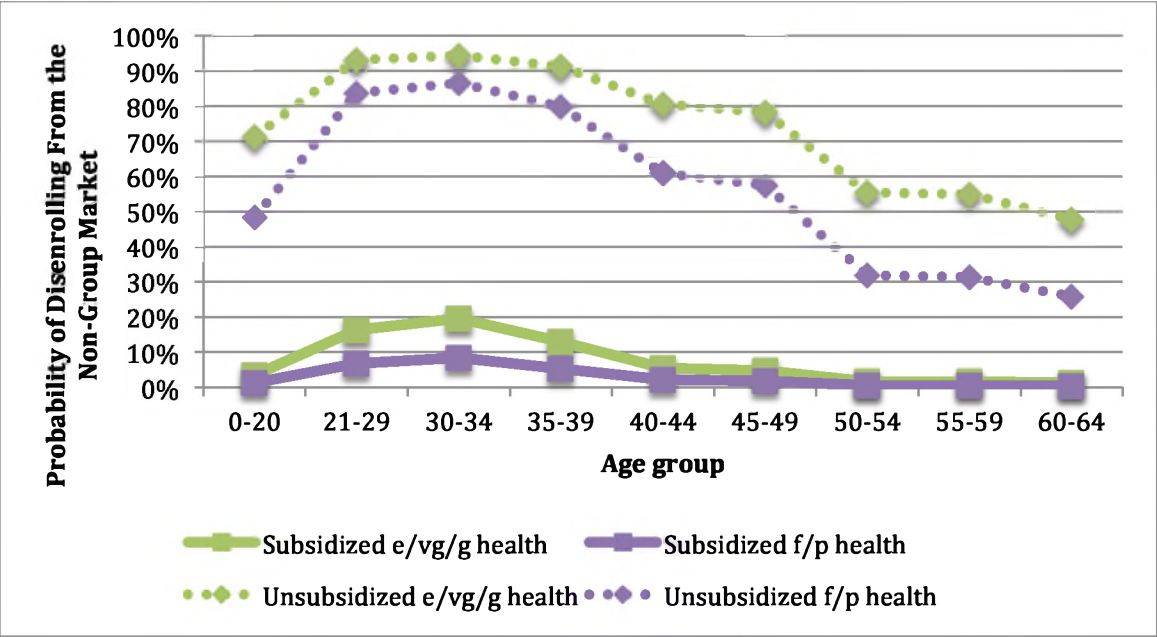


Figure 3. Predicted Probability That Individuals Will Disenroll from the Nongroup Market, by Age, Health Status, and Subsidy Eligibility with the Elimination of Individual Mandate Penalty and EP, 2019

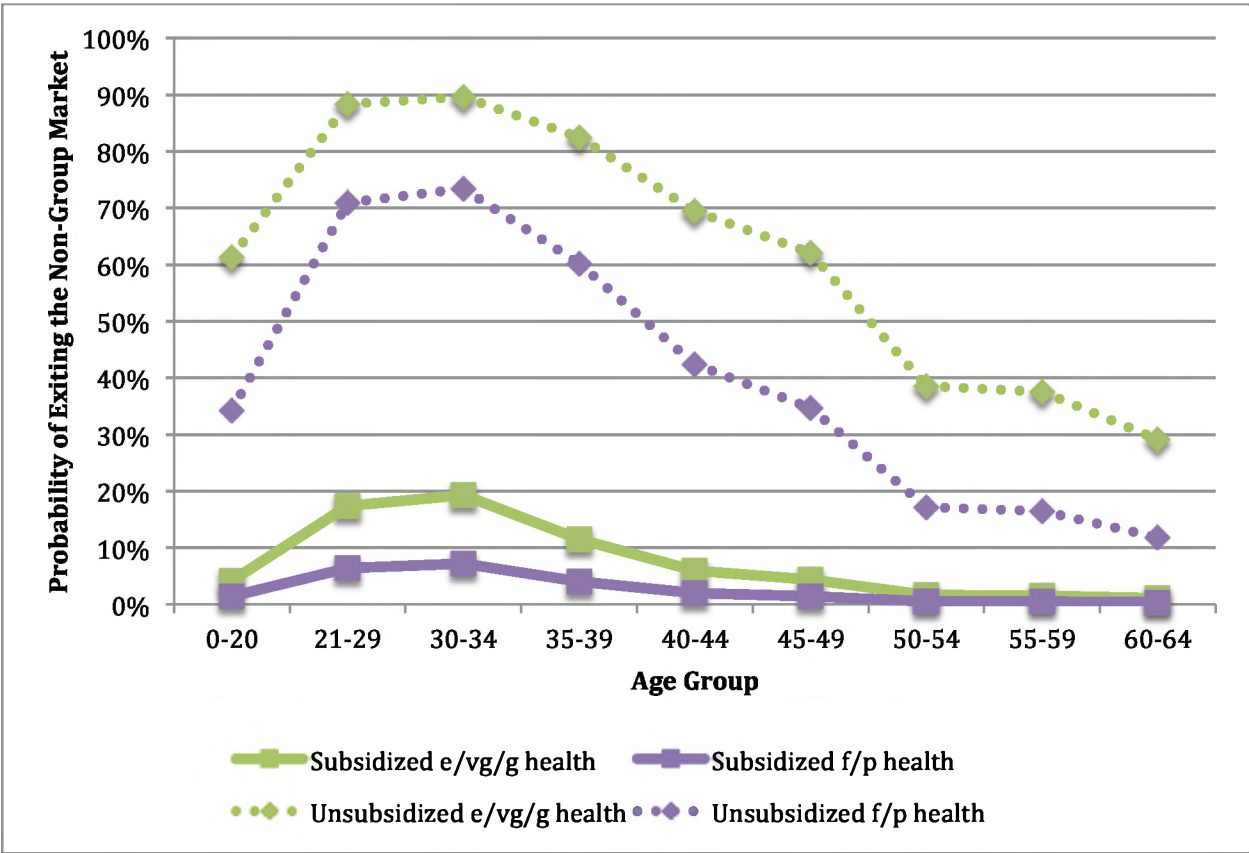


Table 1 shows our estimates for nongroup enrollment, EP enrollment, and the number of uninsured in New York state under the baseline ACA, with the elimination of the individual mandate penalty, and with the elimination of both the individual mandate penalty and the EP for individuals with incomes between 139 and 200 percent FPL in 2019. We estimate that total nongroup enrollment will decrease by 37 percent, from 310,000 to 194,000, without the individual mandate penalty in place, relative to what enrollment would be under our baseline ACA scenario. Most of this decrease will come from individuals both on- and off-marketplace, which we estimate will decrease by 64 percent, from 166,000 to 60,000. We anticipate that the majority of these individuals will become uninsured. We estimate a total increase in the number of uninsured of 292,000. If both the individual mandate penalty and the EP were eliminated for individuals with incomes over 138 percent FPL, nongroup enrollment would increase to 539,000, driven by an influx of individuals who were previously enrolled on the EP who are eligible for subsidies on the nongroup market. We estimate that, under this scenario the number of uninsured individuals would increase by 327,000, slightly more than the increase in the number of uninsured with the elimination of the individual mandate penalty.

Table 1. Projected 2019 Health Insurance Coverage by Type for the Non-Elderly Population (Age 0–64) in New York State

Type of Coverage	Base ACA ^a	ACA, No Individual Mandate	ACA, No Individual Mandate, 139–200% FPL
Total nongroup	310,000	194,000	539,000
Nongroup, subsidized	144,000	134,000	455,000
Nongroup, unsubsidized	166,000	60,000	84,000
EP, 139–200% FPL	382,000	393,000	0
Medicaid and other private ^b	14,531,000	14,343,000	14,357,000
Uninsured	1,403,000	1,695,000	1,730,000

^a Our “Base ACA” scenario is a projection of 2019 enrollment under regulations in under the ACA in 2017.

^b This includes individuals enrolled on the EP with incomes ≤138% FPL, and CHIP enrollees and other sources of public insurance.

Figure 2 shows projected changes in enrollment in the nongroup market by age, health status, and subsidy eligibility. We show nongroup enrollment by these groups for the baseline ACA scenario in the appendix (Table A.2). In terms of health status, “e/vg/g” indicates individuals in excellent, very good, or good health, and “f/p” indicates individuals in fair or poor health. We find that older, subsidized individuals are the most likely to remain enrolled, while younger, unsubsidized individuals are the most likely to disenroll. We also find that individuals in fair or poor health are more likely to remain enrolled than healthier individuals. Finally, we find that children are more likely to remain in the market than young adults. This is primarily due to an assumption in COMPARE that health insurance decisions are made by the family; therefore, children often remain in the market if their parents remain.

Figure 3 shows projected changes in enrollment in the nongroup market by age, health status, and subsidy eligibility with the elimination of the individual mandate penalty and the portion of the EP for individuals with incomes between 139 and 200 percent FPL. Similar to the previous scenario, in which the individual mandate penalty is eliminated, the probability of disenrolling is generally low among subsidized individuals and higher among unsubsidized individuals, and disenrollment is more likely among younger, unsubsidized individuals; healthier individuals; and young adults, compared with children.

Discussion

We estimate that eliminating the individual mandate penalty in New York State will cause nongroup premiums to increase by 23 percent for platinum, gold, and bronze plans, and 25 percent for silver plans. Simultaneously, we estimate that enrollment in the New York's nongroup market will fall by about one-third (37 percent). Because New York has full community rating, which does not allow premiums to vary by age or tobacco use status, the estimated premium increases are identical (in both percentage and dollar terms) for all adult enrollees. Individual market enrollees who are not eligible for APTCs—and hence would have to pay the full premium out-of-pocket—will be much more likely to disenroll, if the mandate penalty were removed, than would those who are APTC-eligible. Those leaving the nongroup market also tend to be younger and healthier than those remaining in the market.

Our estimated premium increases for New York are substantially higher than national increases estimated by both CBO and by us in other RAND analysis. CBO estimates that eliminating the individual mandate penalty will increase premiums by 10 percent (CBO, 2017), and, in recent work, we estimated that premiums would increase by 7 percent (3 to 13 percent in sensitivity analyses) with the elimination of the individual mandate penalty (Eibner and Nowak, 2018). The impact of removing the penalty is larger in the New York marketplace than in the national market for several reasons. First, New York has full community rating, as opposed to modified community rating in most other states. With full community rating, younger people face the same premiums as older people, and non-smokers face the same premiums as smokers. These requirements make nongroup insurance particularly expensive for younger people not eligible for APTCs, increasing their likelihood of disenrolling when the mandate penalty is eliminated. Second, New York established a Basic Health Program, the EP, under the ACA, and approximately 40 percent of individuals enrolled in the EP would be eligible for APTCs offered in the marketplace if the EP for those between 139 and 200 of FPL percent were dismantled. Because of the EP, New York has fewer APTC-eligible people enrolled in nongroup marketplace plans (59 percent in New York, compared with 83 percent nationwide) (KFF, 2018c). Because fewer enrollees with nongroup marketplace plans receive premium subsidies through APTCs relative to other states, more people in New York's market will face the impact of the price increases as a result of the elimination of the individual mandate penalty, given that APTCs create an independent incentive to remain enrolled.

We estimate that less than 20 percent of APTC-eligible enrollees will disenroll from the individual market when the mandate penalty is removed, compared with over half of unsubsidized enrollees in most age groups. Crucially, individuals who receive APTCs through the marketplace are in the same risk pool as all individuals who buy on- or off-marketplace nongroup plans. Therefore, when these individuals remain enrolled, it mitigates some of the

effects of young or healthy individuals who disenroll from the pool when the individual mandate penalty is eliminated. While EP enrollees are also likely to remain enrolled with the removal of the individual mandate penalty, the EP risk pool is separate from the nongroup market and therefore cannot have a mitigating effect on the nongroup risk pool.

Finally, the Trump administration's decision to halt federal payment of cost-sharing reductions had the effect of increasing APTCs in most states (through silver loading), further strengthening the incentive for APTC-eligible people to remain enrolled. However, because New York had implemented the EP, which covers most CSR-eligible enrollees, the administration's decision had a smaller effect on APTCs in New York.

To understand the unique impacts of the EP in New York, we also ran a scenario in which we eliminated both the individual mandate penalty and the EP for individuals with incomes between 139 and 200 percent FPL. In this scenario, we found that unsubsidized enrollment in the nongroup market fell substantially, and uninsurance increased. Eliminating the EP for individuals with incomes between 139 and 200 percent FPL along with the elimination of the individual mandate penalty moderated the premium increase estimates in the nongroup market to an estimated 7 to 10 percent, which is similar to the premium increases we and CBO have previously estimated at the national level (CBO, 2017; Eibner and Nowak, 2018). However, it is important to note that premium payments would increase dramatically for some individuals currently enrolled in the EP if the EP were eliminated. For example, as of 2018, a single individual making \$24,000 per year (a little below 200 percent FPL) pays \$20 a month for an EP. If that person did not have access to an EP, he or she would have to pay nearly \$1,600 per year (\$133 a month) for subsidized coverage on the marketplace, plus additional point-of-service cost sharing. In addition, we estimate that the number of uninsured in New York would be higher in a scenario without the EP for individuals with incomes between 139 and 200 percent FPL and elimination of the individual mandate penalty, compared with elimination of the individual mandate penalty alone.

The individual market in New York State is unique, because of both full community rating and the presence of the EP. We find that these factors make New York's nongroup market particularly susceptible to adverse selection when the individual mandate penalty is removed. We find that New York's coverage of individuals with incomes between 139 and 200 percent FPL through its EP may drive much of this effect, because we estimate that premium increases would be similar to the national average in the absence of the EP.

Appendix: Methods

Modeling the Removal of the Individual Mandate Penalty in COMPARE

The COMPARE model is a national-level model that uses a utility maximization approach to predict individual and firm health insurance decisions. The synthetic population of individuals in COMPARE is based on data from the Survey of Income and Program Participation (SIPP; U.S. Census Bureau, undated), and health care expenditures from the Medical Expenditure Panel Survey (U.S. Department of Health and Human Services, undated) are matched to records in the SIPP. Health care spending is matched based on age, sex, health status, income, and health insurance category. The utility function takes the form

$$(1) U_{ijk} = u(H_{ij}) - E(OOP_{ij}) - p_{ij}^{(H)} - \frac{1}{2} r \text{VAR}(OOP_{ij}) - R_{ij} + \text{Calibration}_{jk}.$$

Within this equation:

- U_{ijk} is the total utility for individual i in demographic category k for insurance type j .
- $u(H_{ij})$ is the utility associated with consuming health care services for individual i under insurance option j .
- OOP_{ij} is the out-of-pocket spending expected.
- $p_{ij}^{(H)}$ is the individual's premium contribution (after adjusting for tax credits).
- r is the coefficient of risk aversion.

R_{ij} represents the individual's response to the tax penalty associated with insurance status j , and—in scenarios in which the mandate penalty is in effect—it is 0 for all but the uninsured insurance status. When the individual mandate penalty is in place, we assume that R_{ij} equals $0.8 * \text{penalty}_i$ for $j = \text{uninsured}$, where penalty_i is the penalty the individual owes. We assume that R_{ij} is equal to zero for individuals who are exempt from the penalty. The 0.8 multiplier captures the fact that, on average, the Internal Revenue Service collects only about 80 percent of taxes owed (Internal Revenue Service, 2018). In scenarios without the individual mandate penalty, R_{ij} is zero for all individuals i , and, for all insurance statuses j , including for the uninsured.

Calibration_{jk} is a calibration constant that captures noneconomic factors, which may influence individual decisionmaking. We adjust the calibration constants so that our estimated pre-ACA enrollment matches actual pre-ACA enrollment by demographic group based on data from the American Community Survey.

There is significant uncertainty regarding how people will respond to the elimination of the individual mandate penalty, and prior research is mixed regarding both the extent of individuals' responses to health insurance mandates and the mechanisms driving these responses (Chandra, Gruber, and McKnight, 2014; Wettstein, 2018; Frean, Gruber, and Sommers, 2017; Saltzman, 2017). When modeling the individual mandate penalty, we assume that people are aware of the

requirement to obtain insurance and understand whether they are exempt from this requirement (e.g., due to being below the tax filing threshold). Among those who are subject to the penalty, we assume that people expect to pay, on average, only 80 percent of what they owe to the IRS. Prior research has hypothesized that people may have a “taste for compliance” with the law that incentivizes compliance regardless of the size of the mandate penalty (Auerbach et al., 2010). It is unclear how a taste for compliance would affect decisions given the approach taken in the Tax Cuts and Jobs Act, which zeros-out the penalty but does not technically eliminate the requirement to enroll in coverage. We do not account for a taste for compliance in this analysis.

Nongroup Premium Calculations

To calculate nongroup premiums in the COMPARE model, we impose the condition that the total amount collected in premiums, $\sum_i w_i p_i$, where w_i and p_i are individual i 's weight and premium, respectively, is equal to the total cost to insurers, that is, $\sum_i w_i s_i AV_i (1 + \delta)$. In this equation, s_i is the health care spending of individual i , AV_i is the actuarial value of the plan in which individual i is enrolled, and δ is the administrative cost of the plans. This equality yields the equation

$$(2) \sum_i w_i p_i = \sum_i w_i s_i AV_i (1 + \delta).$$

To calculate premiums, we use the fact that premium rating regulations fix the ratios of premiums that can be charged to any individual given their age and tobacco use status. We further assume that risk adjustment constrains premiums across metal tiers. We choose a reference group (for example, children enrolled in a bronze plan) and define the premium of that reference group to be p_1 . We then define the ratio of an individual's premium to the reference premium. This is: $r_i = p_i/p_1$. We assume that risk adjustment policies compensate for any differences in metal tier enrollment by risk level, so that premiums across metal tiers vary based on the ratio of their actuarial values (e.g., the premium for a gold plan is $0.8/0.6 = 1.33$ times the cost of a bronze plan). This approach is conceptually consistent with ACA statute, but does not incorporate specific regulations that govern how risk adjustment is implemented.

Substituting the definition of r_i into equation 2 and solving for p_i we compute the nongroup premiums as follows:

$$(3) p_i = r_i \frac{\sum_i w_i s_i AV_i (1 + \delta)}{\sum_i w_i r_i}.$$

Adjustment to Silver Plan Premiums

Along with tax credits, some enrollees are eligible for CSRs, which reduce out-of-pocket payments at the point of service (e.g., copays, deductibles). By law, insurers must provide CSRs to tax-credit eligible enrollees with incomes below 250 percent FPL. Because of the EP in New York (which provides comprehensive coverage with limited cost sharing and federal premium

subsidies for individuals with incomes between 138 and 200 percent FPL), CSRs are available to only those with incomes at 200–250 percent FPL. However, Congress did not appropriate funding for CSRs, and in late 2017, the Trump administration halted federal payment to insurers to cover these costs. In response, insurers in most states increased the premiums for silver plans (KFF, 2017) to accommodate these reductions, resulting in higher tax credit amounts that are tied to the second-lowest-cost silver plan. Therefore, we load the estimated cost of CSR payments onto the silver plan in the COMPARE model.

Customization for New York

We made two types of adjustments to our national model to estimate the impact of the elimination of the individual mandate penalty in New York. First, we incorporated New York–specific policies into the model. Second, we adjusted the weights in the model to reflect the population and demographics of New York.

The New York–specific policies we included in the model were pure community rating, New York’s EP, and New York’s Child Health Plus (CHP) program, based on the programs’ eligibility requirements (NY State of Health, 2017b). We reweighted the COMPARE model results so that our *modeled* 2019 baseline ACA results matched what we project 2019 enrollment would have been in 2019 based on *inflated actual* 2016 survey and 2017 enrollment data.

We used data from the 2016 American Community Survey for New York (U.S. Census Bureau, 2018), population growth projections from the University of Virginia (University of Virginia Demographics Research Group, 2016), state marketplace enrollment data (NY State of Health, 2017a), and Wakely Consulting Group (Wakely Consulting Group, 2017) data on nongroup market enrollment to match the joint distribution of health insurance status, income by group (<138 percent FPL, 138–200 percent FPL, 200–300 percent FPL, 300–400 percent FPL, >400 percent FPL), and age. For most insurance categories, we used five age categories (<18, 18–34, 35–49, 50–64, 65+), and we used the risk-adjustment age groups to adjust nongroup enrollment (≤20, 21–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64).

Estimating Probabilities of Disenrolling from the Nongroup Market

We used a regression-based approach to estimate individuals’ probabilities of disenrolling from the nongroup market by age, subsidy eligibility status, and health status. We found that using a regression-based approach allowed us to produce estimates at a finer level of detail than we could produce by directly estimating exit probabilities by comparing “baseline ACA” and “ACA, no individual mandate” scenario estimates because the regression-based method could produce stable estimates for groups with few enrollees where the direct method could not. For our regression-based approach, we analyzed the subset of records that were in the nongroup market in our base ACA run. For those records, we constructed a variable E_i , which is an indicator for

whether individual I disenrolled from the nongroup market in the no individual mandate scenario. We then constructed the following model:

$$E_i = \text{logit}(\beta_a a_i + \beta_s s_i + \beta_h h_i + \varepsilon_i),$$

where a_i is the age category of individual i , s_i is the subsidy eligibility status⁶, h_i is the individual's health status, and ε_i is an error term. We estimated the coefficients β_a (one for each age category a , with the exception of the reference group), β_s , and β_h . We then used the estimated model to predict the probability that an individual in any of our cells would disenroll from the nongroup market.

Model Validation

To validate our results, we estimate premiums and enrollment in the nongroup market in 2019 if the ACA had never been implemented. Our estimates serve as a validation because there are data on pre-ACA enrollment and premiums in New York, and the New York State Department of Financial Services has analyzed this information to understand how the ACA's provisions affected the nongroup market. Compared with our baseline scenario, this involved eliminating the individual mandate, CSRs, APTCs, Medicaid expansion, the EP for individuals with incomes between 139 and 200 percent FPL, Medicaid expansion, and employer mandate. This scenario includes full community rating and guaranteed issue as the state had both of these regulations in place prior to the ACA (KFF, 2018d).

The ACA introduced new subsidies and an individual mandate that encouraged younger and healthier nongroup enrollees. This led to decreased nongroup premiums and increased nongroup enrollment in New York (Rabin and Abelson, 2013).

Figure A.1 shows projected 2019 premiums in New York State under our "baseline ACA" and "no ACA" scenarios. We estimate that, under a baseline ACA scenario in 2019, premiums would be about 45 percent lower in New York than they would be without the ACA. The New York Department of Financial Services estimated that 2018 nongroup market premiums in New York are 55 percent lower than they would have been without the ACA, after adjusting for inflation (New York Department of Financial Services, 2017). In addition, as shown in Figure A.2, we estimate that enrollment in the nongroup market would be only 16,000—about 95 percent lower than baseline—if the ACA had never been implemented. This is consistent with estimates that the pre-ACA nongroup market enrollment was about 17,000 (Luhby, 2013). Comparisons of COMPARE estimates to other data sources are shown in Table A.1.

⁶ Subsidy eligibility status is calculated within the model based on individuals' income; access to affordable health insurance, such as Medicaid or employer-sponsored insurance; and immigration status.

Figure A.1. Projected Average Nongroup Market Premiums in New York for a Single Adult Under the Baseline ACA Scenario and Under the No ACA Scenario, 2019

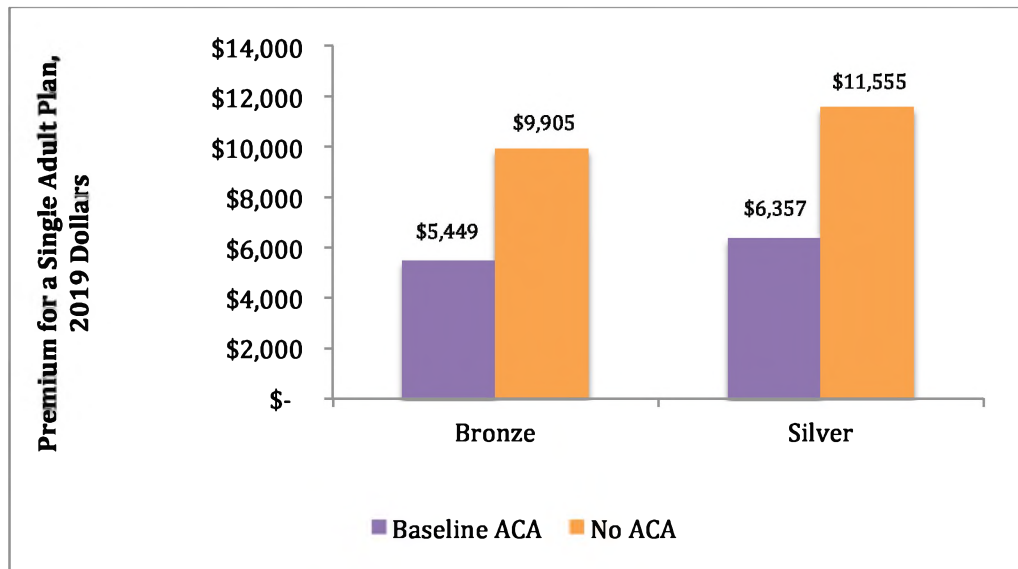
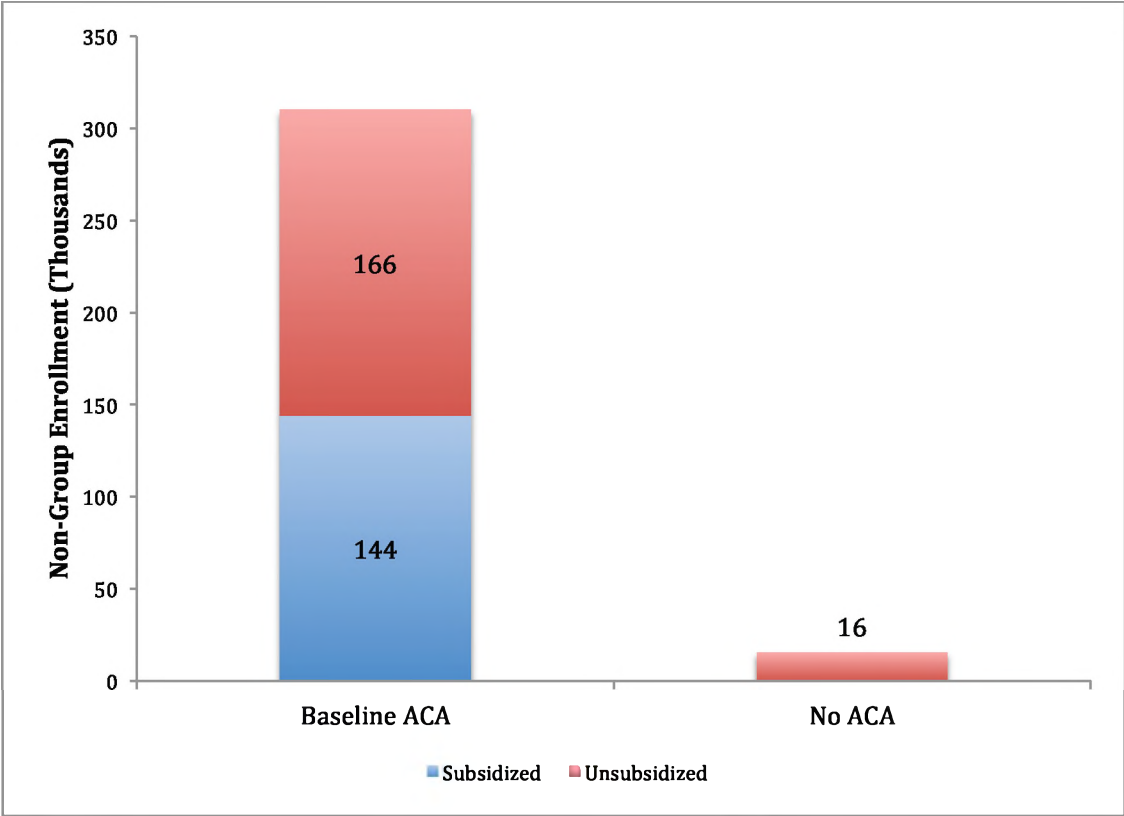


Table A.1. Outcomes from “No ACA” Validation

Outcome	RAND Estimate, 2019	Benchmark
Individual Market Enrollment	16,000	17,000 pre-ACA (Luhby, 2013)
Individual Market Premium Change Under the ACA, Relative to No ACA	-45 percent	-55 percent (New York Department of Financial Services, 2017)

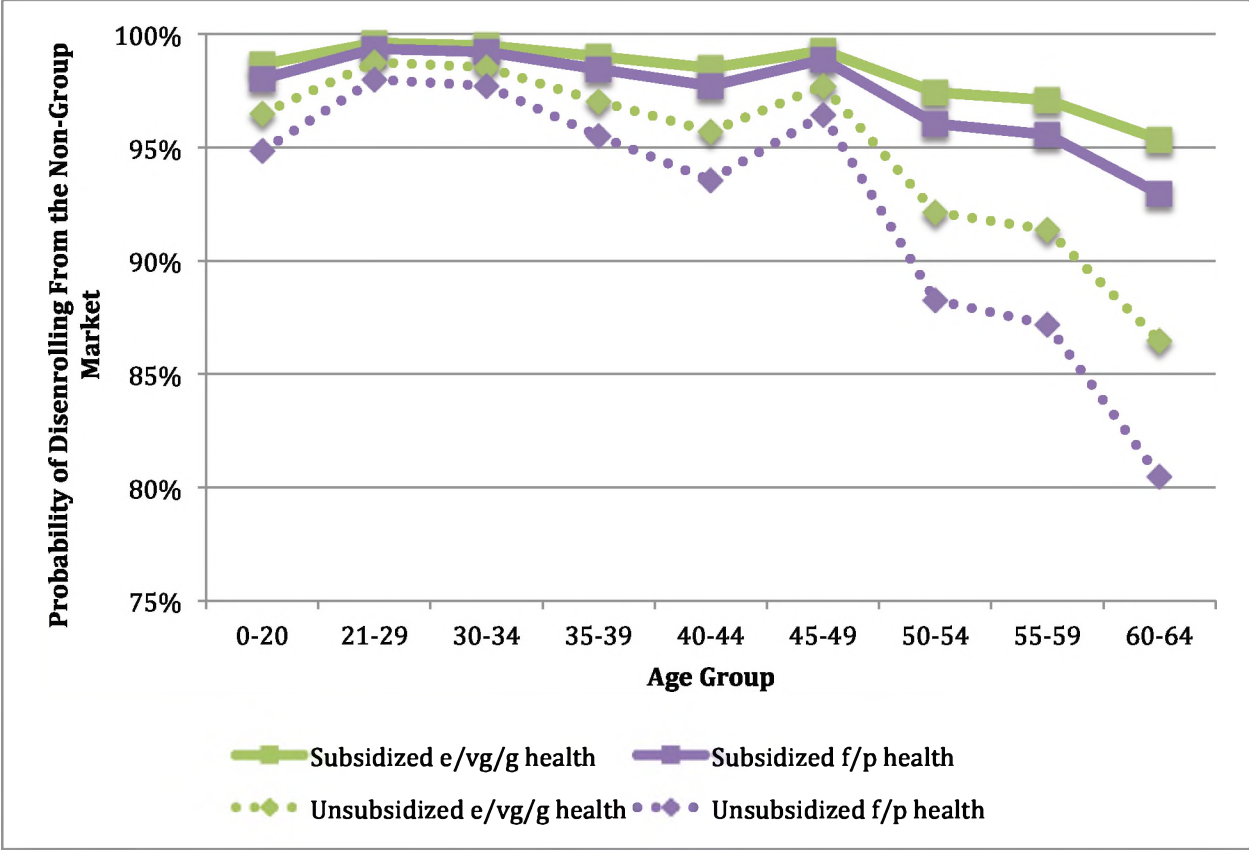
Figure A.2. Projected 2019 Nongroup Enrollment in New York Under the Baseline ACA and No ACA Scenarios



NOTE: In the “No ACA” scenario, subsidies are not available.

Figure A.3 shows our estimates for the probability that individuals would disenroll from the nongroup market under a no ACA scenario, compared with our baseline ACA scenario. The baseline ACA enrollment for individuals in these groups is shown in Table A.2. Most of the individuals who disenroll would become uninsured. We find that the majority of individuals in all groups would disenroll from the nongroup market, but that older individuals who do not qualify for subsidies under the ACA (generally because their incomes exceed 400 percent FPL) would be more likely to remain than other groups. Most lower-income individuals would disenroll from the market, because of the loss of subsidies.

Figure A.3. Projected Changes in Nongroup Enrollment in New York Under a “No Affordable Care Act” Scenario, Relative to Baseline ACA



Nongroup Enrollment in Baseline ACA

Table A.2. shows projected 2019 enrollment in the nongroup market by age, subsidization status, and health status. The groups in this table are the same as those presented in Figures 2, 3, and A.3. For example, Figure A.3 shows that with the elimination of the ACA, about 98 percent of individuals age 0–20 who are subsidized under baseline ACA and who are in excellent, very good, or good health would exit the market. Table A.2 shows that we estimate there are 18.3 thousand individuals in this group under the baseline ACA scenario in 2019. Therefore, we would expect $0.98 \times 18,300 = 17,900$ subsidized individuals in excellent, very good, or good health ages 0–20 to exit the nongroup market with the elimination of the ACA.

Table A.2. Projected Enrollment by Age, Subsidization Status, and Health Status with Baseline ACA, 2019 (thousands)

Age Group	Subsidized, Excellent, Very Good or Good Health Status (Thousands)	Subsidized, Fair or Poor Health Status (Thousands)	Unsubsidized, Excellent, Very Good or Good Health Status (Thousands)	Unsubsidized, Fair or Poor Health Status (Thousands)	Total
0–20	18.3	0.1	10.3	0.1	28.7
21–29	24.9	0.8	5.5	1.9	33.1
30–34	7.2	0.6	16.5	0.4	24.7
35–39	14.9	0.4	7.2	1.0	23.6
40–44	11.0	0.9	10.4	0.7	23.0
45–49	10.0	1.1	15.9	2.1	29.1
50–54	15.0	2.8	16.7	1.7	36.1
55–59	13.6	2.1	25.8	3.7	45.2
60–64	17.1	3.1	40.1	6.3	66.6
Total	132.1	11.9	148.5	17.8	310.1

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By Len Finocchio and Katrina Connolly

Medical Loss Ratios For California's Dental Insurance Plans: Assessing Consumer Value And Policy Solutions

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ABSTRACT As a consumer protection, the Affordable Care Act (ACA) requires that large-group health plans spend at least 85 percent of all premium dollars on health services and quality improvement activities—thus giving the plans a medical loss ratio (MLR) of 85 percent. Small-group and individual plans must have an MLR of at least 80 percent. The ACA did not set minimum MLRs for dental plans. California passed a law in 2014 requiring dental plans to report MLRs but stopped short of setting minimum thresholds. We analyzed dental plans' MLRs reported in California for 2014 and 2015. The average MLR, weighted by covered lives, was 76 percent, with wide variation across product types and sizes. Few products sold by dental plans met the MLR thresholds set by the ACA, but many did meet or exceed other proposed thresholds. While millions of Californians were in large-group plans that achieved high MLRs, millions more were in other plans with relatively low MLRs. A legislatively mandated MLR would provide a standardized financial tool and potentially ensure value for dental insurance products. Given the multiplicity of dental products and the varying numbers of covered lives in those products, setting MLR thresholds poses a challenge for stakeholders.

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The Affordable Care Act (ACA) requires large-group health insurance plans to spend at least 85 percent of all premium dollars on health services and quality improvement activities; this is known as the medical loss ratio (MLR). Under the ACA, small-group and individual plans must spend at least 80 percent.¹ Plans that do not achieve minimum MLRs are required to pay rebates to consumers. The ACA excluded dental insurance and other specialized plans from this requirement.

Passing this requirement for minimum MLRs involved considerable debate. Consumer advocates argued that requiring insurers to spend a minimum amount on patient care served to improve plan efficiency and increase the benefits

consumers derived from their insurance expenditures. In contrast, health plans and others argued that the minimum MLR requirement would drive insurers from the marketplace, thereby diminishing consumer choice and potentially raising premiums instead of lowering them.²

Though the ACA established minimum MLRs for health plans, states continue to debate the issue for dental plans. In 2014 California passed a law requiring dental insurance plans to file annual MLR reports.³ The legislature stopped short of requiring plans to achieve specific MLRs, deciding instead to assess reported MLRs and revisit the threshold requirement in 2018. A bill in the legislature, SB-1008, proposed a minimum MLR of 70 percent for dental plans in the individual and small-group markets and 75 per-

cent in the large-group market, but amendments removed these thresholds in May 2018.⁴

Requiring dental plans to achieve a minimum MLR for dental insurance and reporting that information in a standardized manner would be important for consumers, particularly given the wide variety of dental plans' products and premiums available. Americans report that costs are their main barrier to accessing dental services, and insurance is meant to offer some protection against financial risk.⁵ If dental insurance were demonstrated to have value, in terms expressed by an MLR threshold, the preponderance of consumers' premiums would be directed toward services and quality improvement, thereby reducing this financial barrier.

As states debate whether to require minimum MLRs for dental plans and establish thresholds, it is useful to explore how dental plans currently rate on MLRs. In this article we assess California dental plans' spending on services relative to administration and profit. This work can inform legislators and stakeholders in California and potentially in other states considering MLRs where dental insurance markets resemble those in California.

Study Data And Methods

DATA SOURCE A dental plan, also called a carrier, is an insurance firm that may sell different products that can vary by network type (for example, a health maintenance organization [HMO] or preferred provider organization [PPO]), benefit design, and market (individual, small group, or large group).⁶ Since 2014, plans have filed standardized MLR reports with California regulators annually for each product type.^{7,8} The 2014 and 2015 data used in this analysis include information about all products to which the law applies, including specialized dental health care service plan contracts and specialized dental health insurance policies sold to groups or individual consumers.

DATA ANALYSIS We examined reported MLR data at the level of the product by type of network, market, and year (2014 and 2015). We calculated descriptive statistics of MLRs, including mean, mean weighted by covered lives, and standard deviation conditional on product and market type. We also examined frequency distributions of MLRs by numbers of covered lives and product types. In addition, we assessed the extent to which products achieved three MLR thresholds: the ACA thresholds for health plans (80 percent for individual and small-group products and 85 percent for large-group products),¹ thresholds for dental plans recently proposed in the California legislature (70 percent for individ-

ual and small-group products and 75 percent for large-group products),⁴ and the guidelines of the National Association of Insurance Commissioners (NAIC) (60 percent).⁹ While the NAIC has not proposed specific guidelines for establishing MLRs for dental plans, its July 2000 guidelines for determining the reasonableness of the relationship between benefits and premiums applies to dental plans with optional renewability.

LIMITATIONS This study had some limitations. First, we used available data reported by plans, and we did not validate the data. Second, several types of dental plans are exempt from California's MLR reporting law and were not included in this analysis. These include discount plans, plans for California's Medicaid program, disability insurance, and dental plans that are either self-funded or governed by the Employee Retirement Income Security Act of 1974. Finally, data reported for the 2016 plan year are available but were not yet complete at the time of this study, so we limited our scope to 2014–15.

Study Results

THE DENTAL INSURANCE MARKET IN 2014–15

The dental insurance market changed little from 2014 to 2015. As shown in online appendix A1,¹⁰ plans offered eight more dental insurance products in 2015 than in 2014. The number of products offered increased, but the number of covered lives remained largely unchanged: There were 9.87 million covered lives in 2014 and 9.78 million in 2015—a decrease of less than 1 percent.

MEDICAL LOSS RATIOS The MLRs of dental insurance products varied widely in 2014–15 (exhibit 1), ranging from 4 percent to 126 percent, with a standard deviation of 21 percent.¹¹ The mean MLR across all products in 2014–15 was 61 percent, but when we weighted MLRs by the number of covered lives, we found that the weighted mean was 76 percent.¹² The higher weighted mean indicates that more products had lower MLRs, but most of the covered lives were in products with higher MLRs.

Given that the results for 2014 and 2015 were very similar (analysis not shown), exhibit 1 compares MLRs by product type for the two years combined. Dental PPO products reported higher weighted mean MLRs than HMO products did (81 percent versus 63 percent). The weighted mean MLRs for products in the individual and small-group markets were 60 percent and 61 percent, respectively—lower than that for products in the large-group market (80 percent).

Few dental products reached ACA thresholds during 2014–15. Only twenty products (9 per-

EXHIBIT 1
Medical loss ratios (MLRs) of dental insurance products sold in California, by product and market, 2014–15

	Product		Market			
	HMOs	PPOs	Individual	Small group	Large group	All
Number	99	129	65	84	79	228
MEDICAL LOSS RATIO						
Minimum	4%	14%	5%	4%	28%	4%
Maximum	116	126	126	116	91	126
Median	56	69	53	60	74	63
Mean	53	67	52	59	71	61
Weighted mean ^a	63	81	60	61	80	76
Standard deviation	20	20	25	17	16	21
MET THRESHOLD OF:						
NAIC						
Number	41	90	22	42	67	131
Percent	41%	70%	34%	50%	85%	57%
California SB-1008						
Number	11	54	13	15	37	65
Percent	11%	42%	20%	18%	47%	29%
Affordable Care Act						
Number	3	17	5	8	7	20
Percent	3%	13%	8%	10%	9%	9%

SOURCE Authors' analysis of data from the California Department of Managed Health Care and Department of Insurance. **NOTES** Guidelines of the National Association of Insurance Commissioners (NAIC) recommend a threshold of 60 percent. In SB-1008, California recently proposed setting thresholds for dental plans at 70 percent for the individual and small-group markets and 75 percent for the large-group market (see note 4 in text). Affordable Care Act (ACA) health insurance thresholds are 80 percent for individual and small-group plans and 85 percent for large-group plans. HMO is health maintenance organization. PPO is preferred provider organization. ^aWeighted by covered lives.

cent) reported an MLR that met ACA thresholds during 2014–15. Sixty-five products (29 percent) reached thresholds proposed in California. And 131 (57 percent) reached the threshold for insurance such as dental plans proposed in the NAIC guidelines.

PPO products were more likely to reach an MLR threshold than HMO products were. In the large-group market, all seven of the products that met the ACA threshold were PPOs (data not shown). In addition, products in the large-group market were generally more likely to reach a threshold, compared to those in the individual and small-group markets (exhibit 1).

The majority of dental products reported MLRs of 70 percent or less (exhibit 2). There were fifty-seven products with MLRs of 61–70 percent—a larger number than in any other category.

MEDICAL LOSS RATIOS BY COVERED LIVES Though MLRs varied widely, most Californians with dental insurance in 2015 were served by products with MLRs that met minimums proposed by the NAIC and the recent bill in the California legislature (87 percent and 64 percent, respectively) (calculated from data in exhibit 3). However, 6.6 million (67 percent) of the lives covered in 2015 were covered by dental products that would not meet the MLR minimum of

85 percent required by the ACA for large-group health plans.

The largest number of covered lives (4.4 million) was served by products with reported MLRs of 81–90 percent (exhibit 3). This pattern suggests that products covering more lives tended to have higher MLRs. Indeed, the average MLR steadily increased from an average of 56 percent for products with up to 10,000 lives to an average of 90 percent for all products with more than a million lives (exhibit 4).

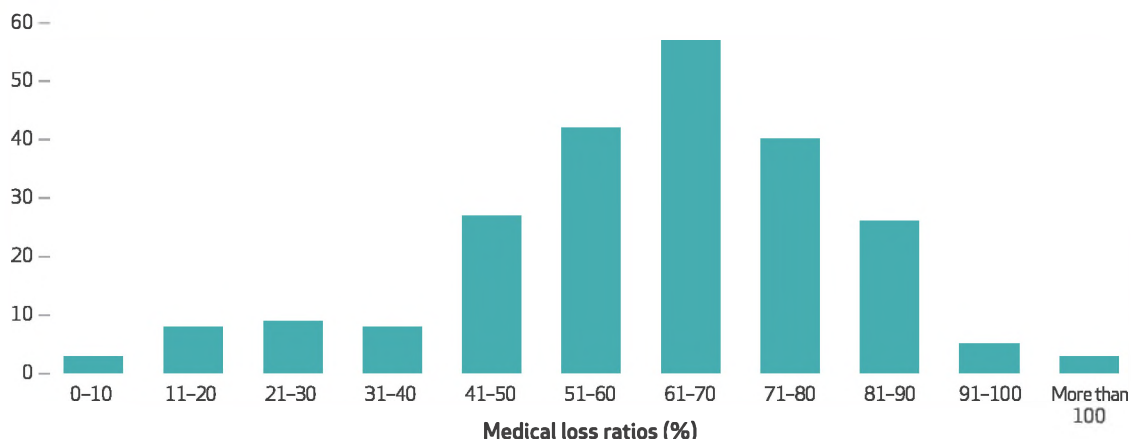
Discussion

WIDE VARIATION ACROSS PRODUCTS AND MARKETS The medical loss ratios of dental products sold in California in 2014–15 ranged widely, from 4 percent to 126 percent. A few patterns emerged in this variation by product type and market. Products using PPO networks reported higher MLRs than those using HMOs did, and products in the large-group market reported higher MLRs, compared to products in the small-group and individual markets—indicating that products using PPOs and those with large groups used more of their premium dollars for dental services.

FEW PRODUCTS ACHIEVED PROPOSED THRESHOLDS Only 9 percent of dental products achieved

EXHIBIT 2

Number of dental insurance products sold in California, by medical loss ratios, 2014-15



SOURCE Authors' analysis of data from the California Department of Managed Health Care and Department of Insurance.

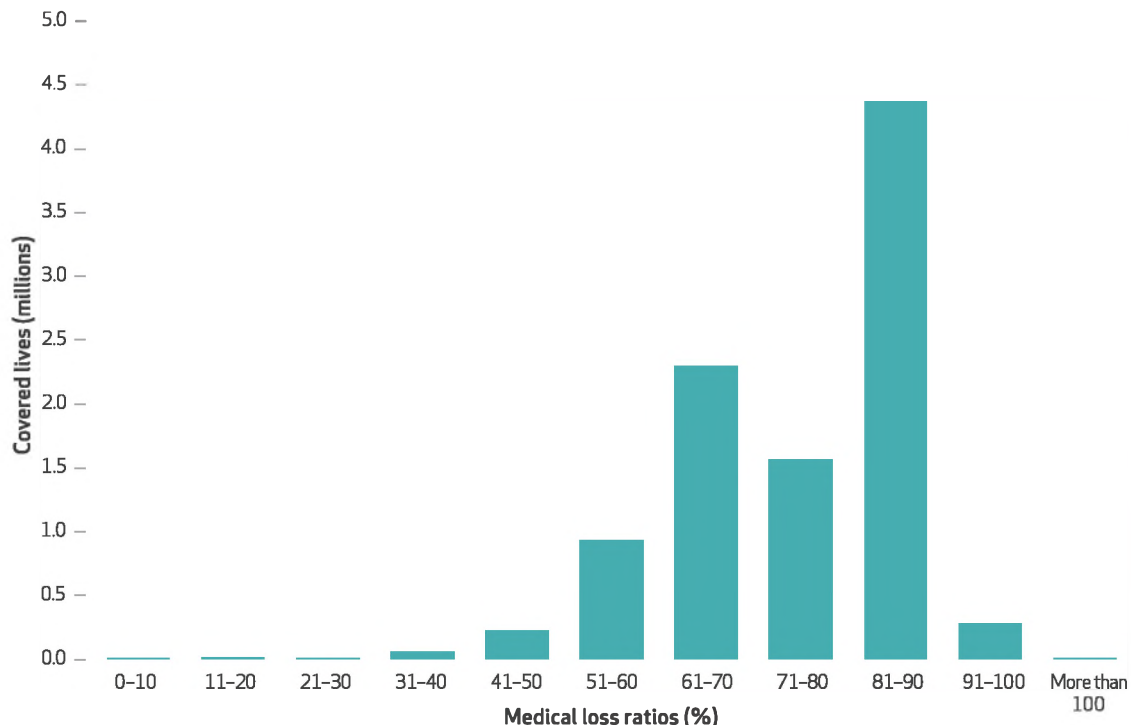
the MLR thresholds established by the ACA of 80 percent for products in the individual and small-group markets and 85 percent for products in the large-group market. An analysis by other researchers of California MLRs that included 2016 data obtained similar results.¹³ A larger minority of dental products (29 percent) met the

thresholds proposed in the recent California bill (70 percent and 75 percent, respectively). Lowering the threshold to 60 percent, as proposed by the NAIC, captured a slight majority (57 percent) of dental products.

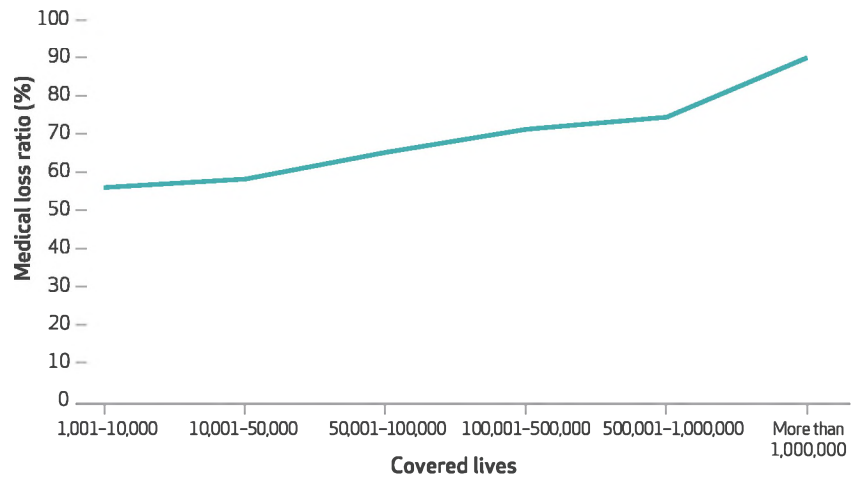
NUMBERS OF COVERED LIVES SERVED The notable difference between unweighted and

EXHIBIT 3

Numbers of covered lives in dental insurance products sold in California, by medical loss ratios, 2015



SOURCE Authors' analysis of data from the California Department of Managed Health Care and Department of Insurance.

EXHIBIT 4**Average medical loss ratio of dental insurance products sold in California, by numbers of covered lives, 2014-15**

SOURCE Authors' analysis of data from the California Department of Managed Health Care and Department of Insurance.

weighted mean MLRs (61 percent versus 76 percent) indicates that products with low MLRs served fewer Californians, compared to products with higher MLRs. Though 43 percent of products would not meet the MLR threshold proposed by the NAIC, a minority (13 percent, or 1.25 million) of Californians are served by those products.

While almost half of Californians with dental insurance were served by products with MLRs higher than 80 percent in 2015, 6.6 million Californians were covered by dental products that would not meet the minimum MLR standard required by the ACA for health plans. Furthermore, 3.8 million and 1.25 million Californians were served by products that did not meet the thresholds proposed in the recent California bill and by the NAIC, respectively. These results suggest that consumers in these products did not receive sufficient value for the premiums they paid.

PRODUCT SIZE AND TYPE MATTER The number of covered lives served by dental products appears to be an important factor in their MLRs, as there was a clear association between average MLR and covered lives: In general, the more lives insured by a product, the higher the MLR. This finding suggests that plans appear able to derive economies of scale for products with large enrollments and thereby offer greater value to consumers. While these findings show that size matters in achieving higher MLRs, there were products with fewer than 5,000 insured lives (data not shown) that nonetheless reported MLRs above 80 percent, which suggests that providing value for consumers is possible even at a smaller scale.

Policy Implications

Based on California's experience, we have examined the central policy issues to consider for legislation to require dental products to achieve minimum medical loss ratios. Given the multiplicity of dental products and benefit designs available, the varying numbers of covered lives in these products, and the wide range of MLRs, determining threshold requirements poses a challenge for lawmakers and stakeholders. The stakeholders with an interest in such laws include the plans and their shareholders, employers, insurance brokers, dentists, and consumers.

THE DIFFICULTY OF DETERMINING MINIMUM MEDICAL LOSS RATIOS The MLR thresholds for health insurance in the ACA resulted from a long process undertaken by the National Association of Insurance Commissioners. They are viewed as largely successful in bringing greater value to consumers with minimal market disruption.¹⁴

The challenge for lawmakers and stakeholders now is to quantify, debate, and establish the specific thresholds that would be appropriate for dental products.

Dental insurance firms argue that health and dental plans are "apples and oranges" and that the health plan MLR thresholds are therefore inappropriate for dental plans. Dental plans are "oranges" because they emphasize prevention and have myriad benefit classes with stricter utilization limits (such as waiting periods for major procedures), lower claims volumes, and higher cost sharing to mitigate adverse selection. Consequently, dental firms argue, annual expenditures on services are not appropriately measured in an annual loss ratio.¹⁵

Dental insurance premiums are also typically lower than health insurance premiums, which means that administrative expenses are a greater share of premiums as administrative requirements (for example, member services, grievances, and appeals) don't vary across types of products.¹⁵ In addition, most dental insurance is not "insurance" in the sense that the plan bears the financial risk for all services provided to the insured person after cost sharing has been met. This situation, however, is changing as dental insurance plans offer products with maximum out-of-pocket spending and function as true insurance in helping consumers avoid large financial losses (examples are ACA-compliant pediatric dental products).

Nevertheless, states do have statutes and rules requiring MLRs for dental products. The California Medicaid program currently requires

a 70 percent MLR for dental managed care products, which will increase to 85 percent in July 2019.¹⁶ Florida's Medicaid program requires an 85 percent MLR for prepaid dental products.¹⁷ Nevada requires a "safe harbor" MLR of 75 percent and allows products leeway to adjust the MLR and justify lower amounts.¹⁸ However, these Medicaid products differ from private commercial products as they assume full financial risk for covering all necessary services.

State legislatures have also proposed MLR thresholds. In 2013 the California legislature considered requiring health insurers that offered pediatric dental coverage through the Covered California Marketplace to maintain a medical loss ratio of 75 percent.¹⁹ An unsuccessful 2015 bill in Massachusetts would have imposed an initial 90 percent MLR, increasing to 95 percent, on dental products.²⁰ As noted above, a bill in the 2018 session in the California legislature proposed MLR thresholds of 70 percent for individual and small-group plans and 75 percent for large-group plans.⁴

The MLRs required of health plans are feasible in large part because the ACA standardized benefit design by requiring ten essential health benefits. Given the multiplicity of dental benefit designs across products and available in markets of all sizes, legislators might consider a more differentiated set of MLRs.

Legislators could consider, for example, additional MLR thresholds for plans with small enrollments or products with similar classes of benefits, thereby enabling consumers more choice of products. Plans could also be given MLR corridors linked to average monthly enrollment.

The debate would be well served by a multidisciplinary and comprehensive analysis of the actuarial values of different dental products. To contribute to the policy discussion, dental insurance firms could present an alternative financial measure and consumer protection tool that uniquely measured value for dental products. Alternatively, the NAIC could be tasked with developing specific MLR guidelines for dental products with different benefit classes and cost-sharing requirements.

Legislators could require an MLR of the entire dental plan enterprise or the average MLR achieved across all of a plan's products in different markets and with different enrollment sizes. However, this would have the consequence of relegating some plan consumers—those in HMOs and those in products with small enrollments—to have little recourse if their dental products offer poor value.

Finally, legislators might also consider a phased implementation, in which plans would have two or three years to achieve minimum

Millions of Californians appear not to have received good value for their dental insurance premium dollars.

MLRs for their products. The imposition of MLRs could disrupt the market, forcing small and low-cost plans to exit and leaving consumers with less choice and more plan concentration. A phased approach would allow plans to adjust their administrative costs, premiums, and profits over a longer period.

CONSEQUENCES FOR NOT ACHIEVING MINIMUM MEDICAL LOSS RATIOS Legislators and stakeholders will also have to consider the consequences for plans that do not comply with minimum MLRs for their products. The ACA requires such plans to pay rebates to consumers. Rebates incentivize plans to find administrative efficiencies or reduce their profits to spend more of the premiums on services. On the other hand, plans might also respond by raising premiums or leaving the market altogether.

In lieu of rebates, states could require dental plans that do not meet MLR thresholds to file corrective action plans that specify how they will meet or exceed the threshold within a required time period. States might also allow plans to justify having lower MLRs. Legislators and stakeholders will also need to consider the state administrative infrastructure and resources necessary to validate MLR reporting and the management of rebates or other penalties imposed on plans that are not in compliance.

Conclusion

The results of this study demonstrate that dental products with large numbers of enrollees can achieve minimum medical loss ratios for millions of California consumers. However, these results also suggest that millions of Californians appear not to have received good value for their dental insurance premium dollars. A legislatively mandated MLR could offer a remedy and ensure better value for dental products. These results also reveal, however, the complexity of minimally standardized dental insurance mar-

ketplaces and the resulting challenge for legislators to create regulatory specificity to inform and protect consumers. Legislators have several

policy options to consider in a legislated approach to bringing greater transparency and value to the dental plan marketplace. ■

The California Dental Association contracted with the authors to undertake the data analysis whose results appear in this article.

NOTES

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By Glenn A. Melnick, Katya Fonkych, and Jack Zwanziger

The California Competitive Model: How Has It Fared, And What's Next?

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ABSTRACT California became very successful in controlling rising health care costs by promoting price competition through market-based, managed care policies. However, recent data reveal that the state has not been able sustain its initial success in controlling growth in hospital prices. Two powerful trends emerged in California that eroded the conditions needed to sustain price competition. To ensure timely access to emergency hospital services, government regulators enacted regulations that had the unintended effect of giving hospitals tremendous leverage when contracting with health plans. Also, antitrust authorities allowed hospitals to consolidate into multihospital systems by adding members that were not direct competitors in local markets. The combined effect of these policies and consolidation trends was a substantial reduction in the competitiveness of provider markets in California, which reduced health plans' ability to leverage competitive provider markets and negotiate lower prices and other benefits for their members. Policy makers can and should act to restore competitive conditions.

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Nearly two decades ago an article published in *Health Affairs* by some of the current authors reported that California had been very successful over the previous decade in controlling rising health care costs by promoting price competition through market-based managed care policies.¹ California was the earliest US adopter of such a model for controlling rising health care costs.² In the summer of 1982 the California State Legislature passed what turned out to be groundbreaking legislation that spurred national growth in managed care plans and the use of selective contracting by commercial health plans to leverage competitive market conditions and keep prices low. Subsequent research showed that this new model was working well in California and other states where managed care and selective contracting had taken hold.³⁻⁹ We concluded our 1996 article¹ with a

challenge to policy makers to promote and support competitive provider markets, and we underscored the importance of stimulating price competition to control rising health care prices.

Since we made that recommendation, more recent data have revealed that California has not been able to sustain its initial success in controlling hospital spending. Based on data reported to the state, prices paid by commercial health plans to California hospitals declined consistently from 1995 to 1999, for a cumulative reduction of 26 percent. However, beginning in 2001 hospital prices in the state began a sustained and rapid rise: Between 2001 and 2016 hospitals' revenue from commercial health plans grew from \$13.2 billion to \$40.2 billion, despite a 10 percent decline in total volume of care for commercially insured patients over the same period—resulting in a 238 percent increase in prices.¹⁰

Comparing California to the rest of the nation paints a similar picture. In 1998 hospital prices to commercial payers in California (measured as a percentage of Medicare prices) matched the national average.^{11,12} However, by 2012 hospital prices in California were well above the national Medicare average (203 percent versus 175 percent of Medicare prices).^{11,12}

In this article we present data covering the past twenty-five-plus years to focus on some key market developments and governmental policies during that period that undermined the effectiveness of California’s competitive, managed care-based model. We conclude that health policy in California did not keep pace with changes in the hospital market, resulting in an erosion of the competitive structure of the market needed to sustain and support a model that relies on competitive forces for controlling health spending.

‘Managed Care Backlash’ Affects Emergency Care And Hospital Billed Charges

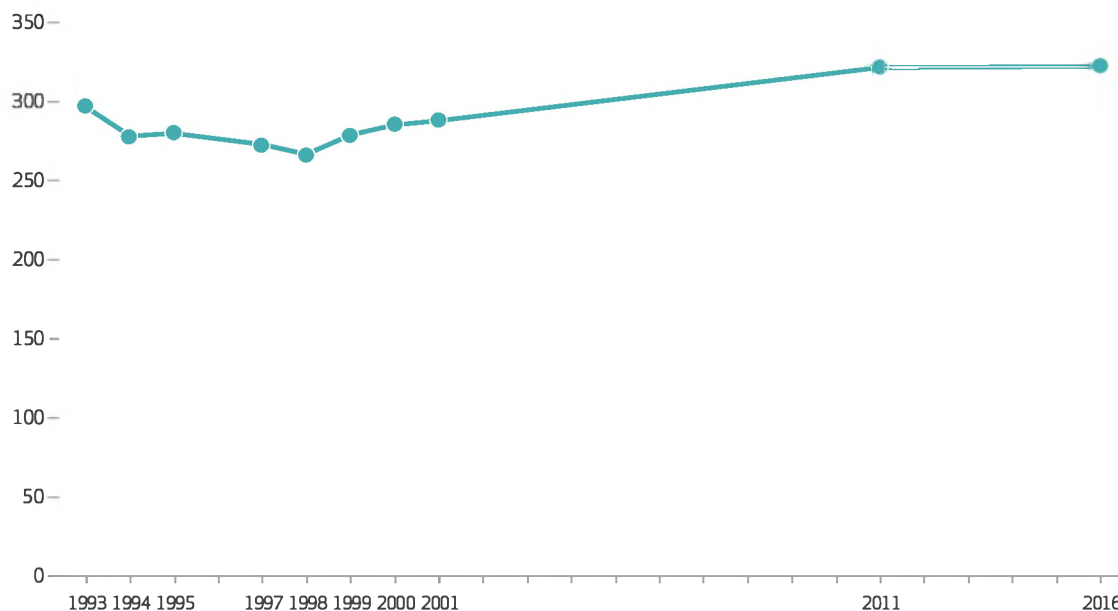
As managed care plans in California and the rest of the country became more aggressive in managing utilization and limiting prices through selectively contracting for narrower “preferred” provider networks, a so-called managed care backlash emerged across the country.¹³⁻¹⁶

Patients and employers expressed concern that managed care plans had gone too far in limiting access to needed care, especially emergency care. Governments responded by enacting regulations that made it more difficult for commercial health plans to exclude hospitals from their preferred networks. One such policy was adopting the “prudent layperson” rule for emergency care, which requires health plans to pay for their members’ emergency services (both inpatient and outpatient) received from all providers, even those out of network.¹⁷ California adopted a prudent layperson regulation in 1999, mandating that health plans instruct their members to go to the nearest emergency room (ER) in the case of a medical emergency, even if it is not on the health plan’s contracted, preferred list, and requiring the health plan to pay for it.^{18,19} To assess the effects of this rule change, we calculated ER visit rates per 1,000 population before and after the change in 1999 (see the online appendix for data and variable construction).²⁰ Before 1999 ER visit rates were declining (exhibit 1). In the period after 1999 we found an increase in the rate of hospital ER use in California. This trend continued even before the expansion of health insurance coverage related to the Affordable Care Act (ACA) in 2014.

Along with the increase in ER visit rates came increases in patients admitted as hospital inpatients through the ER (exhibit 2). Those in-

EXHIBIT 1

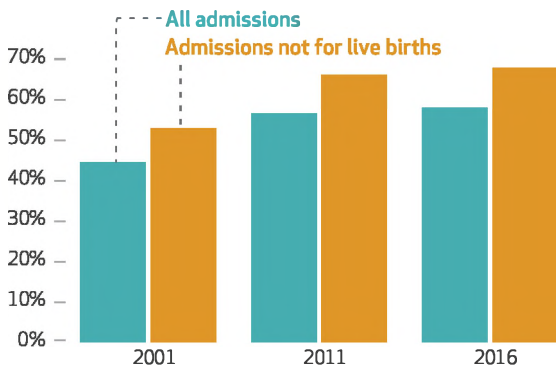
Emergency room visits per 1,000 people in California before and after implementation of a prudent layperson regulation, selected years 1993-2016



SOURCE Authors’ analysis of hospital financial disclosure pivot data for 1993–2016 from California’s Office of Statewide Health Planning and Development. **NOTE** California enacted a prudent layperson rule for emergency care (explained in the text) in 1999.

EXHIBIT 2

Percentages of inpatients admitted via hospital emergency rooms in California, with and without admissions for live births, selected years 2001-16



SOURCE Authors' analysis of hospital annual utilization data for 2001, 2011, and 2016 from California's Office of Statewide Health Planning and Development.

creases also followed the adoption of the prudent layperson rule and have continued over time: The number of ER-based admissions grew from 1.26 million in 1993 to 1.92 million in 2016, an increase of 52 percent—compared with a population increase of 25 percent, according to Annual Utilization Reports for selected years from the Office of Statewide Health Planning and Development.

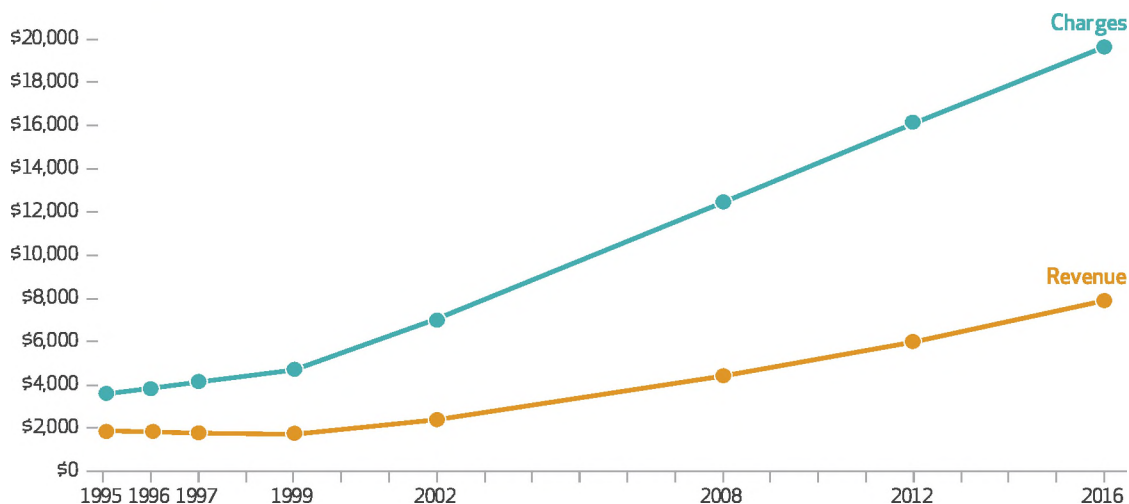
These changes have proved valuable to hospitals since health plans must pay for all emergency visits, even when patients go to the nearest hospitals that have not signed a contract with a

given health plan. The prudent layperson rule guarantees that hospitals will still receive a portion of all medical emergencies that occur in their local markets, even in the absence of a contract. Furthermore, they are permitted to submit bills to health plans at billed-charges rates. The specific proportion of medical emergencies treated at a given hospital without contracts depends on local emergency medical transportation routes and other local factors. Typically, emergency medical transport companies do not consider a patient's insurance coverage restrictions but instead follow local protocols based on travel time, medical necessity, and local hospital ER capacity.

Simultaneous with enactment of a prudent layperson rule in California and the acceleration of ER use, hospitals began substantially raising their billed charges, and they have continued to do so throughout the period we examined (exhibit 3) (see the appendix for variable construction).²⁰ The enactment of the rule, along with differential payments tied to billed charges from Medicare and commercial health plans for patients with extremely long lengths-of-stay or high costs (so-called outlier patients), provided hospitals with strong incentives to increase their billed charges, without any market constraints on the amount of increase. Before 1999 billed charges grew relatively slowly, from \$3,590 per day in 1995 to \$4,675 in 1999 (an increase of 30 percent). By 2002, however, billed charges per day had increased to \$7,071 (an increase of 51 percent from 1999). This inflationary trend has continued and accelerated, with billed

EXHIBIT 3

Hospitals' net revenue and billed charges for commercial payers per day in California, selected years 1995-2016



SOURCE Authors' analysis of hospital financial disclosure pivot data for 1995-2016 from California's Office of Statewide Health Planning and Development. **NOTE** Billed charges and net revenue were adjusted for outpatient volume.

charges per day reaching \$19,649 in 2016 (an increase of 178 percent since 2002). Exhibit 3 also shows average amounts paid to hospitals by health plans, calculated as net revenue per day. Before 1999 that amount trended downward, from \$1,851 in 1995 to \$1,713 in 1999, and then it began trending upward. This is consistent with the robust price competition among hospitals in the early period and reduced competition in the later period.

Hospitals Respond To Price Competition By Consolidating Into Hospital Systems

Health care providers reacted to the introduction of managed care price competition in several stages. Initially, as reported in our earlier article,⁷ managed care enrollment grew rapidly, and providers were forced to compete for managed care contracts based on price (for the first time) and other factors. This contributed to a slowdown in health care spending in California.^{2,7,21} However, competition based on price presents real difficulties for hospitals as it imposes market forces that require constant efforts to manage and control costs while delivering acceptable levels of quality and service. California hospitals soon began seeking ways to lessen competitive pressure. One of their first responses to intense price competition was consolidation, which included a combination of hospitals exiting the market, mergers or acquisitions, and the expansion of multihospital systems. Based on data reported to California's Office of Statewide Health Planning and Development, between 1995 and 2016 the number of acute hospitals in California declined nearly 20 percent (from 345 to 282, including new hospitals entering the market and existing hospitals closing), while at the same time the proportion of hospitals (and beds) in multihospital systems increased substantially (from 39 percent to almost 60 percent).

Reducing the number of hospitals and increasing consolidation into systems can affect the degree of competition hospitals face in their local markets. To examine this, we computed Herfindahl-Hirschman Indexes (HHIs) for each hospital and averaged across all hospitals over time. A standard measure of local market competition, the HHI ranges from 0 (perfect competition) to 1 (a monopoly market); see the appendix for more details.²⁰ Average HHIs grew from 0.24 in 1995 to 0.30 in 2001 and then remained stable until 2016. This early change followed by stabilization indicates that consolidation, mergers, and expansions of multihospital systems that involved local competitors happened early in the period and that continuing expansion of multihospital

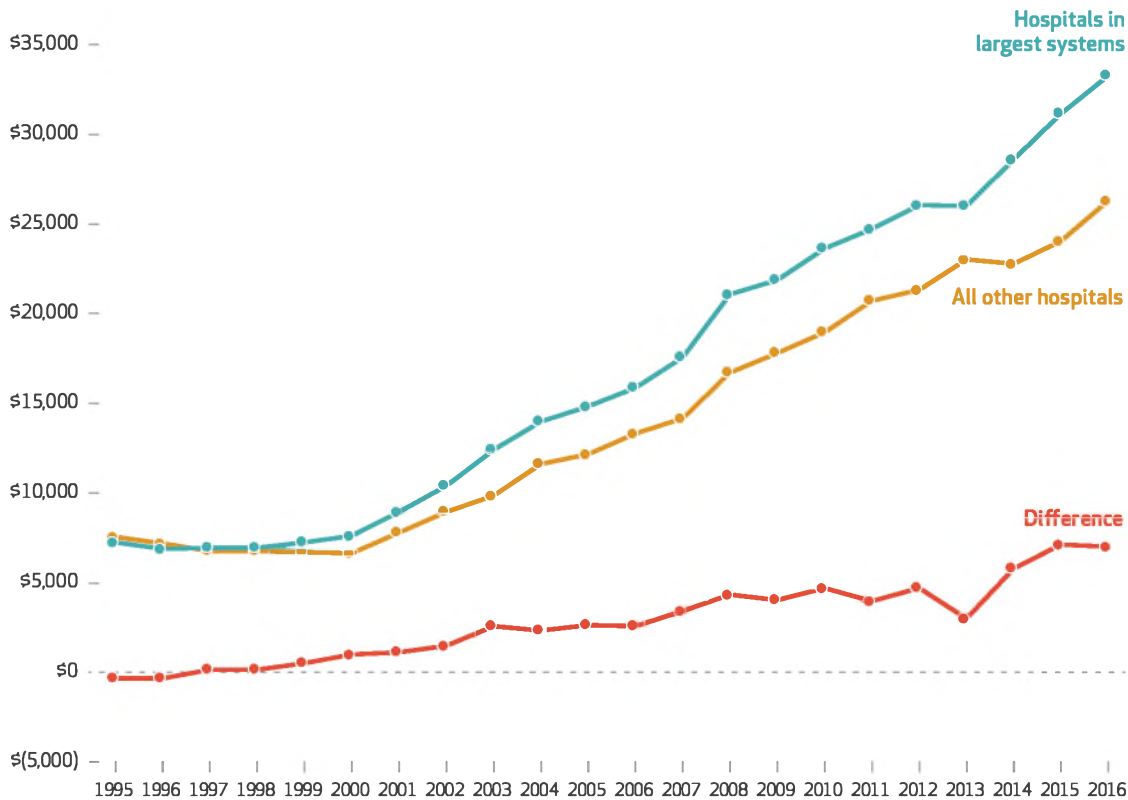
systems likely focused on adding hospitals in different geographic markets (which would not affect HHIs). The expansion of hospital systems by adding hospitals beyond local geographic markets is important, since antitrust regulators historically have not intervened in this type of consolidation.

Hospital Systems Can Employ Anticompetitive Contracting Practices To Gain Market Power And Raise Prices

As hospital systems have grown in number and size in California, they have developed strategies to enhance their leverage when contracting with health plans. One reported strategy is to link, when possible, all system-member hospitals into a single bloc for contracting purposes and to demand contracts with commercial health plans that include all system hospitals (an approach known as systemwide, or all-or-none, contracting), even when particular member hospitals would otherwise be excluded because they had higher prices or lower quality than other alternatives in their local markets.

To illustrate the potential impact of all-or-none contracting by systems, we examined price trends in 1995–2016 in the two largest multihospital systems compared with trends in other California hospitals. According to reporting by news media in California, these two systems employ all-or-none contracting practices—threatening to pull all of their member hospitals out of a health plan's network when contract negotiations break down.^{22,23} These news reports suggest that both systems adopted this practice at about the same time, and recently filed court documents allege that one of the systems implemented all-or-none contracting practices in the early 2000s, “insisting that all contract negotiations for any of its providers be conducted on a system-wide basis.”²⁴

Exhibit 4 shows that the average price per admission (adjusted for differences in hospital case-mix and cost of labor and outpatient volume) for hospitals in the two largest systems was about the same as the average price at all other hospitals in California at the beginning of the period (see the appendix for price construction).²⁰ While prices in both groups grew substantially over time, prices at hospitals that were members of these two systems increased more rapidly, compared to prices at other California hospitals. By 2016 the average adjusted price per admission in large-system hospitals was almost \$7,000 higher than that in all other California hospitals. It should be noted that this widening price difference was not related to differential

EXHIBIT 4**Adjusted average prices per admission at hospitals in the two largest systems and at all other hospitals in California, 1995–2016**

SOURCE Authors' analysis of hospital financial disclosure pivot data for 1995–2016 from California's Office of Statewide Health Planning and Development. **NOTE** Prices were adjusted for differences in hospital case-mix, cost of labor, and outpatient volume.

changes in either patient severity (case-mix) or local wage rates (Centers for Medicare and Medicaid Services wage indexes), as these effects were adjusted for in the price measure in exhibit 4.

In addition, because there are other factors beyond hospital system membership that may affect hospital prices, we conducted a sensitivity test using a statistical model (see the appendix)²⁰ that contained thirty-nine factors, including local market competition; payer mix; and eighteen measures of the availability of specialized hospital services, technology, satisfaction, and quality. The test generated adjusted differences between large-system hospitals and all other California hospitals that were of similar magnitude. That finding indicates that the higher prices observed in the data for large-system hospitals (a difference of \$6,985 in 2016) cannot be not explained by differences in other factors (that we can measure).

This is important because hospital systems often defend their need to accumulate market power and charge higher prices to offset the effects of other factors, including the need to cross-

subsidize Medicare and Medicaid patients and rural hospitals in their systems or pay higher wages in their local markets. All of these factors, along with measures of quality and the availability of specialized services, were included in the sensitivity test model, and they did not substantially reduce the higher prices observed in the largest systems by the end of the period.

Failure Of Policy To Keep Markets Competitive Derails The California Model

Research has shown that health care prices are consistently lower in markets where there are more competing hospitals for health plans to contract with.²⁵ An essential element of the price competition model is health plans' ability to exclude high-price or low-quality hospitals from preferred provider contracted status, which could result in lost volume, revenue, and net income for excluded hospitals. However, as shown by the data above, developments in California eroded these conditions needed to sustain price competition.

In an attempt to ensure timely access to emergency hospital services, regulators in California and across the country enacted rules that had the unintended effect of giving hospitals tremendous leverage in contract negotiations with health plans. Prudent layperson rules enabled hospitals to continue receiving ER patients even if the hospitals did not have a contract with those patients' health plans, weakening health plans' bargaining power with the hospitals. Regulators in California also enacted minimum geographic access rules and limitations on transferring health plan members from one provider to another when a hospital threatened to withdraw from a plan's network.

Simultaneously, hospitals began substantially raising their billed charges and applied them to ER patients not covered by a health plan contract. The result was that hospitals gained a guaranteed flow of local patients with a medical emergency for whom they could charge above-market prices. This makes it much more expensive for a health plan to exclude a hospital from its preferred contracted network, and during contract negotiations it weakens any threat of selective hospital exclusion and strengthens potential all-or-none contract demands from hospital systems.

At the same time, government antitrust authorities allowed hospitals, with little regulatory intervention, to form multihospital systems and expand them by adding members that were not direct competitors in local markets. Hospitals join systems for a variety of reasons: Systems offer the potential to improve quality and efficiency, but they also may accumulate market power that can restrain contractual freedom, resulting in higher prices and other anticompetitive outcomes. Additionally, it has been reported²⁶ that once systems are able to demand all-or-none contracts, they add other anticompetitive language to contracts to protect or expand their market power. Similarly, we have seen hospital systems acquiring medical groups and other services, which can further enhance market power and raise prices for other services.

The combined effect of these policies and consolidation trends was a sustained and substantial reduction in the competitiveness of provider markets in California. This resulted in a significant loss in health plans' ability to negotiate lower prices and other benefits for their members. The outcome has been sustained increases in health care spending in California.

Our data provide a quantitative example of the impact on prices when systems accumulate enough leverage to impose anticompetitive demands on health plans. The data show that the price per adjusted admission of the two largest

systems in California grew faster than those of other hospitals (in 2016 the average price at the system hospitals was 27 percent higher than the average price at other hospitals).

Policy Implications

The California experiment has not sustained its initial success, but there might still be the opportunity to change course. Our data provide important lessons for policy makers in California and other states. Markets are dynamic, so the competitive conditions needed by health plans to generate price competition increasingly need to be understood, monitored, and protected.

It is not clear where needed changes will come from. Legislation was introduced in California (SB-538) in 2016 to limit anticompetitive provisions by hospital systems in contracts with health plans. SB-538 sought to level the playing field in health care contracting by preventing dominant provider systems from engaging in five coercive and unfair practices: requiring all-or-none contract terms; forcing employers to be bound by undisclosed terms of a hospital-plan contract; mandating that payers bring antitrust claims on terms that are exceedingly favorable to the dominant provider group; requiring that a health plan provide coverage to its enrollees at the same level of cost sharing regardless of underlying value; and requiring that rates be kept secret from parties that are or will become liable for payment. This proposed bill was withdrawn on June 27, 2018, without explanation.²⁷

There are two ongoing private class-action antitrust lawsuits (one certified) that challenge all-or-none and other contracting practices as unlawfully anticompetitive.^{28,29} The California Office of the Attorney General recently filed a lawsuit alleging anticompetitive conduct by one of California's largest hospital systems and is seeking to join the existing class-action cases.³⁰ The attorney general's complaint outlines a broad range of anticompetitive behaviors that are used to drive up prices—including the use of all-or-none contracting; gag clauses that do not disclose prices; and other contract provisions that hinder competition, such as limiting a health plan's ability to create products with incentives for members to use more cost-effective providers (so-called anti-tiering language).³¹

Policy makers across the country can and should learn from California. The wave of hospital consolidation happened earlier in California, but other states are catching up.³²⁻³⁵ States could enact a variety of policy changes to restore, maintain, and protect competitive forces in their markets.

Antitrust regulators at the state and federal levels could expand their scope beyond transactions within local markets to oversee consolidation involving multihospital systems that span broader geographic markets. This is important because, as has been seen in California, much consolidation has involved hospitals that are in different markets.

Policy makers should also consider new approaches to limit the use of prudent layperson rules by providers to undermine competition. The California State Legislature has adopted rules limiting the use of out-of-network prices for some hospital-based physicians. Similar regulation could also cover hospital-based emergency care to limit monopoly pricing for out-of-network emergency care. Some states have limited hospitals' ability to collect full billed charges for out-of-network emergency patients, but this approach often ends up relying on the courts to interpret broad regulatory language. It increases both uncertainty and the costs of challenging full billed charges by health plans. Some states allow providers to balance-bill patients for the difference between full billed charges and amounts collected from the patient's health plan.³⁶ This does not solve the problem of monopoly pricing of emergency services but just shifts more of the

costs to the patient. One state, Maryland, offers a potential model, as it has the most administratively simple and comprehensive approach: limiting health plan payments to a fixed percentage of what Medicare pays without balance billing patients.³⁶ A more market-based approach could tie prices for out-of-network emergency care to negotiated, contracted prices for the same services in local markets.

Health insurance premiums in the United States for a family of four cost nearly \$27,000 in 2017, and they continue to grow much faster than general inflation.³⁷ A growing body of research shows that rising provider prices are the driving force behind rising premiums.³⁸ This article has identified two sets of policy changes that could help restore competitive conditions to health care markets and immediately slow the growth in prices. First, the formation of integrated delivery systems needs to be supported, yet these consolidated entities must be prevented from accumulating market power that can affect prices, quality, and service levels. Second, access to needed emergency care should continue to be assured, while at the same time regulations are needed to limit prices when there is no contract in place. ■

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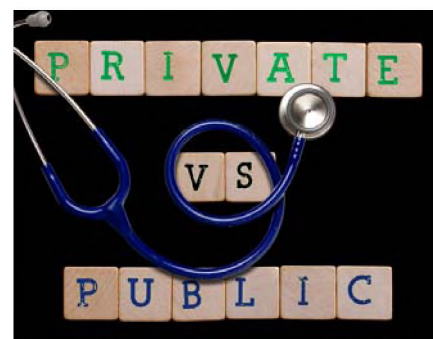
Why are employer-sponsored health insurance premiums higher in the public sector than in the private sector?

In this article, we examine the factors explaining differences in public and private sector health insurance premiums for enrollees with single coverage. We use data from the 2000 and 2014 Medical Expenditure Panel Survey-Insurance Component, along with decomposition methods, to explore the relative explanatory importance of plan features and benefit generosity, such as deductibles and other forms of cost sharing, basic employee characteristics (e.g., age, gender, and education), and unionization. While there was little difference in public and private sector premiums in 2000, by 2014, public premiums had exceeded private premiums by 14 to 19 percent. We find that differences in plan characteristics played a substantial role in explaining premium differences in 2014, but they were not the only, or even the most important, factor. Differences in worker age, gender, marital status, and educational attainment were also important factors, as was workforce unionization.

With many state and local governments facing difficult fiscal challenges in recent years, the compensation of public employees has come under increased scrutiny. Although the cost of health insurance benefits for active workers is not perceived as a “crisis” in the way underfunded pensions are, health benefits in 2014 were the costliest voluntary nonwage benefit for employers.¹ Over the past decade and a half, that cost has grown more rapidly in the public sector than in the private sector. According to data from the U.S. Bureau of Labor Statistics, between 2000 and 2014, health insurance costs as a share of total compensation rose by roughly 4 percentage points for nonfederal public sector employers, compared with roughly 2 percentage points for private sector employers. Data from the Medical Expenditure Panel Survey-Insurance Component (MEPS-IC), which we use in this study, show that, in 2000, average health insurance premiums for single coverage were 10 percent higher for local government enrollees than for private sector enrollees; however, by 2014, that difference had grown to 19 percent. Public sector enrollees also generally contribute a smaller proportion of total premium costs than do private sector enrollees (e.g., 13 percent for local enrollees versus 24 percent for private enrollees in 2014).

Economic theory predicts that, in competitive labor markets, rising health insurance costs will affect wages. If this is the case, the increase in public sector premiums need not imply an increase in the overall compensation of the sector’s workers. However, recent research suggests that the wages of public sector workers do not adjust to fully offset higher health insurance costs,² although this result must be interpreted cautiously given limited evidence for a compensating wage differential for health benefits.³

To evaluate the policy and welfare implications of differences in health insurance premiums for public and private sector enrollees, we need to understand the determinants of these differences. One possible explanation for the increasing gap in premiums is that, in certain aspects, public sector health plans have become relatively more generous than private sector plans. This may have occurred if, for example, private employers have been more aggressive than public employers in increasing deductibles and other forms of cost sharing in response to rising healthcare costs. If this is the case, public sector benefits can be seen as increasing in value relative to private sector benefits. Without a corresponding decline in wages, this increase would imply an increase in compensation. However, public-private differences in premiums



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will also reflect differences in the demographic characteristics of employees in the two sectors, as public sector employees are more likely to be older and female than private sector workers.

In this article, we examine the factors explaining differences in health insurance premiums for actively employed public and private sector enrollees with single coverage. Specifically, we use data from the 2000–14 MEPS-IC to compare premiums for enrollees at private employers with premiums for enrollees in state and local governments. After documenting changes in mean premiums over our analysis period, we focus on explaining public and private sector premium differences in 2000 and 2014. We use Oaxaca–Blinder decomposition methods to explore the relative explanatory importance of plan features and benefit generosity, such as deductibles and other forms of cost sharing, basic employee characteristics (e.g., age, gender, and education), and unionization.

Literature review

Over the years, economic research examining public and private sector compensation has produced mixed results. Some analyses have suggested that public sector employees earn more than observationally similar workers in private sector firms, whereas other analyses have found that the compensation gap favors the private sector.⁴ These conflicting results have been due to differences in analysis periods, in the choice of household or employer data, and in the methods used to control for employee characteristics. However, a consistent finding of this research is that, compared with private sector compensation, public sector compensation has been more heavily weighted toward nonwage benefits. There is also evidence that the public–private benefit gap has grown in recent years.

In terms of cost, health insurance is the most important voluntary nonwage employee benefit, representing 8.4 percent of total compensation and 26.5 percent of the cost per hour worked for nonwage benefits at the end of 2014.⁵ Several largely descriptive studies using different data sources indicate that, in the early 2000s, premiums were similar between sectors, but that since then, premiums for plans offered to public employees have grown faster than those offered to private employees. Using data from the 2004 Kaiser/HRET Employer Health Benefits Annual Survey to compare private and public sector managed-care offerings, Christopher Reddick found that premiums were slightly higher in the public sector.⁶ More recent Kaiser/HRET survey estimates indicate that, by 2014, the average single coverage premium for nonfederal public enrollees had reached \$6,727, compared with \$5,646 for private sector enrollees in firms with a for-profit ownership structure.⁷ Private sector enrollees at not-for-profit organizations had premiums (\$6,587) much closer to those for public sector enrollees. Using data from the 2014 MEPS-IC, Karen Davis found that public sector premiums for single coverage were higher than private sector premiums in all census divisions except West South Central.⁸

Previous studies provided limited information on why plans offered to public employees had higher premiums. Reddick found that, in 2004, private sector employers were more likely than public sector employers to offer alternative health plan options such as high-deductible health plans and health savings accounts.⁹ In addition, a few studies using semistructured interview data from the Community Tracking Survey examined how employers responded to rising health benefit costs in the early 2000s.¹⁰ Survey responses suggested that public employers were more reluctant than private firms to reduce the generosity of health benefits. For example, public employers were less likely to increase copayments for prescription drugs or to introduce tiered formularies that required enrollees to pay more for certain branded drugs.¹¹ Greater unionization in the public sector also served as an important constraint on the ability of state and local governments to cut benefits in response to rising healthcare costs.

In this article, we extend the comparative literature on public and private health insurance premiums. We explicitly consider the extent to which differences in mean premiums for plans covering public and private sector enrollees can be explained by differences in benefit generosity as opposed to differences in workforce and employer characteristics. In other words, do public sector enrollees receive more generous health benefits than their private sector counterparts, or are they just more expensive to insure?

Data

The MEPS-IC is a nationally representative survey of establishments fielded annually by the U.S. Census Bureau under sponsorship by the Agency for Healthcare Research and Quality. Despite its name, this component of the MEPS is not a panel but a repeated cross-section of establishments. The MEPS-IC collects data from employers in the private and public sectors, but public sector information is gathered only from state and local governments, not the federal government.¹²

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In 2014, state and local governments employed 5.3 million and 13.9 million workers, respectively, compared with over 121 million employees in the private sector.¹³ The MEPS-IC sample of private sector establishments—a sample containing between 30,000 and 35,000 observations in most years—is drawn annually from the most recently updated version of the Business Register, which is maintained by the U.S. Census Bureau. The unit of observation is the establishment, rather than the firm, and it is possible for multiple establishments from a single firm to appear in the sample as separate observations. Roughly two-thirds of the observations are single-unit establishments (for which there is no distinction between the establishment and the firm).

The state and local government sample for the MEPS-IC is much smaller—roughly 3,000 observations per year—but is nationally representative of nonfederal public employees. The public sector data include all state government units and local government units with at least 5,000 employees. These units represent a census and therefore lack a sampling error. The data also include smaller local governments that are sampled from the Census of Governments, with stratification by census division. This sampling is performed at the government-unit level, which is defined as all sites under a single controlling government entity.¹⁴ Local governments include counties, municipalities, townships, special districts, and school districts, and most of their employment is in elementary and secondary education. While the activities of state governments span different industries, they are concentrated in higher education, corrections, and hospitals.

The MEPS-IC asks private and public sector employers whether they offer health insurance to their active workers. For those offering insurance, the survey instrument includes detailed plan-level questions for up to four health plans for private sector establishments and all health plans for state and local governments. These questions ask about premiums, plan type, employee premium contributions, coverage of certain benefits (e.g., prescription-drug and dental coverage), whether the plan was self-insured, deductibles, copayment amounts, coinsurance rates, and limits on out-of-pocket spending. The MEPS-IC also collects information on establishment and workforce characteristics, such as the size of the firm or government unit, the percentage of the workforce that is unionized, and whether the employer provides health insurance to retirees.

Methods

To examine differences between public and private premiums, we use 2000 and 2014 MEPS-IC data and Oaxaca–Blinder decomposition methods. Because the employer sizes for private sector and local government establishments both range from small (fewer than 10 employees) to large (1,000 or more employees), our local–private comparisons compare premiums for all enrollees in local governments with premiums for all enrollees in the private sector.¹⁵ Since all state government employers have at least 1,000 employees—and size is an important predictor of whether an employer offers health insurance and the comprehensiveness of benefits—our comparisons of state government and private sector premiums restrict the sample of private establishments to those in firms with 1,000 or more employees.

We analyze differences in mean public and private sector premiums, as shown in equation (1). We perform these analyses separately with data for 2000 and 2014. In the equation, the subscript t represents each of the 2 years examined, and the subscripts *public* and *private* refer to the specific public and private sector establishment types included in each comparison.

$$(1) \quad \text{Diff}_{t,\text{public-private}} = E(Y_{t,\text{public}}) - E(Y_{t,\text{private}})$$

We estimate equation (2) as a pooled regression of premiums for public and private sector enrollees for each comparison set:

$$(2) \quad Y_t = X_t' \beta_t^* + \varepsilon_t, E(\varepsilon_t) = 0,$$

where β_t^* represents the vector of slope and intercept parameters from the pooled regressions within each year for each comparison set, and X_t represents the vector of predictors and a constant.

Using equation (2) to calculate the mean difference in premiums in equation (1), we can rearrange the regression coefficients and expected values of our independent variables so that they can be used in an

Oaxaca–Blinder decomposition. The decomposition is shown in equation (3), where β^* represents coefficients from the pooled regressions within each year and each comparison set, and β_i^{public} and

β_i^{private} represent coefficients from models run separately for the samples of public and private enrollees

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in each comparison set. The expected values of the independent variables are estimated with the use of the means of the variables in our samples.

$$(3) \quad \text{Diff}_{\text{public-private}} = \{E(X_{t,\text{public}}) - E(X_{t,\text{private}})\}'\beta^* + \{E(X_{t,\text{public}})'(\beta_t^{\text{public}} - \beta^*) + E(X_{t,\text{private}})'(\beta^* - \beta_t^{\text{private}})\},$$

where the explained component = $\{E(X_{t,\text{public}}) - E(X_{t,\text{private}})\}'\beta^*$ and the unexplained component = $\{E(X_{t,\text{public}})'(\beta_t^{\text{public}} - \beta^*) + E(X_{t,\text{private}})'(\beta^* - \beta_t^{\text{private}})\}$.

Note that the interpretation of our results depends on how we interpret the coefficients. If the coefficients reflect a degree of correlation with unobserved variables, we may be attributing differences to a predictor even though the true difference may be due to an unobserved variable. Because this issue is problematic in interpreting our measure of unionization (described below), we perform a number of sensitivity tests to evaluate our results with respect to this measure.

For each year, we show the dollar amount of the premium differences that are due to differences in the characteristics of public and private sector enrollees (i.e., the explained component). The amount for the unexplained component can be calculated as the total mean difference in premiums minus the amount for the explained component. Since we estimate OLS models, we can separate the explained component further, to show the detailed contributions from different predictors (e.g., X_1 and X_2):

$$(4) \quad \text{Explained portion} = \{E(X_{t,\text{public}}) - E(X_{t,\text{private}})\}'\beta^* = \{E(X_{1,t,\text{public}}) - E(X_{1,t,\text{private}})\}'\beta_1^* + \{E(X_{2,t,\text{public}}) - E(X_{2,t,\text{private}})\}'\beta_2^* + \dots$$

The predictors included in our models are described below.

While our decomposition models are estimated separately for 2000 and 2014, we do not attempt to explicitly decompose the widening gap in premiums over time. Given the large changes that occurred in the employer-sponsored insurance market during our analysis period, it is difficult to select one set of regression coefficients and use it across years. For example, the coefficient on the variable measuring whether a plan had a deductible was large and positive in 2000, but much smaller in 2014. One explanation for this change could be that, in 2000, the coefficient captured the effects of an unmeasured plan characteristic associated with plans with deductibles, but this association was no longer present in 2014.

Because of changes in coefficients over time, the apparent increase in the dollar amount of the contributions to the explained portion of the models likely reflects the effects of changes in coefficients and in plan, employer, and workforce characteristics. To aid readers with interpreting the decomposition results, appendix table A-1 shows selected contributions to the explained portion of the decomposition that were calculated with the use of coefficients from models estimated for both 2000 and 2014. For these selected estimates, the larger dollar contributions in 2014 are due to changing coefficients and widening differences in plan, employer, and workforce characteristics.

Independent variables

In analyzing differences in health insurance premiums, it is important to distinguish between those which are related to the comprehensiveness of benefits and those which are driven by the risk characteristics of employees and employers. Therefore, in our Oaxaca–Blinder models, we include plan, employer, and workforce characteristics. For plan characteristics, we include the following measures: an indicator for whether the plan has an overall deductible, the individual deductible level, hospital and physician coinsurance rates and copayment amounts (including an indicator for whether the hospital copayment is per stay or per day), an indicator for whether the plan has an out-of-pocket maximum, and the maximum out-of-pocket level. We inflate all dollar values to 2014 levels, using the all-items Consumer Price Index for All Urban Consumers.

Premiums may vary by the use of in- and out-of-network providers and the requirement that enrollees visit a gatekeeper before seeing a specialist. For this reason, we define five different plan types, using plan-level MEPS-IC information on provider arrangements and gatekeeper requirements: (1) plans that allow enrollees to visit any providers with no differential cost incentives (e.g., fee-for-service, or FFS, plans), (2) plans with a mixture of in- and out-of-network providers that have a gatekeeper (e.g., point-of-service, or POS, plans), (3) plans with a mixture of providers that do not have a gatekeeper (e.g., preferred-provider organization, or PPO, plans), (4) plans that require enrollees to use in-network

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providers (e.g., health maintenance organization, or HMO, plans) and do not have a gatekeeper, and (5) HMO plans that do have a gatekeeper (the omitted category).

Since the services covered by a health plan can affect its cost, our models include two indicators for whether the plan covers dental care and prescription drugs. We also include an indicator for whether the plan is self-insured—a feature employers may adopt in an attempt to reduce premium costs—although the evidence for lower premiums for self-insured plans is inconsistent.¹⁶

One important distinction between public and private workplaces is that a higher percentage of public sector employees are union members with contractually negotiated benefits. In 2014, 29.8 percent of state government employees and 41.9 percent of local government employees were members of a union, compared with 6.6 percent of private sector employees.¹⁷ It is well documented that unionization is associated with higher rates of coverage for health insurance and other nonwage benefits.¹⁸ Some research has also noted the various ways in which unions may constrain public employers' ability to change health insurance benefits.¹⁹ Given that some plan design features are unobserved in our data, including unionization as a control variable may account for unobserved differences in benefits (e.g., size of provider network or limits on the formulary for prescription drugs). At the same time, a more unionized workforce also may have characteristics different from those of a workforce that has no, or fewer, unionized workers. In our models, we include a measure for the proportion of the establishment's workforce that belongs to a union, noting that the coefficient on this variable is difficult to interpret because of possible correlation between our unionization measure and unobserved insurance benefits or unobserved workforce characteristics. To test whether our unionization measure is capturing information on such benefits and characteristics, we perform sensitivity tests by including and excluding this measure and evaluating any resulting changes in plan and workforce contributions toward explaining premium differences.

We also include an establishment-level indicator for whether the employer offers health insurance to retirees. We include this measure at the establishment, rather than the plan, level, because the MEPS-IC does not contain information on which plans might enroll retirees. If retirees are included in the same risk pool as active employees, this could increase premiums because of the greater risk and higher cost associated with insuring older individuals.²⁰ Providing evidence that this might occur, 43 states in 2014 offered non-Medicare eligible retirees and their dependents the same plans as those offered to active employees, and 29 of these states enrolled retirees at a premium rate that also applied to active employees.²¹ The public sector offers retiree benefits more often than the private sector. This may be due, in part, to a higher concentration of small employers in the private sector, differences in the occupational mix of workers, or both.²²

As noted earlier, it is important to identify differences between public and private premiums that are driven by the characteristics of employees in the two sectors. Studies have shown that workers in the public sector are more likely to be older, to be female, to be married, and to have higher levels of education and longer job tenure than private sector workers.²³ Since the MEPS-IC public sector data on worker characteristics have relatively high rates of item nonresponse compared with the survey's private sector data, we impute worker demographic characteristics for all observations in both sectors. This imputation is performed by creating means from the full sample of the 2000 Decennial Census and the 2014 American Community Survey (ACS) and merging them with the MEPS-IC records.

To create these means, we first limit the samples from each data source to adults who are full-time workers (individuals ages 18 to 64 who worked at least 35 hours per week) and employed in state governments, local governments, and the private sector. We average these data at the state and detailed industry levels for private sector workers and at the state level for state and local government workers.²⁴ We construct means for the percentages of workers who are female, married, and married females. We also produce averages for all workers and for female workers who are in the following age groups: 18–25 years, 26–35 years, 36–45 years, 46–55 years, and 56–64 years. In addition, we generate means for workers with the following levels of educational attainment: less than high school, high school diploma, some college, associate's degree, bachelor's degree, and graduate degree. Finally, we include state fixed effects to capture variations in the geographic costs of healthcare and other state-level differences. We use plan-level data from the MEPS-IC and weight all estimates by the number of enrollees.

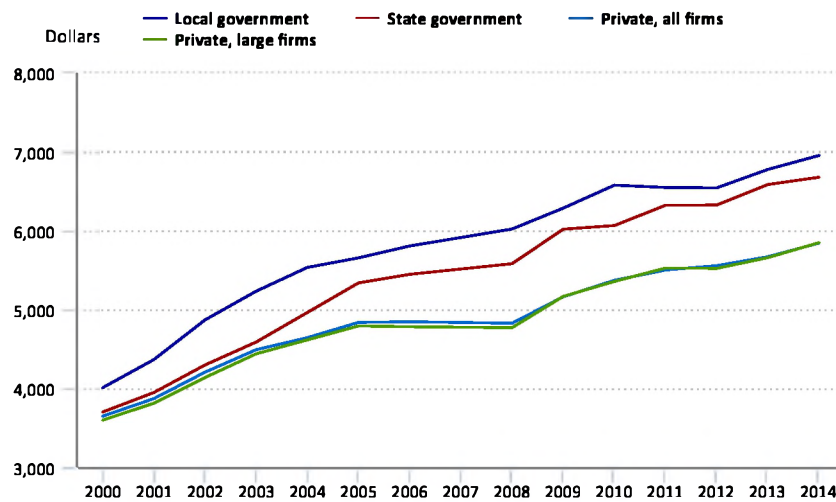
Results

Although premiums for government enrollees were consistently higher than those for private sector enrollees from 2000 to 2014, the gap widened over the period. (See figure 1.) In 2000, average local

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government premiums were 10 percent higher than private sector premiums (\$4,012 versus \$3,652), and average state premiums were 3 percent higher than large-firm private premiums (\$3,705 versus \$3,602). (See table 1.) By 2014, average local government premiums exceeded private sector premiums by \$1,106 (19 percent), while state government premiums exceeded large-firm private premiums by \$826 (14 percent).

Figure 1. Mean single-coverage premiums per enrollee, 2000–14 (2014 dollars)



Note: Because data were not collected in 2007, estimates for that year are averages of 2006 and 2008 premiums. Premiums are inflated to 2014 dollars with the use of the all-items Consumer Price Index for All Urban Consumers. Differences between local and private premiums and between state government and large-firm private premiums are significant at $p < 0.05$. Source: Medical Expenditure Panel Survey-Insurance Component, 2000–14.

[View Chart Data](#)

Table 1. Mean characteristics of employer-sponsored plans for public and private enrollees, single coverage, 2000 and 2014

Plan characteristics	2000		2014		2000		2014	
	Local government	Private, all	Local government	Private, all	State government	Private, large firms	State government	Private, large firms
Premiums (2014 dollars)	4,012***	3,652	6,945***	5,839	3,705*	3,602	6,670***	5,844
Plan type (percent)								
Fee for service (FFS)	9.9**	7.6	4.0**	5.8	13.9***	7.7	0.5***	3.1
Preferred-provider organization (PPO)	42.7†	40.4	59.9***	64.9	28.2***	42.8	59.5***	76.6
Point of service (POS)	14.4***	19.5	11.3***	7.8	7.3***	17.8	9.8***	5.1
Health maintenance organization (HMO), with gatekeeper	30.1	28.5	14.9***	12.1	46.5***	29.3	18.3***	7.3
HMO, no gatekeeper	2.9*	4	9.9	9.4	4.2***	2.4	11.9***	7.9
Self-insured (percent)	20.0***	34.9	37.4***	44.8	30.0***	70.7	61.6***	80.5
Dental coverage (percent)	20.5***	26.4	13.0***	17.4	14.3***	23.2	8.1***	14.3

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: Dollar measures are inflated to 2014 dollars with the use of the all-items Consumer Price Index for All Urban Consumers. Significant differences between local and private plans are indicated on the local government estimate. Significant differences between state and large-firm private plans are indicated on the state government estimate. Estimates are weighted by the number of enrollees in the plan.

Source: 2000 and 2014 Medical Expenditure Panel Survey-Insurance Component.

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Plan characteristics	2000		2014		2000		2014	
	Local government	Private, all	Local government	Private, all	State government	Private, large firms	State government	Private, large firms
Prescription drug coverage (percent)	97.0*	95.9	97.2**	98.1	95.7	95.6	94.9***	98.2
Cost sharing								
Deductibles (2014 dollars)	166***	229	589***	1,113	145	153	408***	945
Deductibles (> \$0) (2014 dollars)	384***	525	930***	1,350	387*	424	666***	1,112
Percent with Deductible > \$0	43.1	43.6	63.4***	82.5	37.4	36.1	61.2***	85
Copayments								
Hospital copayment (2014 dollars)	90	88	153	139	54***	77	174***	83
Hospital copayment if > \$0 (2014 dollars)	358†	407	459***	585	186***	343	381†	418
Percent with copayment per hospital stay	22.3**	18.8	30.0***	19.6	25.3***	20	45.8***	17.7
Physician copayment (2014 dollars)	11***	13	17**	16	10***	13	15***	13
Physician copayment if > \$0 (2014 dollars)	16***	18	22***	25	14***	17	20***	24
Coinsurance rates (percent)								
Hospital coinsurance rate	6.5**	7.3	10.7***	13.5	5.9**	6.6	8.3***	15
Hospital coinsurance rate if > 0	16.9	16.9	19.2***	20.1	16.2	15.9	18.6***	19.4
Physician coinsurance rate	4.5**	3.7	4.0***	6.3	0.1***	3.8	3.5***	8.3
Physician coinsurance rate if > 0	17.7	18	19.3**	20.3	17.5	17.6	18.9***	20.1
Out-of-pocket maximum (2014 dollars)	1,367***	1,555	2,812***	3,263	1,226***	1,529	3,271	3,250
No maximum (percent)	32.3	32.4	9.2	8.7	45.9***	31.5	4.1***	7.0
Maximum if > \$0 (2014 dollars)	2,027***	2,299	3,098***	3,575	2,265	2,233	3,412†	3,496
Number of enrollees (thousands)	3,569	29,500	4,326	29,000	1,369	13,900	1,550	15,100

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: Dollar measures are inflated to 2014 dollars with the use of the all-items Consumer Price Index for All Urban Consumers. Significant differences between local and private plans are indicated on the local government estimate. Significant differences between state and large-firm private plans are indicated on the state government estimate. Estimates are weighted by the number of enrollees in the plan.

Source: 2000 and 2014 Medical Expenditure Panel Survey-Insurance Component.

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In table 2, we present the results of the Oaxaca–Blinder decomposition models for public–private premium differences in 2000 and 2014. As discussed earlier, we estimate our decomposition models separately for the 2 years and compare (1) premiums for local government enrollees with those for all private enrollees and (2) premiums for state government enrollees with those for private sector enrollees in large firms. The estimates in table 2 show the contributions of differences in plan, worker, and employer characteristics toward explaining premium differences for public and private sector enrollees. They also show the remaining unexplained portion from the models.²⁵

Table 2. Oaxaca–Blinder decomposition of public–private premium differences per enrollee, single coverage, 2000 and 2014

Plan characteristics	Local government–all private firms		State government–large private firms	
	2000 (2014 dollars)	2014	2000 (2014 dollars)	2014
Premiums				
Public	\$4,012	\$6,945	\$3,705	\$6,670
Private	3,652	5,839	3,602	5,844
Difference	360***	1,106***	103**	826***
Difference contributed by				
Plan characteristics	12	174***	-24	206***
Selected plan characteristics				
Deductibles	11*	135***	9†	169***
Hospital copayments	2	-0.3	26**	-29
Hospital coinsurance	7*	32***	8*	137***
Physician out of pocket	0.4	15*	-2	18
Out-of-pocket maximums	3	32***	6	10†
Plan type	7	-24***	-42**	-58**
Dental	-20***	-13**	-29***	-28**
Prescription drug coverage	2	-4	0.3	-13†
Self-insured	-10**	-0.1	-28**	-13†
Age, marital status, female	57	304***	-212**	280***
Educational attainment	112***	162**	248***	78
Unionization	245***	336***	184***	181***
Retiree health insurance offered	-33	70*	-48	98**
Firm/government unit size	-103***	-88***	—	—
State fixed effects	-4	-32**	19	-35**
Total explained	277***	925***	138	796***
Residual/unexplained	83	181*	-35	30

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: Premiums, deductibles, and copayment amounts for 2000 are inflated to 2014 dollars with the use of the all-items Consumer Price Index for All Urban Consumers. "Total explained" may differ from the sum of individual contributions because of rounding. **Plan characteristics:** total deductibles, positive deductible indicator, hospital and physician copayments and coinsurance rates, hospital copayment per stay indicator, out-of-pocket maximum, no-out-of-pocket maximum indicator, plan type indicators (HMO, no gatekeeper; PPO; POS; FFS; HMO, with gatekeeper (omitted category)), dental coverage and prescription drug coverage indicators. **Selected plan characteristics:** deductibles (total deductibles, positive deductible indicator), hospital copayments (hospital copayment and hospital copayments per stay indicator), physician out of pocket (physician copayment and physician coinsurance), out-of-pocket maximums (out-of-pocket maximum, no-out-of-pocket maximum indicator), plan type (indicators for HMO, no gatekeeper; PPO; POS; FFS; HMO, with gatekeeper (omitted category)). **Age, marital status, female:** 26–35 years, 36–45 years, 46–55 years, 56 or more years; married, female, married female, female and in specified age categories (omitted categories: 18–25 years, female and 18–25 years of age). **Educational attainment:** high school completed, some college, associate's degree, bachelor's degree, graduate degree (omitted category: less than high school). **Firm/government unit size:** 10–24 employees, 25–99 employees, 100–499 employees, 500–999 employees, and 1,000 or more employees (omitted category: fewer than 10 employees).

Source: Authors' calculations using the 2000 and 2014 Medical Expenditure Panel Survey–Insurance Component with merged data from the 2000 Decennial Census and the 2014 American Community Survey.

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Overall, the Oaxaca–Blinder model’s explained effects, which reflect the contributions of differences in characteristics between the public and private sectors, are very important for understanding why public premiums were higher than private sector premiums in both years. For example, in our local–private models, differences in characteristics explained \$277 of the \$360 premium gap in 2000 and \$925 of the \$1,106 premium gap in 2014. The explanation for these findings is multifaceted. In 2000, a more educated workforce and a higher rate of unionization contributed toward the relatively high premiums for local government enrollees, but plan characteristics, as a group, did not have a significant contribution because of the offsetting positive and negative effects of specific plan characteristics. By 2014, however, differences in plan characteristics were important in explaining premium differences, as were differences in demographic characteristics, rates of unionization, and the possibility that retirees were included in the insurance plans’ risk pools. Below, we discuss the detailed results from the decomposition models (table 2), alongside descriptive characteristics for the two sectors (tables 1, 3, and 4).

Table 3. Establishment characteristics for enrollees with single coverage, 2000 and 2014 (percent)

Establishment characteristics	2000		2014		2000		2014	
	Local government	Private, all	Local government	Private, all	State government	Private, large firms	State government	Private, large firms
Firm or government unit size								
Less than 10 employees	1.1***	9.6	0.8***	5.8	—	—	—	—
10–24 employees	1.2***	8.6	1.2***	6.7	—	—	—	—
25–99 employees	5.4***	14.6	4.6***	14.4	—	—	—	—
100–499 employees	20.1***	15.2	18.7**	15.8	—	—	—	—
500–999 employees	11.8***	5.0	12.6***	5.3	—	—	—	—
1,000 or more employees	60.3***	47.1	62.2***	52.0	100.0	100.0	100.0	100.0
Workers belonging to a union at enrollee’s establishment								
	29.8***	4.5	35.3***	4.7	32.6***	6.5	30.4***	6.2
Enrollees’ employer offers retiree health insurance								
	70.7***	27.9	77.7***	25.5	98.7***	48.0	88.6***	42.6

** $p < 0.01$, *** $p < 0.001$

Note: Estimates are weighted by the number of enrollees in the plan. Significant differences between local and private plans are indicated on the local government estimate. Significant differences between state and large-firm private plans are indicated on the state government estimate.

Source: 2000 and 2014 Medical Expenditure Panel Survey-Insurance Component.

Table 4. Workforce characteristics for enrollees with single coverage, 2000 and 2014 (percent)

Worker characteristics	2000		2014		2000		2014	
	Local government	Private, all	Local government	Private, all	State government	Private, large firms	State government	Private, large firms
Age								
18–25 years	6.3***	13.5	5.7***	11.2	6.1***	13.4	5.7***	11.1
26–35 years	22.5***	28.1	21.4***	25.7	21.7***	27.9	21.3***	25.6

** $p < 0.01$, *** $p < 0.001$

Note: Estimates are weighted by the number of enrollees in the plan. Significant differences between local and private plans are indicated on the local government estimate. Significant differences between state and large-firm private plans are indicated on the state government estimate.

Source: Estimates calculated from the 2000 Decennial Census and the 2014 American Community Survey and merged back onto the 2000 and 2014 Medical Expenditure Panel Survey-Insurance Component.

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Worker characteristics	2000		2014		2000		2014	
	Local government	Private, all	Local government	Private, all	State government	Private, large firms	State government	Private, large firms
36–45 years	29.6***	29.3	25.0***	24.1	29.9***	29.4	25.0***	24.0
46–55 years	30.6***	21.0	28.3***	24.3	31.1***	21.3	28.3***	24.5
56 years or older	11.0***	8.1	19.6***	14.7	11.2***	8.1	19.8***	14.8
Female	54.0***	44.9	58.7***	44.7	56.5***	47.3	58.8***	46.8
Married	67.0***	58.5	60.8***	54.2	64.5***	58.4	61.1***	53.9
Married female	34.3***	24.0	33.8***	22.3	33.8***	25.2	34.1***	23.2
Female × age								
18–25 years	3.4***	6.2	3.3***	5.0	3.6***	6.6	3.2***	5.2
26–35 years	11.4***	12.5	12.4***	11.5	12.2***	13.1	12.3**	11.9
36–45 years	15.7***	13.0	14.6***	10.5	17.3***	13.8	14.6***	11.1
46–55 years	17.3***	9.6	16.9***	11.0	17.6***	10.1	17.0***	11.6
56 years or older	6.2***	3.6	11.5***	6.7	5.8***	3.7	11.7***	7.1
Educational attainment								
Less than high school	5.4***	11.7	2.1***	7.8	3.7***	11.0	2.1***	7.1
High school	19.4***	27.7	13.8***	25.2	16.5***	27.4	14.1***	24.3
Some college	21.9***	24.7	16.3***	22.4	19.0***	25.0	15.9***	22.6
Associate's degree	7.5***	8.0	8.2***	9.8	7.1***	8.3	8.1***	10.3
Bachelor's degree	25.4***	19.6	29.1***	23.1	27.3***	20.5	29.0***	23.9
Graduate degree	20.4***	8.3	30.5***	11.7	26.5***	7.9	30.9***	11.9

** $p < 0.01$, *** $p < 0.001$

Note: Estimates are weighted by the number of enrollees in the plan. Significant differences between local and private plans are indicated on the local government estimate. Significant differences between state and large-firm private plans are indicated on the state government estimate.

Source: Estimates calculated from the 2000 Decennial Census and the 2014 American Community Survey and merged back onto the 2000 and 2014 Medical Expenditure Panel Survey-Insurance Component.

Differences in detailed plan characteristics

Differences in plan characteristics were not a significant factor in explaining differences between private sector premiums and either state or local government premiums in 2000. Premium differences in that year were not large, and neither were differences in plan characteristics. (See table 1.) For example, a similar percentage of public and private enrollees had plans with deductibles in 2000. However, among these enrollees, the mean deductible for private enrollees was significantly larger than the corresponding mean for public enrollees.

By 2014, differences in benefits had widened. Holding other factors constant, combined differences in plan type, out-of-pocket cost-sharing arrangements, and covered services led premiums for local government enrollees to be \$174 higher than those for private enrollees (\$206 in the model comparing state government enrollees and large-firm private enrollees).²⁶ In the local-private model, differences in deductibles alone contributed \$135 toward this \$174 total, reflecting the \$524 gap (see table 1) in unconditional deductibles between local government and private sector enrollees. Similarly, the \$537 difference in unconditional deductibles between state government and large-firm private enrollees in 2014 contributed \$169 toward the premium differences in that year.

In addition, differences in hospital coinsurance rates for state government and private enrollees accounted for \$137 of the state-private premium difference in 2014 and \$32 of the local-private premium gap. The 2014 decompositions also show that differences in out-of-pocket maximums contributed \$32 toward the local-private premium gap and \$10 toward the state-private premium gap ($p < 0.10$ for the latter estimate). In contrast, differences in plan type and dental coverage (which is offered more often in the private than in the public sector) pulled premiums in the opposite direction, contributing toward private premiums being higher than public sector premiums.

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Differences in rates of unionization

Unionization is an important factor in explaining public–private differences in premiums. In 2014, differences in unionization rates contributed \$336 toward the gap between local and private premiums and \$181 of the gap between state and large-firm private premiums. To understand whether these contributions resulted from differences in unobserved worker characteristics or in unobserved benefit generosity negotiated by unions, we reran our models by excluding unionization. Omitting unionization greatly reduced the explained portion of the decomposition models (a reduction of \$300 in the 2014 local–private comparison; data not shown), and the factors that were most affected were employer offers of retiree health insurance and workforce characteristics. In contrast, the contributions of plan characteristics were not affected, which suggests that our unionization measure does not reflect unobserved measures of benefit generosity.

Workforce and employer characteristics

The demographic characteristics of potential enrollees in a health insurance plan help determine the risk and cost—and, therefore, the premiums—associated with insuring these individuals. As shown in table 4, there were significant differences in the demographic characteristics of public and private sector employees in both 2000 and 2014. As other studies have shown, public sector workers are more likely to be female, older, and married than private sector workers. Differences in these three measures accounted for \$304 of the 2014 premium difference between local and all private enrollees and \$280 of the difference between state and large-firm private enrollees.²⁷ Public sector workers also had higher levels of educational attainment than private sector workers, and this difference contributed \$112 and \$162 toward the local–private premium gap in 2000 and 2014, respectively. While differences in educational attainment contributed \$248 toward the gap between state and large-firm private premiums in 2000, they did not contribute to the large premium gap in 2014.

Employer offers of retiree health insurance were far more common in the public than in the private sector in both 2000 and 2014, with 40 to 50 percentage-point differences in the rates at which enrollees worked for employers offering this benefit. In 2014, differences in the offer rates of retiree health insurance accounted for \$70 of the local–private premium gap and \$98 of the gap between state and large-firm private premiums.²⁸ As noted earlier, these differences may reflect the possibility that the premiums for some public sector plans were higher than those in the private sector, since public plans are more likely to cover more expensive retired employees. Finally, in 2014, differences in firm size between local government and private sector employers, along with the different distribution of employers across states, contributed toward private premiums being higher than public premiums. The fact that government enrollees were more likely to be employed at larger employers than private sector enrollees (see table 3) lowered government premiums relative to private premiums.

Conclusion

In this article, we used data from the 2000 and 2014 MEPS-IC to compare health insurance premiums for public and private sector enrollees. We used Oaxaca–Blinder decomposition methods to examine the contribution of plan, worker, and employer characteristics toward explaining the public sector's higher premiums. While there was little difference in premiums in the two sectors in 2000, we found that a more educated workforce and a higher rate of unionization in the public sector contributed toward local government enrollees' higher premiums in that year. By 2014, the gaps between public and private sector premiums had grown larger, with public sector premiums exceeding private sector premiums by 14 to 19 percent. We found that differences in plan characteristics played a substantial role in explaining these differences in 2014, but that these characteristics were not the only, or even the most important, factor. Differences in plan characteristics accounted for \$174 of the \$1,106 gap between local and private premiums in 2014 and \$206 of the \$826 gap between state premiums and large-firm private premiums in that year. In comparison, the combined contributions of differences in the age, marital status, and educational attainment of workers and in the share of workers who were female explained \$466 of the \$1,106 premium gap between local government and all private enrollees in 2014. Similarly, these combined contributions accounted for \$359 of the \$826 premium gap between state government and large-firm private enrollees.

Unionization also contributed more toward explaining public–private premium gaps than did plan characteristics in 2014 (\$336 of the gap between local and private premiums and \$181 of the gap between state and large-firm private premiums). Given the results of our sensitivity analyses, this measure likely reflects variations in worker, rather than plan, characteristics.

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To the best of our knowledge, our study is the first to decompose differences in public and private premiums with the aim of identifying specific factors that contribute to higher public sector premiums. While we found that the design features of plans offered by state and local governments contributed to the public sector's higher premiums in 2014, our decomposition analysis revealed that worker and employer characteristics also played a large role—in some comparisons, even larger than that of plan characteristics. We believe that our results on the relative contribution of plan generosity and workforce characteristics can inform the broader debate on the relative compensation of public and private sector workers.

Appendix

Table A-1. Contributions of plan and selected worker characteristics to explaining premium differences calculated with both 2000 and 2014 coefficients

Coefficients	Explained portion	
	2000	2014
Local government units—all private firms		
Plan characteristics		
2000	\$12	\$51
2014	26	174
Age, marital status, female		
2000	57	136
2014	123	304
State government units—large private firms		
Plan characteristics		
2000	-24	172
2014	-143	206
Age, marital status, female		
2000	-212	-10
2014	166	280

Source: Authors' calculations using the 2000 and 2014 Medical Expenditure Panel Survey-Insurance Component with merged data from the 2000 Decennial Census and the 2014 American Community Survey.

Disclaimer: Any opinions and conclusions expressed here are those of the authors and do not necessarily represent the views of the U.S. Census Bureau, the Agency for Healthcare Research and Quality, or the University of Michigan. All results have been reviewed to ensure that no confidential information has been disclosed.

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Notes

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¹² For more information on the MEPS-IC, see https://meps.ahrq.gov/mepsweb/survey_comp/Insurance.jsp.

¹³ See "2014 Annual Survey of Public Employment and Payroll" (U.S. Census Bureau), <https://www.census.gov/data/datasets/2014/econ/apes/annual-apes.html>; and "2014 County Business Patterns" (U.S. Census Bureau), <https://www.census.gov/programs-surveys/cbp/data/tables.2014.html>.

¹⁴ Government units are defined as organized entities with governmental character and with managerial discretion in their own affairs that is distinct from that of any other governmental unit's administrative structure. This definition can apply to universities and community colleges, as well as to state and other branches of government. States or local parent governments determine the level of entities that are considered governments. These determinations can vary by state, leaving some states without any dependent governments (i.e., entities, such as libraries or school boards, associated with a parental governmental agency) that report as separate units. For example, some states define all their universities as one government entity, whereas other states define each separate university as a separate government entity; see *State and local government statistics at a crossroads* (National Research Council, 2007), <https://www.nap.edu/catalog/12000/state-and-local-government-statistics-at-a-crossroads>.

¹⁵ These models include the following indicators for firm or government unit size: fewer than 10 employees (the omitted category), 10–24 employees, 25–99 employees, 100–499 employees, 500–999 employees, and 1,000 or more employees.

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¹⁹ Trude et al., "Employer-sponsored health insurance"; Watts et al., "The role of public employers in a changing health care market"; and Hurley et al., "Public employees' health benefits survive major threats, so far."

²⁰ In response to rising costs, some states are expanding their health-plan risk pools to include employees from local governments. The National Council of State Legislatures has reported that state-employee health plans often combine their enrollee pool with that of other government-employee participants (see <http://www.ncsl.org/research/health/health-insurance-premiums.aspx>). For example, 21 states expanded their pools with participants from cities, towns, and counties; 16 states with participants from colleges and universities; and 19 states with participants from public schools. The MEPS-IC enrollment data for the public sector do not capture this detail, but our models control for state fixed effects.

We were unable to find data showing whether public or private employers were more likely to pool retirees with active employees. Some state governments have included retirees in the active-employee risk pool in order to reduce liabilities they must report for the expected costs of health benefits promised to current and future retirees under Government Accounting Standard Statement 45; see Katie Meyer, Colleen Schlecht, and Betta Sherman, "Challenges and current practices in state employee healthcare," NASPE white paper (Chicago, IL: University of Chicago, 2010), https://knowledgecenter.csg.org/kc/system/files/NASPE_Healthcare_Whitepaper_0.pdf. In addition, some employers have created separate retiree-only plans for exemption from certain costly requirements of the Affordable Care Act; see Frank McArdle, Tricia Neuman, and Jennifer Huang, "Retiree health benefits at the crossroads" (Kaiser Family Foundation, 2014), <https://www.kff.org/medicare/report/retiree-health-benefits-at-the-crossroads/>.

²¹ In some cases, the premium rate for retirees is 1–5 percent higher than that for active employees; see "State employee health plan spending: an examination of premiums, cost drivers, and policy approaches" (Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation, August 2014), <http://www.pewtrusts.org/en/research-and-analysis/reports/2014/08/state-employee-health-plan-spending>.

²² See Hurley et al., "Public employees' health benefits survive major threats, so far"; and "New data series highlights employee access to medical care and retirement benefits," *Program Perspectives*, vol. 2, no. 4 (U.S. Bureau of Labor Statistics, July 2010), https://www.bls.gov/opub/perspectives/program_perspectives_vol2_issue4.pdf. The MEPS-IC does not collect data on the occupational mix of the employer's workforce.

²³ *Employee tenure in 2010*, USDL-10-1278 (U.S. Department of Labor, September 14, 2010), https://www.bls.gov/news.release/archives/tenure_09142010.pdf; Ramoni-Perazzi and Bellante, "Do truly comparable public and private sector workers show any compensation differential?"; Bender and Heywood, "Out of balance?"; and Gerald Mayer, "Selected characteristics of private and public sector workers," CRS Report R41897 (Congressional Research Service, March 21, 2014), <https://fas.org/sgp/crs/misc/R41897.pdf>.

²⁴ For each year, we merge these measures with MEPS-IC establishments by state and four-digit ACS industry code and by state and two-digit North American Industry Classification System (NAICS) industry level. For the produced statistic to be considered reliable enough for merging, we require cells in the ACS to have at least 100 observations. If cells by state and four-digit ACS industry code do not meet this requirement, we use the mean by state and two-digit NAICS level. If this procedure still fails to yield at least 100 observations for the cell, we use state-level means.

²⁵ We performed a sensitivity analysis using an alternative method of clustering standard errors, clustering these errors by state and two-digit NAICS industry level and treating state government and local government units as separate industries. While this method's standard errors for the explained portion of the decomposition model were generally larger than the standard errors from our models adjusted for the survey design of the MEPS-IC, the statistical significance of our results was largely unchanged. The only differences were observed in the models comparing local government and private sector premiums in 2000 and the models comparing state government and large-firm private premiums in 2014. In these models, the contributions to the explained portion of the difference derived from differences in the percentage of plans that were self-insured were no longer significant, and the contributions from the state fixed effects for both models in 2014 were also no longer significant.

²⁶ Appendix table A-1 provides information to assist readers in identifying how much of the increases in the contribution of plan characteristics and other factors between 2000 and 2014 were due to changes in coefficients over time. For example, in the local-private Oaxaca model, plan characteristics contributed \$12 toward explaining premium differences in 2000 but \$174 in 2014. Alternatively, if we use the coefficients from the 2000 model to evaluate the effect of differences in plan characteristics in 2014, we find that plan characteristics contributed \$51 toward premium differences. The difference between the original estimate of \$174 and this alternative estimate of \$51 is due to changes in the coefficients between the 2014 and 2000 models.

²⁷ To assess any potential biases from using imputed state-industry measures versus establishment-level measures reported by respondents ("collected" measures), we performed sensitivity tests by running a set of premium regressions for private sector establishments in 2000 and 2014. For these tests, we chose private sector establishments because they had adequate item response rates on variables measuring the percentage of the workforce that is female and the percentage that is age 50 or older. We found that any potential biases from using imputed versus collected data on workers at different levels of aggregation are difficult to generalize. This is because the "collected" coefficients on the variable measuring the percentage of female workers were smaller than the "imputed" coefficients in the 2014 model, but the "collected" coefficients on the variable measuring the percentage of workers age 50 or older were bigger than the "imputed" coefficients in both the 2000 and 2014 models. The use of imputed versus collected variables did not affect other coefficients in the models.

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²⁸ Note that the results were similar when we excluded retiree health insurance from our models.

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📈 What's Trending: Medicaid Waivers Non-ACA Compliant Health Plans
Prescription Drugs

Lawsuit Threatens Affordable Care Act Preexisting Condition Protections But Impact Will Depend on Where You Live

August 29, 2018

| Sabrina Corlette, Maanasa Kona, and Justin Giovannelli



to help people obtain coverage regardless of health status are **consistently popular**. These provisions prevent insurance companies from denying someone a policy because they have a preexisting condition (the “guaranteed issue” requirement), refusing to cover services that people need to treat a preexisting condition (“preexisting condition exclusions”), or charging a higher premium based on a person’s health status (the “community rating” provision).¹ Indeed, multiple efforts to repeal the ACA in Congress in 2017 foundered partly because of **public support** for the law’s preexisting condition protections.

Nevertheless, ACA opponents continue to target these rules. In February 2018, Republican governors and attorneys general in 20 states **filed a lawsuit** in Texas federal court seeking to invalidate these and other ACA protections.

Plaintiff States and the Trump Administration Agree: Preexisting Condition Protections Must Go

This most recent **legal attack** on the ACA asserts that Congress’s repeal of the individual mandate penalty has rendered the mandate unconstitutional. Because the mandate is an essential, nonseverable feature of the ACA, the states assert, the rest of the law must be struck down too. Should this argument prevail, an **estimated 17 million people** could become uninsured.

In June, the U.S. Department of Justice weighed in, **agreeing with the plaintiff states** that the ACA's individual mandate is unconstitutional. While it did not ask the court to block the whole ACA, the administration **urged the court** to strike down the law's guaranteed issue, preexisting condition exclusion, and community rating provisions.

The Impact of Eliminating the ACA's Preexisting Condition Protections Will Depend on Where You Live

Prior to the ACA, standards to protect people with preexisting conditions were primarily determined at the state level, and **most states** had very **limited protections**. Indeed, before the ACA, many insurers maintained lists of up to **400 different conditions** that would potentially disqualify applicants from insurance or result in their being charged higher premiums. As many as **35 percent** of people who tried to buy insurance on their own were either turned down by an insurer, charged a higher premium, or had a benefit excluded from coverage due to a preexisting health problem. Many will face these challenges again if the federal law's preexisting condition protections are stripped away by the court.

The court's decision would not inhibit the states' role as the primary regulators of insurance, meaning that states could enact and enforce their own laws to protect residents from discrimination due to preexisting conditions. **Several states** have adopted their own laws to incorporate some or all of the ACA's protections, but these are in the minority.

In a comprehensive review of insurance statutes in 50 states and the District of Columbia, we find most states have not fully incorporated the ACA's guaranteed issue, preexisting condition exclusion, and community rating standards into state law. Specifically:

- Four states (Colorado, Massachusetts, New York, and Virginia) have adopted all three ACA or equivalent protections.
- Fourteen states have partially adopted the suite of ACA preexisting condition protections, meaning that consumers in those states could face some gaps in coverage access and affordability. For example, Delaware law requires insurers

to issue policies to consumers regardless of health status, but insurers would be permitted to impose preexisting condition exclusions if the ACA provision is struck down.

- Nine states and D.C. adopted one or more of the ACA's preexisting condition protections but include provisions that render the state law protection void in the event the corresponding ACA provisions are repealed or invalidated.
- Twenty-nine states have not adopted any of the ACA consumer protections. Many of these states are also plaintiffs in the litigation.

Key State Insurance Statutes That Protect Individual Market Consumers with Preexisting Conditions

State	Guaranteed issue	Adjusted community rating	Prohibition on preexisting condition exclusions
Alabama	No	No	No
Alaska	No	No	No
Arizona	No [1]	No [1]	No [1]
Arkansas	No	No	No
California	No [1]	Yes	No [1]
Colorado	Yes	Yes	Yes
Connecticut	No [1]	Yes	Yes
Delaware	Yes	No [1]	No
District of Columbia	No [1]	No [1]	No [1]
Florida	No	No	No
Georgia	No	No	No
Hawaii	No	No	Yes
Idaho	No	No	No
Illinois [2]	No	No	Yes
Indiana	No	No	No

Iowa	No	No	No
Kansas	No	No	No
Kentucky	No	No	No
Louisiana	No	Yes [3]	Yes [4]
Maine	Yes	Yes [5]	No [1]
Maryland	No [1]	No [1]	No [1]
Massachusetts	Yes	Yes [6]	Yes
Michigan	Yes	Yes	No
Minnesota	No [1]	Yes [7]	Yes
Mississippi	No	No	No
Missouri	No	No	No
Montana	No	No	No
Nebraska	No	No	No
Nevada	No [1]	Yes	No
New Hampshire	No	No [1]	No
New Jersey	Yes	Yes	No
New Mexico	No	No	No
New York	Yes	Yes [6]	Yes
North Carolina	No	No	No
North Dakota	No	No	No
Ohio	No	No	No
Oklahoma	No	No	No
Oregon [2]	No	Yes	No
Pennsylvania	No	No	No
Rhode Island	No	No	Yes
South Carolina	No	No	No
South Dakota	No	No	No
Tennessee	No	No	No
Texas	No	No	No
Utah	No	No	No
Vermont	Yes	Yes [6]	No
Virginia	Yes	Yes	Yes
Washington	No	No [8]	No
West Virginia	No	No	No
Wisconsin	No	No	No

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Wyoming	No	No	No

[1] State statute incorporates protection by reference to the ACA or includes a provision that renders the statute void in the event that the ACA is repealed or declared unconstitutional.

[2] Several states, including Illinois, Oregon, and South Dakota, have promulgated regulations that incorporate some or all of these consumer protections. For the purposes of this table, a state is marked as “yes” only if the given protection is in statute.

[3] Louisiana insurance regulators have authority to grant insurers “transitional” relief from this provision.

[4] Louisiana prohibits insurers from imposing preexisting condition exclusions on federally prescribed essential health benefits (EHBs). However, state law permits insurers to impose a preexisting condition exclusion for other, non-EHB benefits.

[5] Maine law permits an up to 5:1 age-rating band.

[6] A few states, such as Massachusetts, New York, and Vermont, have established age-rating standards that are more restrictive than the ones in the ACA.

[7] In the event the ACA is struck down, Minnesota law may permit an insurer to implement wider age- and tobacco-rating bands than those allowed by the ACA.

[8] Washington allows insurers to adjust premiums for “wellness” and to set an age-rating band of 1:3.75.

Notes: Some states have laws that require insurers to comply with 1) federal law or with the ACA in general; or with 2) specific provisions of the ACA, by incorporating such federal protections into state law by reference. (For example, a state may require insurers to meet the community rating requirements “established under the ACA.”) The enforceability of such provisions may be vulnerable to challenge in the event the ACA is found invalid. Accordingly, unless such a state has codified additional requirements, described below, it is marked as “no.” A state is marked as “yes” only if: it has adopted a specific statutory protection regarding guaranteed issue, adjusted community rating, or preexisting condition exclusions for all non-Medicare-eligible residents, regardless of age, that is equivalent to, or more protective than the ACA; and the operation of that protection does not appear to depend on the continued validity of the corresponding federal law provision.

Source: Sabrina Corlette, Maanasa Kona, and Justin Giovannelli, “[Lawsuit Threatens Affordable Care Act Preexisting Condition Protections But Impact Will Depend on Where You Live.](#)” *To the Point* (blog), Commonwealth Fund, Aug. 29, 2018.

Although some states have pursued legislation to incorporate the ACA protections into state law or may do so in the future, no state can fully protect all consumers. That is because state regulation of **self-funded single employer plans** is preempted under another federal law, the Employee Retirement Income Security Act. Thus, while a state could prohibit insurers from imposing preexisting condition contract exclusions on enrollees in **fully insured** health plans, it cannot prevent employer group plans from doing so if this ACA provision is struck down.²

Looking Ahead

The arguments advanced by the plaintiff states and the Trump administration have been met with skepticism by legal experts on the **left and right**. Still, it's not clear how the court will rule, and an appeal by whichever side loses is a near certainty. Should the case against the federal preexisting condition protections eventually prevail, the effect on consumers will depend largely on how states respond. More states may want to take steps to solidify these protections and shield their residents from ongoing efforts to strip them away.

¹ Prior to enactment of the ACA, the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) had some protections for people with preexisting conditions. Specifically, HIPAA required insurers to guarantee issue coverage and prohibited the imposition of preexisting condition exclusions for individuals who 1) had at least 18 months of prior coverage, not interrupted by a gap of more than 63 days; 2) had exhausted any continuation coverage, such as COBRA; 3) were not eligible for group coverage or Medicare; and 4) had as their most recent coverage a group health plan. However, HIPAA placed no limit on the amount insurers could charge based on an enrollee's health status.

² The ACA's prohibition on preexisting condition exclusions applies to individual and employer group plans, including self-funded, single employer plans. The ACA's community rating provision applies only to individual and small employer (those with 50 or fewer employees) health plans. The ACA's guaranteed issue requirement applies to fully insured individual and employer group market plans.

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Expanding Enrollment Without the Individual Mandate: Options to Bring More People into the Individual Market

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ABSTRACT

ISSUE: Recent changes to the Affordable Care Act, including elimination of the individual mandate penalty, the halting of federal payments for cost-sharing reductions, and expanded access to short-term plans, may reduce enrollment in the individual market.

GOAL: Analyze options to increase enrollment, accounting for recent policy changes.

METHODS: RAND's COMPARE microsimulation model is used to analyze six policies that would expand access to tax credits, increase their generosity, and fund a reinsurance program.

KEY FINDINGS AND CONCLUSIONS: The options would increase individual market enrollment by 400,000 to 3.2 million in 2020. Net increases in total enrollment (300,000 to 2.4 million) are smaller because of offsetting decreases in employer-sponsored insurance. The largest gains are possible through two options: large-scale investment in reinsurance, and extension of tax credits to higher-income people combined with increases in the generosity of existing tax credits. If funded through a fee on health plans, reinsurance could be implemented without increasing the federal deficit. Additional taxpayer costs would increase by \$1 billion to \$23 billion, depending on the policy. While enhanced tax credits for young adults would lead to small coverage gains, they would entail the lowest costs to taxpayers among the six options.

KEY TAKEAWAYS

- ▶ With the repeal of the ACA's individual mandate, potential options for increasing health coverage include larger tax credits, expanded eligibility for existing tax credits, and greater investment in reinsurance programs.
- ▶ The largest gains in coverage are possible through generous reinsurance and a combination of increasing and extending tax credits, with each resulting in about 2 million more insured.
- ▶ If funded through a fee on health plans, reinsurance could reduce the federal deficit.

BACKGROUND

In late 2017, Congress and the Trump administration have made or proposed policy changes that could affect enrollment and affordability in the individual health insurance market, which covers approximately 17.6 million people.¹ First, the administration halted federal payments for cost-sharing reductions (CSRs), which are subsidies that help people pay for out-of-pocket costs like copayments and deductibles. Although the federal government has ceased payments, insurers are required by law to make the CSRs available to those eligible — that is, tax-credit-eligible silver plan enrollees with incomes up to 250 percent of the federal poverty level. Most insurers have raised the silver premiums to fund these payments.² This silver premium increase results in higher tax credit amounts, which are calculated based on the second-lowest-cost silver plan available to an enrollee. Second, a federal rule proposed by the Departments of Treasury, Labor, and Health and Human Services would allow insurers to sell short-term plans that provide coverage in 12-month periods, rather than the three-month periods previously allowed.³ Short-term plans are exempt from Affordable Care Act (ACA) requirements, such as “guaranteed issue,” under which all applicants are offered coverage; coverage of preexisting conditions; and minimum essential benefits. Finally, Congress eliminated the ACA’s individual mandate penalty as part of the *Tax Cuts and Jobs Act of 2017*.⁴

In this issue brief, we update estimates of several policy options to expand enrollment in the individual market first analyzed in a prior brief (Exhibit 1),⁵ accounting for the federal changes described above.⁶ The policies we

consider aim to make individual market insurance more affordable for consumers, either through tax credits or reinsurance. We based the design of the reinsurance scenarios on the ACA’s transitional reinsurance program, which was in effect from 2014 through 2016. As was the case under this program, we assume reinsurance would be financed through a per-enrollee fee levied on all health plans, including employer-sponsored plans. We assess changes in insurance coverage, individual market premiums, the federal deficit, and taxpayer costs.

FINDINGS

Insurance Coverage

Exhibit 2 shows the changes in health insurance enrollment for each of the policy options considered. The number of total insured increases in all the scenarios relative to current law, ranging from an additional 300,000 individuals in the enhance advance premium tax credits (APTCs) for young adults and standard reinsurance scenarios to 2.4 million individuals in the increase and extend APTCs scenario. In all cases, the increase in individual market insurance enrollment is higher than the increase in total insurance enrollment, because of reductions in employer-sponsored coverage when the individual market is more attractive. The largest increase in individual market enrollment occurs in the generous reinsurance scenario. In general, these increases in coverage are slightly smaller than the insurance enrollment changes reported in our earlier brief (see [Exhibit A3](#)).

Exhibit 1. Policies to Expand Enrollment in the Individual Market

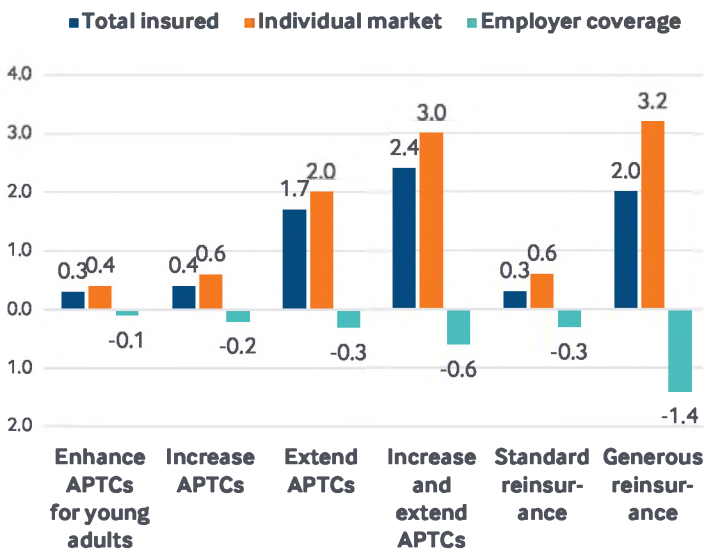
Policy	Description	Policy objectives	Proposed by
Enhance advance premium tax credits (APTCs) for young adults	<ul style="list-style-type: none"> Adults ages 19 to 30 who are eligible for APTCs would get a \$50 enhancement to their tax credit each month APTC-eligible adults ages 31 to 34 would get a smaller enhancement, declining to \$0 at age 35 Total credit (APTC plus enhancement) cannot exceed price of second-lowest-cost silver plan 	<ul style="list-style-type: none"> Encourage young people to enroll Improve risk pool 	Obama administration; Senator Tammy Baldwin
Increase generosity of APTCs for all eligible enrollees	<ul style="list-style-type: none"> Under current law, APTCs are equal to price of second-lowest-cost silver plan available to enrollee, minus applicable percentage contribution that varies with income* In 2020, applicable percentage contributions are estimated to range from 2.09 percent to 9.95 percent of income Proposed policy would reduce maximum applicable percentage contributions to a range of 1.79 percent to 8.5 percent of income 	<ul style="list-style-type: none"> Make insurance more affordable for people currently eligible for tax credits Encourage tax-credit-eligible individuals to enroll 	Hillary Clinton
Extend premium tax credits to those with incomes above 400 percent of FPL	<ul style="list-style-type: none"> Would allow people with incomes above 400 percent of FPL to receive tax credits if they had no other affordable source of coverage Tax credit would equal price of second-lowest-cost silver plan available, minus maximum applicable percentage contribution under current law (9.95% of income in 2020)* 	<ul style="list-style-type: none"> Eliminate tax credit “cliff” that causes people to abruptly lose eligibility when income exceeds 400 percent of FPL Make insurance more affordable for those not currently eligible for tax credits 	Dianne Feinstein, Heidi Heitkamp, other senators
Increase generosity of APTCs and extend tax-credit eligibility to those with incomes above 400 percent of FPL	<ul style="list-style-type: none"> Applicable percentage contributions for 2020 would range from 1.79 percent to 8.5 percent of income Individuals with incomes above 400 percent of FPL would be eligible for tax credit if price of second-lowest-cost silver plan exceeds 8.5 percent of income 	<ul style="list-style-type: none"> Eliminate tax credit cliff Make insurance more affordable 	Combines two options above
Standard reinsurance	<ul style="list-style-type: none"> Individual-market insurers would be eligible for reinsurance for any enrollee whose annual claims exceed \$90,000 Reinsurance would cover 50 percent of claims between \$90,000 and \$250,000 Program would be funded by per capita fee on all individual and employer health plans, including self-insured plans 	<ul style="list-style-type: none"> Encourage insurer participation Reduce premiums 	Reinsurance proposed by multiple stakeholders; specific design based on ACA
Generous reinsurance	<ul style="list-style-type: none"> Individual-market insurers would be eligible for reinsurance for any enrollee whose annual claims exceed \$45,000 Reinsurance would cover 100 percent of claims between \$45,000 and \$250,000 Program would be funded by per capita fee on all individual and employer health plans, including self-insured plans 	<ul style="list-style-type: none"> Encourage insurer participation Reduce premiums 	Reinsurance proposed by multiple stakeholders; specific design based on ACA

Data: Policy scenarios in authors' analysis using RAND COMPARE microsimulation model.

Notes: FPL = federal poverty level. For more detail on each option and justification for proposed parameters, see the [Appendix](#).

* If applicable percentage contribution exceeds price of second-lowest-cost silver plan, individual does not receive tax credit.

Exhibit 2. Changes in Health Insurance Enrollment Under Policies to Expand Coverage Relative to Current Law, 2020, Individuals Under Age 65 (in millions)



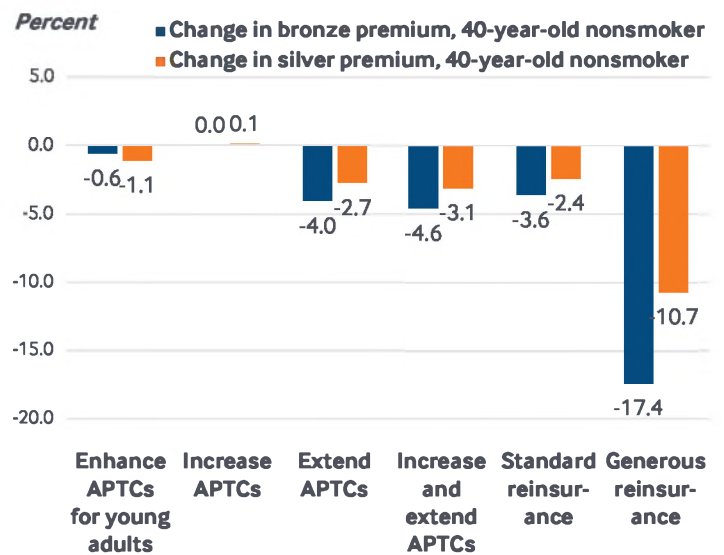
Data: Estimates based on the RAND COMPARE microsimulation model.
 Notes: APTCs = advance premium tax credits. Total insured is the number of individuals with insurance coverage from any source, including employer-sponsored coverage, individual market plans, Medicaid, and other public coverage. Individual market plans include plans purchased on and off the marketplaces. Off-marketplace plans are purchased directly from insurers rather than through the marketplaces; individuals purchasing these plans are not eligible for tax credits. The decreases in employer coverage reflect movement to other sources of coverage; in aggregate, the number insured through any source increases. The changes in individual market and employer coverage may not sum to changes in total insured because of minor changes in other insurance categories that are not shown in the exhibit. For example, there is a 0.2 million increase in Medicaid enrollment in the generous reinsurance scenario. We assume insurers increase silver premiums to offset the costs of cost-sharing reductions without federal payments, short-term plans are available for 12-month periods, and the individual mandate penalty is eliminated.

Individual Market Premiums

Exhibit 3 shows the estimated changes in individual market premiums under each scenario. Premiums fall in all scenarios except the one that increases APTCs for the currently eligible population, in which the premium change is negligible. Among the scenarios modifying APTCs, extending them to people with incomes above 400 percent of the federal poverty level has a relatively large effect — approximately 2 percent to 4 percent premium reductions — because of improvements in the risk pool as healthy, low-cost people enroll. Enhancing APTCs for young adults has a more modest effect, partly because it has a smaller effect on individual market enrollment.⁷

The largest premium decline occurs in the generous reinsurance scenario, which reduces the age-specific premium by about 17 percent for bronze plans and nearly 11 percent for silver plans. The reduction in silver premiums is smaller because we assume that insurers load the cost of CSRs onto silver premiums.

Exhibit 3. Changes in Individual Market Bronze and Silver Premiums for a 40-Year-Old Nonsmoker, Under Policies to Expand Coverage Relative to Current Law, 2020



Data: Estimates based on the RAND COMPARE microsimulation model.
 Notes: APTCs = advance premium tax credits. We assume insurers increase silver premiums to offset the costs of cost-sharing reductions (CSRs) without federal payments, short-term plans are available for 12-month periods, and the individual mandate penalty is eliminated.

Federal Deficit

The four policies modifying APTCs would increase the federal deficit relative to current law (Exhibit 4). Of these four scenarios, enhancing APTCs for young adults yields the smallest net increase in the federal deficit (\$1.1 billion); the combined policy that both increases and extends APTCs yields the largest net increase (\$18.8 billion).

The reinsurance scenarios reduce the federal deficit relative to current law. As modeled, reinsurance is funded by per-enrollee fees on employer-sponsored and individual plans; there are no direct federal costs. The

Exhibit 4. Changes in the Federal Deficit Under Policies to Expand Coverage Relative to Current Law, 2020 (in \$ billions)

	Current law	Enhance APTCs for young adults	Increase APTCs	Extend APTCs	Increase and extend APTCs	Standard reinsurance	Generous reinsurance
Spending							
APTCs	80.7	1.2	6.5	9.9	18.9	-2.5	-9.0
Medicaid and CHIP	300.7	-<0.1	-0.1	0.1	-<0.1	0.2	0.5
Total	381.4	1.1	6.4	10.0	18.9	-2.3	-8.5
Revenues							
Employer mandate	14.4	0	<0.1	0.1	0.1	<0.1	0.1
Tax on high-cost health plans*	1.7	-<0.1	-<0.1	-<0.1	<0.1	<0.1	0.2
Total	16.1	-<0.1	-<0.1	0.1	0.1	<0.1	0.3
Net deficit impact	365.3	1.1	6.4	9.9	18.8	-2.3	-8.8

Data: Estimates based on the RAND COMPARE microsimulation model.

* Commonly called the Cadillac tax.

Notes: APTCs = advance premium tax credits. Changes in APTC spending include changes to tax credits received by individuals already enrolled in marketplace plans under current law and tax credits for new enrollees under the policies considered. Estimates may not sum to totals because of rounding.

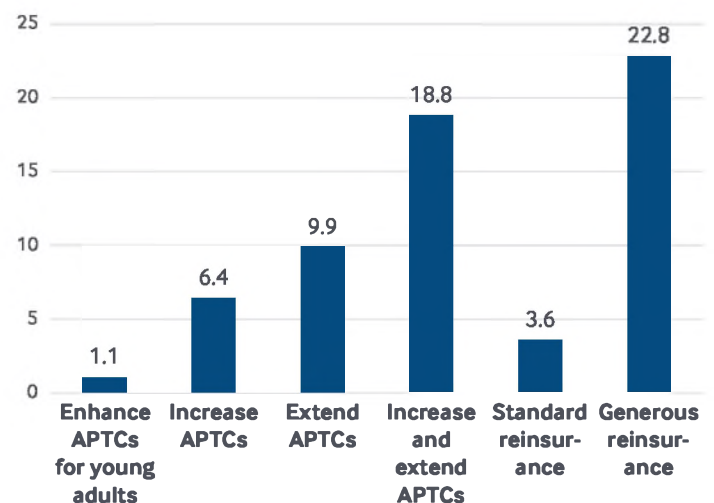
federal deficit declines because lower premiums result in reductions in federal spending on APTCs. We estimate the federal deficit would decrease by approximately \$2.3 billion in the standard reinsurance scenario and \$8.8 billion in the generous reinsurance scenario.

Taxpayer Costs

Exhibit 5 shows the additional cost to taxpayers under each of the policies. We measure costs to taxpayers by adding the net deficit effect and the cost of the reinsurance fees, which we assume will be passed on to enrollees in the form of higher health plan premiums. We estimate the per-enrollee fee needed to fund the standard reinsurance program is \$37 and the fee needed for the generous reinsurance program is \$197 per enrollee per year. For the first four policies, the only cost to taxpayers is the increase in the federal deficit. The two policies that result in the largest increase in number of insured (i.e., increasing and extending APTCs and generous reinsurance) cost the most from the perspective of taxpayers.

Exhibit 5. Additional Taxpayer Cost (in \$ billions) Under Policies to Expand Coverage, 2020

Dollars (billions)

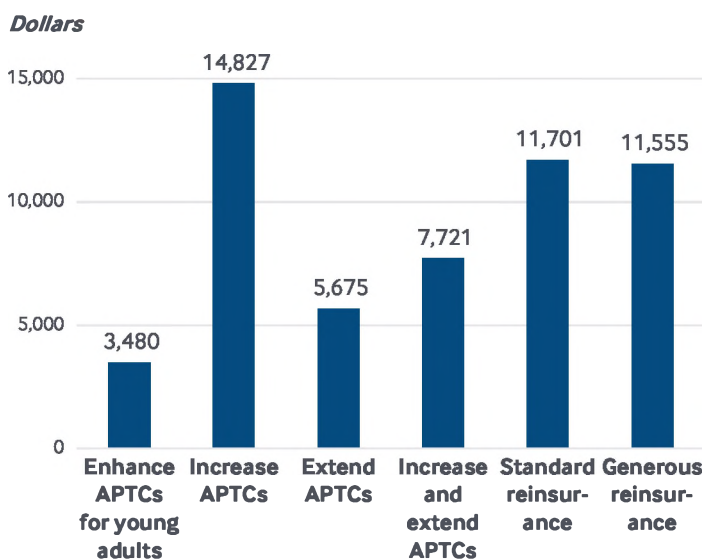


Data: Estimates based on the RAND COMPARE microsimulation model.

Note: APTCs = advance premium tax credits.

Although enhanced APTCs for young adults yield the smallest number of newly insured individuals among the policies considered, it is the most efficient policy in terms of taxpayer costs per new enrollee (Exhibit 6). At the higher end, the reinsurance programs and increasing APTCs for the currently eligible population cost between \$11,000 and \$15,000 per new enrollee. Across scenarios, those that require greater investments in the previously enrolled population tend to have higher costs per new enrollee. For example, increasing APTCs, which has the highest cost per new enrollee, raises tax credit spending for those who would have enrolled anyway.

Exhibit 6. Additional Taxpayer Cost per New Enrollee Under Policies to Expand Coverage, 2020



Data: Estimates based on the RAND COMPARE microsimulation model.

Notes: APTCs = advance premium tax credits. The additional taxpayer cost per new enrollee is calculated as the total additional taxpayer cost divided by the number of new enrollees.

In our prior analyses, we found similar relative efficiency between the policies in terms of taxpayer costs per new enrollee. However, in this analysis costs per new enrollee increase in every scenario. This increase results from insurers increasing silver premiums to offset the costs of CSRs without federal payments; the availability of short-term plans for 12-month periods; and elimination of the individual mandate penalty.

CONCLUSION

We analyzed six options — all of which have been discussed by policymakers — to expand individual market enrollment and found that each could increase total insurance enrollment by 0.3 million to 2.4 million, and individual market enrollment by 0.4 million to 3.2 million. These options would make insurance less expensive for enrollees by enhancing tax credits, extending tax credits to a broader share of the population, or adding reinsurance to the individual market. All approaches would increase costs for taxpayers, either by adding to the federal deficit or by requiring new fees on health plans. Generally, policies that insure more people — such as generous reinsurance or a combined policy that both extends tax credits and increases their value — cost more. If funded through a fee on health plans, reinsurance could increase enrollment while simultaneously reducing the federal deficit but would increase costs for group and self-insured health plan enrollees. Among the policies considered, providing enhanced tax credits to young adults yields the lowest taxpayer cost per new enrollee.

This research updates analyses we conducted before the Trump administration halted CSR payments and Congress eliminated the individual mandate penalty. Despite these major changes, the policies remain nearly as effective at expanding enrollment although taxpayer costs per new enrollee have increased. The higher costs reflect the federal decision not to pay CSRs, which increased tax credit payments, as well as the fact that without mandate penalties it is harder to induce people to enroll in insurance. It is still possible to expand coverage in the individual market but, without CSRs paid by the federal government and an individual mandate, it will require a greater investment of resources.

NOTES

1. Mark Farrah Associates, *A Brief Look at the Turbulent Individual Health Insurance Market* (Farrah, July 19, 2017).
2. Rabah Kamal et al., *How the Loss of Cost-Sharing Subsidy Payments Is Affecting 2018 Premiums* (Kaiser Family Foundation, Oct. 2017).
3. U.S. Department of the Treasury, Internal Revenue Service, U.S. Department of Labor, Employee Benefits Security Administration, and U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, “*Short-Term, Limited-Duration Insurance (Proposed Rule)*,” *Federal Register* 83, no. 35 (Feb. 21, 2018): 7437–47; and President Donald J. Trump, *Promoting Healthcare Choice and Competition Across the United States*, Executive Order 13813 (White House, Oct. 12, 2017).
4. Representative Kevin Brady, *An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018*, H.R. 1, 115th Congress, introduced Nov. 2, 2017.
5. Christine Eibner and Jodi Liu, *Options to Expand Health Insurance Enrollment in the Individual Market* (Commonwealth Fund, Oct. 2017).
6. Preethi Rao, Sarah A. Nowak, and Christine Eibner, *What Is the Impact on Enrollment and Premiums if the Duration of Short-Term Health Insurance Plans Is Increased?* (Commonwealth Fund, June 2018); and Christine Eibner and Sarah A. Nowak, *The Effect of Eliminating the Individual Mandate Penalty and the Role of Behavioral Factors* (Commonwealth Fund, July 2018).
7. With the ACA’s age-rating rules, younger adults are charged less than older adults, and as such do not contribute as much effect on insurers’ risk pools.

ABOUT THE AUTHORS

Jodi Liu, Ph.D., is an associate policy researcher at the RAND Corporation. Liu has experience using simulation modeling to analyze the effects of health care financing and payment changes on health insurance coverage, household spending, government spending, and provider revenues. Her recent work has involved assessing

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About the Commonwealth Fund

The mission of the Commonwealth Fund is to promote a high-performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society’s most vulnerable, including low-income people, the uninsured, and people of color. Support for this research was provided by the Commonwealth Fund. The views presented here are those of the authors and not necessarily those of the Commonwealth Fund or its directors, officers, or staff.

APPENDIX

COMPARE Overview

COMPARE is a microsimulation model that uses economic theory, nationally representative data, and evidence from past experience to estimate how consumers and business will respond to health policy changes.¹ The model creates a synthetic population of individuals, families, and firms and assigns health expenditures using data from the April 2010 wave of the 2008 Survey of Income and Program Participation, the 2010–2011 Medical Expenditures Panel Survey (MEPS), and the 2009 Kaiser Family Foundation/Health Research and Educational Trust Employer Health Benefits Survey. While the data sources predate the implementation of the Affordable Care Act (ACA), we update them to reflect population growth based on factors reported by the U.S. Census Bureau, and to reflect health care cost growth using the Centers for Medicare and Medicaid Services (CMS) National Health Expenditures Accounts.

We assign each individual in the Survey of Income and Program Participation a spending amount using the spending of a similar individual from the MEPS. We then augment spending imputations with data on high-cost claims from the Society of Actuaries. These adjustments account for the fact that the MEPS underrepresents individuals with high spending.

Individuals in COMPARE make health insurance enrollment decisions by weighing the costs and benefits of available options, an approach that is referred to by economists as “utility maximization.” The utility-maximization framework accounts for the following:

- premium costs
- anticipated out-of-pocket health care spending
- the value of health care consumption
- the risk of incurring a financially devastating health care bill, and
- any penalties the individual would face by remaining uninsured, including the risk of later being denied coverage or being charged higher premiums.

Premium costs are adjusted to account for tax credits, if such credits are available to the enrollee. All else being equal, higher premiums reduce an individual’s probability of enrolling in health insurance. In contrast, several factors

encourage enrollment, such as a lower risk of catastrophic spending, reduced out-of-pocket spending, the avoidance of penalties (if they apply), and increases in health care utilization.

Businesses in the model make decisions by considering the value of health insurance to their workers. Tax credits for individual market coverage and Medicaid eligibility expansions may reduce the value of health insurance to workers, leading firms to drop insurance. However, mandates requiring individuals to enroll in insurance, as well as mandates requiring firms to offer coverage, tend to increase the likelihood that a firm will offer insurance.

We calibrate the model to ensure that it accurately predicts outcomes for years in which complete data exist. As new data emerge, we update the model to reflect this information. For example, we added an adjustment to our Medicaid enrollment algorithm to account for the “welcome mat” effect in which people who were previously eligible for Medicaid enrolled after the ACA’s Medicaid expansion.

Below, we describe the health insurance enrollment algorithm used in the base COMPARE scenario, as well as recent adjustments to the model that we have incorporated to better match post-ACA experience (e.g., administrative reports on enrollment, subsidy payments, and tax collections). We then describe how we modeled each of the additional individual mandate response scenarios discussed in the main text. Finally, we present additional modeling results, and discuss how our results compare to those of the Congressional Budget Office (CBO).

Health Insurance Enrollment Decisions

To model individual and family health insurance enrollment decisions under the ACA, COMPARE uses a utility-maximization approach, in which decision-makers weigh the costs and benefits of available options. The utility-maximization framework accounts for the tax penalty for not purchasing insurance,² the value of health care consumption, premium costs, expected out-of-pocket health care spending, and financial risk associated with out-of-pocket spending.

We scale each of these components of utility to dollars and assume that they are additively separable.³ We further assume that individuals’ utilities are separable in consumption and health. The health-related component of the utility function is modeled as follows:

$$U_{ijk} = u(H_{ij}) - E(OOP_{ij}) - p_{ij} - \frac{1}{2}rVAR(OOP_{ij}) - (0.8 * Penalty_j) + Calibration_{jk}$$

Within this equation:

- $u(H_{ij})$ is the utility associated with consuming health care services for individual i under insurance option j
- k represents an individual's demographic group based on age and income
- OOP_{ij} is the out-of-pocket spending expected
- p is the individual's premium contribution (after adjusting for tax credits)
- r is the coefficient of risk aversion.

Possible health insurance enrollment choices (j) under the ACA may include employer coverage, Medicaid or Children's Health Insurance Program (CHIP) coverage, an ACA-compliant individual-market plan (including plans available on and off the marketplaces), or another source of coverage.⁴ Individuals can also choose to forgo insurance. Not all individuals will have access to all forms of coverage. For example, access to Medicaid is contingent on eligibility, and individuals will have access to employer coverage only if they (or their spouse or parent) work for a business that offers insurance.

The *Penalty* term represents the tax penalty associated with insurance status j , and — in scenarios in which the mandate is in effect — it is 0 for all but the uninsured insurance status and on so-called “short term” nongroup plans. We downweight the tax penalty by a factor of 0.8 to capture the fact that, on average, the Internal Revenue Service collects only about 80 percent of taxes owed.⁵

The term *Calibration* _{jk} is a factor that adjusts utilities to match enrollment patterns observed in pre-ACA data. The term accounts for nonpecuniary factors that may influence preferences for different types of insurance. Such factors include the convenience associated with enrolling in employer coverage and access constraints associated with Medicaid. Specific modeling strategies for each source of coverage j are described next.

Small-Group Employer Coverage. Small employers in the model choose whether to offer coverage based on worker preferences and a small set of other factors, including the employer's industry and whether workers are unionized. Under the ACA, all small firms are part of a single risk pool with guaranteed issue, three-to-one rate banding on age, and restrictions that preclude insurers from charging different premiums to different groups other than based on geography, family size, tobacco use, and plan generosity.

In the current version of the model, small-group market regulations apply to all firms with 50 or fewer employees, regardless of year. Earlier versions of the model expanded the small group market to include firms with 100 or fewer workers after 2015, as originally intended by the ACA. We revised the definition because the Protecting Affordable Coverage for Employees Act, signed into law in late 2015, amended the ACA's definition of *small employer* to include firms with one to 50 employees in perpetuity, unless states opt to extend the small-group market to firms with up to 100 workers.

Small firms in the model are permitted to purchase a 60-percent, 70-percent, 80-percent, or 90-percent actuarial value plan on the ACA's regulated small-group market, which includes the Small Business Health Insurance Options marketplaces. Small firms in the model may retain grandfathered status, which exempts them from the ACA's rating regulations, although we assume that a certain percentage of small firms will lose grandfathered status each year.

The ACA also offers a small business tax credit to small firms with low-wage workers who obtain coverage through the Small Business Health Insurance Options marketplaces. Because firms can take advantage of these credits for only two years, we assume that all small firms will have exhausted their tax credit eligibility by 2020.

Large-Group Employer Coverage. Like small employers, large employers choose whether to offer coverage based on worker preferences and several other characteristics, including union status and industry. We allow large firms that offer coverage to choose between four different plans, which are distinguished by plan generosity and rated based on enrollees' expected health expenditures. We estimate premiums for the large-group market based on a regression. The firm's decision to offer is modeled using structural econometric techniques.

Medicaid. Through our calibration process, the model accounts for the fact that not all Medicaid-eligible individuals chose to enroll, perhaps because of stigma, lack of information, or transaction costs associated with enrolling. To account for the fact that the ACA increased Medicaid enrollment among the previously eligible population,⁶ we increase the calibration parameter by a factor of approximately \$200 in the post-2014 period.

Individual Market. ACA-compliant individual market premiums are calculated endogenously in the model based on the health expenditure profile of those who

choose to enroll. The total, unsubsidized premium is based on enrollees' age, smoking status, and market-rating reforms implemented under the ACA.⁷ We model three-to-one rate banding on age for adults ages 21 and older, with a separate age-band for children and young adults under age 21. We also account for the ACA's risk-adjustment requirements, which transfer funds from plans with lower-than-average actuarial risk to plans with higher-than-average actuarial risk.

Under the ACA, the actual premium an enrollee pays is adjusted to account for tax credits available to qualifying individuals with incomes between 100 percent and 400 percent of the federal poverty level who do not have affordable offers of insurance from another source (e.g., employer coverage, Medicaid). We apply the ACA's subsidy formula using the benchmark silver premium and the individual's income. Eligible individuals who have incomes between 100 percent and 250 percent of poverty can also receive cost-sharing reduction (CSR) subsidies that help to lower out-of-pocket spending. As required by the ACA, individuals who receive CSR subsidies in COMPARE must be tax-credit eligible and purchase a silver plan (i.e., 70 percent actuarial value). With the CSR subsidies, the effective actuarial value of the plan is increased to 94 percent if income is below 150 percent of poverty, 87 percent if income is between 150 and 200 percent of poverty, and 73 percent if income is between 200 and 250 percent of poverty. Accordingly, out-of-pocket spending is adjusted downward to reflect the higher actuarial value of the plan. Note that out-of-pocket spending enters the individual's utility function; hence, individuals receiving CSR subsidies are more likely to purchase coverage.

To model short-term plans for this analysis, we model the individual market as consisting of two components: 1) the ACA-compliant individual market, including the marketplaces, and 2) off-marketplace short-term plans that are not required to comply with the ACA's rating or other requirements. In the ACA-compliant individual market, modeled individuals and families can purchase plans with a 60-percent, 70-percent, 80-percent, or 90-percent actuarial value, corresponding to bronze, silver, gold, and platinum plans on the marketplaces, respectively. We model short-term plans as having an actuarial value of 50 percent, consistent with estimates of the actuarial value of health insurance plans prior to the ACA.⁸ We do not model catastrophic plans, which are available only to those under age 30 or who qualify for a hardship exemption from the individual mandate. According to a 2016 fact sheet published by the Centers for Medicare and Medicaid

Services, less than 1 percent of all marketplace enrollees have selected catastrophic coverage.⁹

Adjustment to Account for Post-ACA Experiences and Policies

CSRs. Given the Trump administration's decision to halt federal payments for CSRs, we assume in the model that insurers build the costs of the CSR payments into premiums for their silver plans. We take this into account in COMPARE by eliminating CSR payments from the federal government and loading the costs of CSRs onto the premiums of silver nongroup market plans. Individuals who would have previously been eligible to receive CSR subsidies continue to do so.

Awareness of Marketplace Tax Credits. The U.S. Department of Health and Human Services reported that approximately 14 percent of individual market enrollees are eligible for tax credits but forgo those credits by purchasing coverage outside of the marketplaces.¹⁰ HHS further estimates that 9 million people are potentially eligible for tax credits but remain uninsured. Because these findings suggest that some people may be unaware of their tax credit eligibility, we assume that 25 percent of tax-credit eligible individuals will not account for these credits in their health insurance enrollment decisions. With this assumption, we match HHS's estimate that approximately half of all individual market enrollees receive tax credits.

Penalty Payments. We adjusted the distribution of individual mandate penalty payments among individuals with incomes above 400 percent of poverty to better match data published by the IRS.¹¹ This adjustment required us to reduce penalty payments among very high-income individuals and increase them for individuals just above 400 percent of poverty. We did not alter the distribution of payments among lower-income individuals.

New Rating Curve. In May 2017, CMS updated the default age-rating curve to adjust premium rating factors for children and young adults ages 20 and under.¹² We use the revised rating curve in this analysis.

Comparison to the Congressional Budget Office and the Urban Institute

Exhibit A1 compares our insurance estimates without the individual mandate to those of CBO and the Urban Institute.¹³ The analyses are not comparable regarding the treatment of CSRs. CBO assumes CSRs are paid by

the federal government without the mandate. Urban, in contrast, compares policies in place at the end of 2016 to policies that will be in place in 2019. Urban's analysis includes a scenario in which the mandate is removed and CSRs are halted.

Exhibit A1. Comparison to Urban Institute and the Congressional Budget Office

	COMPARE 2020, No IM, CSRs not paid (millions)	Urban 2019, No IM, CSRs not paid (millions)	COMPARE 2020, No IM, CSRs paid (millions)	CBO 2020, No IM, CSRs paid (millions)
Total Insured				
Employer	155.1	148	155.4	153
Individual market	15.7	16*	13.8	14
Medicaid	60.5	69	60.5	66
Other	12.5	9	12.5	13
Uninsured	34.3	33	35.9	38
Total population	278	274	278	274
Share uninsured	12.3%	11.9%	12.9%	13.9%

Notes: IM = individual mandate. CSRs = cost-sharing reductions. CBO allows multiple sources of coverage, so estimates do not sum to population totals.

* Includes 4 million people enrolled in short-term plans that do not meet minimum essential coverage requirements.

Another difference across the estimates is that RAND and Urban assign individuals to a primary insurance category, while CBO allows people to have more than one source of coverage. Hence, CBO's estimates do not sum to population totals.

The estimated population size also differs across the studies. RAND matches population estimates published by the U.S. Census Bureau, which estimates that there will be 278 million nonelderly U.S. residents by 2020.¹⁴

RAND's estimated number without insurance is comparable to Urban's estimate (conditional on assumptions about CSR payment) and slightly lower than CBO's. Compared to the other modelers, we estimate that slightly more people will be enrolled in employer coverage, and slightly fewer people will be insured in Medicaid. Estimates for individual market enrollment — the market that is arguably most affected by the elimination of the individual mandate penalty — are similar across the three models.

Scenarios Considered in This Report

The scenarios considered in this report were analyzed in a prior report,¹⁵ before the recent policy changes under the Trump administration.

Enhanced APTCs for Young Adults. Under the ACA, individuals and families are eligible for APTCs on the marketplaces if they have incomes between 100 percent and 400 percent of the federal poverty level and no access to an alternative affordable plan (e.g., through an employer, Medicaid, or CHIP). The APTC amount is equal to the premium for the second-lowest-cost silver plan in the individual's rating area, minus a required percentage contribution that scales with income. For the 2018 plan year, the required percentage contribution will range from 2.01 percent of income for those with incomes between 100 percent and 133 percent of the federal poverty level to 9.56 percent of income for those with incomes between 300 and 400 percent of poverty.¹⁶ The contributions are adjusted over time based on health care cost growth relative to general inflation, and — in 2020 — we estimate that contributions will range from 2.09 to 9.95 percent of income.

To model the enhancement, we increase the monthly APTC for eligible enrollees between the ages of 19 and 30 by \$50. The enhancement amount scales down linearly for enrollees between the ages of 30 and 35, declining to \$0 at age 35. APTC-eligible enrollees in the specified age range receive the enhancement, regardless of their income level, with the caveat that the total credit (original APTC plus enhancement) may not exceed the cost of the second-lowest-cost silver plan available to the enrollee.

We modeled the enhanced APTC policy, based on suggestions made in 2016 by members of the Obama administration, in a previous analysis.¹⁷ Senator Tammy Baldwin has also introduced legislation that would increase APTCs for young adults.¹⁸

Extending APTCs to All Incomes. In this scenario, we assume that those with incomes over 400 percent of poverty would receive tax credits if they had to pay more than 9.95 percent of income to enroll in health insurance coverage in 2020. The tax credit would equal the price of the second-lowest-cost silver plan available, minus $income \times 0.0995$. The change influences the chance of enrolling in the individual market by reducing the premium contribution that the enrollee faces (in the equation shown in the prior section). In addition, the tax credit reduces premium spending for eligible individuals who would have enrolled in the individual market without the tax credit and increases government spending.

As under current law, we continue to assume that those with affordable employer coverage are ineligible for tax credits. Affordability is defined as having an employer premium contribution for single coverage that exceeds 9.95 percent of income in 2020. Further, we assume that those with incomes under 100 percent of poverty remain ineligible for tax credits, even if their states opted not to expand Medicaid.¹⁹ The possibility of extending tax credits to people with higher incomes has been proposed several times, including by Senators Heidi Heitkamp and Dianne Feinstein.²⁰ We modeled this proposal in a previous issue brief.²¹

Increasing the Value of APTCs. Under current law, those with incomes between 100 percent and 400 percent of poverty and no other affordable source of coverage are eligible for APTCs, which cap their contribution toward a benchmark health insurance plan on the ACA's marketplaces. We considered a scenario that would reduce the contribution level for those with incomes between 300 percent and 400 percent of poverty from 9.95 percent to 8.5 percent of income for a benchmark plan, with commensurate reductions for lower-income individuals. To incorporate this change, we adjusted the maximum percentage contributions by a factor of $(8.5/9.95)=0.8543$. After these adjustments, the percentage contribution amounts ranged from 1.79 percent of income for those with incomes between 100 percent and 138 percent of poverty and no other affordable source of coverage to 8.5 percent of income for those with incomes between 300 percent and 400 percent of poverty. This policy is similar to a proposal suggested during the 2016 presidential election campaign that we modeled in a previous Commonwealth Fund brief.²²

Reinsurance. Reinsurance pays insurers some or all the cost of health plan enrollees with costly conditions. Reinsurance reduces insurers' risk of experiencing a catastrophic financial loss. Further, if individual market reinsurance is funded through external sources (e.g., from government investment or through taxes levied outside of the individual market), it reduces the average cost of insuring an individual market enrollee, leading to lower premiums. Under the ACA, a transitional reinsurance program was available from 2014 to 2016. The reinsurance program was funded by a per capita contribution from individuals covered by individual and employer health plans, including self-insured plans. We consider two reinsurance scenarios. The standard reinsurance scenario is based on the ACA's 2016 payment parameters: individual market insurers would be eligible for reinsurance payments for enrollees whose annual

claims exceed \$90,000; the payments would cover 50 percent of claims between \$90,000 and \$250,000.²³ The generous reinsurance scenario is based on the ACA's 2014 payment parameters: individual market insurers would be eligible for reinsurance payments for enrollees whose annual claims exceed \$45,000; the payments would cover 100 percent of claims between \$45,000 and \$250,000.²⁴ We used the annual expenditures of individual market enrollees to calculate the cost of the reinsurance program. We assume that the reinsurance program is fully funded by a per capita fee levied on all individual market, group, and self-insured health plan enrollees.

We estimate that the total cost of the reinsurance program would range from \$6.3 billion in the standard scenario to \$33.9 billion in the generous scenario. As modeled, the reinsurance program would be funded through a fee levied on all health plans, including group, self-insured, and nongroup plans. On a per enrollee basis, the fee would be \$37 per enrollee in the standard scenario and \$197 per enrollee in the generous scenario. Because the fee is levied on all plans, including marketplace plans, a portion of the fee is paid for by the federal government as part of the APTC. In the deficit table reported in the main text ([Exhibit 4](#)), the change in federal APTC spending reflects the net effect of the reinsurance fee and the premium reductions caused by the reinsurance program. Despite the new fee, federal spending on APTCs falls because the additional cost of the reinsurance fee is more than offset by premium reductions caused by the inflow of reinsurance funding into the nongroup market from taxes on group and self-funded health plans.

When we estimate the total cost of the reinsurance program to taxpayers ([Exhibit 5](#)), we consider the change in the deficit plus the cost of the reinsurance fee to health plan enrollees. Because fees levied on subsidized marketplace plans are incorporated into APTC spending, they are reflected in the deficit change, and need to be removed from the reinsurance fee calculations to avoid double counting. For enrollees who receive APTCs, we model the federal contribution to reinsurance taxes as $Min(\text{Reinsurance Tax}, \text{APTC})$. To calculate the nonfederal cost of the reinsurance program, we subtract these federal payments from the total cost of the reinsurance program. [Exhibit A2](#) reports the total cost of the reinsurance program, and shows the amount incorporated into APTC spending (federal reinsurance payments) and the amount paid by private health plan enrollees. In calculating the cost to taxpayers, we sum the deficit impact and private reinsurance payments.

Exhibit A2. Cost of Reinsurance Options (in \$ billions), 2020

	Standard reinsurance	Generous reinsurance
Total cost of the reinsurance program	6.3	33.9
Federal reinsurance payments (incorporated into federal APTC spending)	0.4	2.3
Private reinsurance payments (paid by all health plan enrollees)	5.9	31.6

Notes: APTC = advance premium tax credit. Analysis assumes reinsurance is funded through a per capita fee on all group, nongroup, and self-funded health plans. The federal government bears most of the cost of the fee for people who are enrolled in APTC-eligible marketplace plans. The remaining cost is borne directly by health plan enrollees.

Comparison to Prior Results

We previously analyzed these policy options to expand individual market enrollment,²⁵ prior to the elimination of the individual mandate penalty, halting of federal payments for CSRs, and extension of the duration of short-term plans to 12 months. A comparison of the current results to the prior results is shown in Exhibit A3.

Compared to the prior results, we found that the recent policy changes reduced individual market enrollment under the options considered, except for extending APTCs to people above 400 percent of FPL. The slightly larger enrollment effect in the “extend APTC” scenario reflects CSR nonpayment, which increases the cost of the silver plans relative to other plan options, hence both increasing the number of people who are newly eligible for tax credits when APTCs are extended, and making those

Exhibit A3. Comparison of Current Results to Prior Results, 2020

	Enhance APTCs for young adults	Increase APTCs	Extend APTCs	Increase and extend APTCs	Standard reinsurance	Generous reinsurance
Change in total insured (millions)						
Prior results	0.8	1.0	1.2	2.6	0.9	3.4
Current results	0.3	0.4	1.7	2.4	0.3	2.0
Change in individual market enrollees (millions)						
Prior results	1.0	1.4	1.6	3.4	1.2	5.4
Current results	0.4	0.6	2.0	3.0	0.6	3.2
Change in silver premium, 40-year-old nonsmoker						
Prior results	-0.8%	-0.2%	-2.5%	-4.8%	-3.9%	-19.3%
Current results	-1.1%	0.1%	-2.7%	-3.1%	-2.4%	-10.7%
Change in federal spending for APTCs (\$ billions)						
Prior results	\$1.8	\$4.8	\$3.2	\$9.0	-\$4.1	-\$18.7
Current results	\$1.2	\$6.5	\$9.9	\$18.9	-\$2.5	-\$9.0
Change in net deficit impact (\$ billions)						
Prior results	\$2.5	\$5.9	\$4.9	\$11.8	-\$2.9	-\$13.1
Current results	\$1.1	\$6.4	\$9.9	\$18.8	-\$2.3	-\$8.8
Additional taxpayer cost per new enrollee						
Prior results	\$3,112	\$5,737	\$3,969	\$4,448	\$3,537	\$5,571
Current results	\$3,480	\$14,827	\$5,675	\$7,721	\$11,701	\$11,555

Notes: APTCs = advance premium tax credits. The prior results reflect policies including the individual mandate penalty and federal payment for CSRs. The current results reflect recent policies that eliminate the individual mandate penalty, halt federal payments for CSRs, and allow 12-month short-term plans.

credits go further for bronze, gold, and platinum coverage. The changes in individual market silver premiums reflect increases resulting from CSR nonpayment that may be offset by decreases from people newly enrolling in individual market coverage because of increased and/or extended APTCs and reinsurance.

The net federal deficit and taxpayer impact of the options considered follows the same trend as our prior results. Without revenues from individual mandate penalties, the federal revenue impact is diminished. However, the four scenarios with modified APTCs still increase the deficit, because of increased spending on APTCs. Compared to the prior results, there is a larger deficit increase in the option that extends APTCs to people above 400 percent of FPL, corresponding to the larger number of newly subsidized enrollees. Although the reinsurance policies are designed to be budget neutral by collecting fees from health plan enrollees, the deficit is still reduced because of lower APTC spending. The additional taxpayer costs per new enrollee are higher in the current results because of higher APTC spending and/or lower numbers of new enrollees.

APPENDIX NOTES

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4. Other sources of coverage include Medicare for the nonelderly with qualifying conditions and military-related sources of coverage, such as TRICARE.
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14. United States Census Bureau, *2014 National Population Projections Tables* (Census Bureau, updated May 9, 2017).

15. Christine Eibner and Jodi Liu, *Options to Expand Health Insurance Enrollment in the Individual Market* (Commonwealth Fund, Oct. 2017).

16. Internal Revenue Service, *Rev. Proc. 2017-36* (IRS, 2017).

17. Eibner and Liu, *Options to Expand*, 2017.

18. Senator Tammy Baldwin, "U.S. Senator Tammy Baldwin Introduces Legislation to Improve Health Coverage Affordability for Young Adults," News release, Mar. 8, 2018.

19. Arguably, it would make more sense to extend tax credits to lower-income individuals, rather than providing additional federal assistance to people with incomes above 400% of FPL. However, because extending tax credits to lower-income populations might cause some states to rescind Medicaid expansion, extending tax credits to lower-income individuals may be a less viable policy option than extending them to those with incomes above 400% of FPL.

20. Senator Heidi Heitkamp, *Addressing Affordability for More Americans Act of 2017*, S. 1529, 115th Congress, introduced July 11, 2017; and Senator Dianne Feinstein, "Senators Introduce Legislation to Improve Affordable Care Act, Make Coverage More Affordable for Middle-Class Families," News release, June 7, 2017.

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Do States Know the Status of Their Short-Term Health Plan Markets?

August 3, 2018

Emily Curran, Kevin Lucia, Sabrina Corlette, and Dania Palanker



Toplines

Starting in October, insurers will be allowed to sell short-term health plans for just under 12 months and to renew them for up to 36 months

In the wake of a Trump administration rule expanding short-term health plans, states need to understand which sellers are marketing these plans in order to protect consumers and maintain a stable individual market

The Trump administration this week issued a **final rule** reversing federal limits on short-term health coverage, allowing such plans to become a long-term alternative to individual market coverage. Starting in October, insurers will be allowed to sell short-term plans for just under 12 months, up from the current federal limit of three months. And in a sharp break from prior regulations, insurers can renew short-term plans for up to 36 months. The rule does strengthen a consumer notice required in application materials, but the notice does not need to inform consumers of all limitations and “**fine print.**”

Importantly, the rule does not preempt **state regulation** that includes shorter limits on coverage.

Short-term plans are not required to comply with the Affordable Care Act's (ACA) consumer protections, meaning insurers that sell these policies can deny coverage to individuals with preexisting conditions and are **not required** to cover essential health benefits. These plans are typically marketed to healthy consumers, for whom coverage with limited benefits and a low premium may appear attractive.

In the past, many state insurance departments have had to warn residents about **deceptive marketing practices** sometimes undertaken by short-term plan sellers, which can lead consumers to believe they are buying a comprehensive policy when they are not. During the fall open-enrollment seasons for ACA marketplaces, these plans will be **competing** for consumers' premium dollars with **comprehensive coverage**, introducing the possibility of still greater consumer confusion.

We surveyed the Departments of Insurance (DOIs) in the 17 **state-based ACA marketplace states** to understand how the market for short-term coverage is working on the eve of this policy shift. We found that most states have little information about the status of their current short-term plan markets. Additionally, inconsistencies in how states have collected and reviewed the premium rates and contracts for short-term plans will make it difficult to assess how the market is responding to the new federal rules.

Most States Do Not Have a Complete Picture of the Current Short-Term Market

With the exception of New York, which doesn't permit short-term plans, 16 states in our survey require insurers to file for approval in order to sell short-term policies. However, once these policies are approved, few states require annual reapproval unless policies undergo significant rate or benefit design changes. Most DOIs acknowledged that insurers with short-term policies that were approved decades ago could potentially market them to consumers this fall without any additional regulatory approval.

As a first step to prepare for the Trump administration's rulemaking, some states started to identify their approved short-term sellers and which ones are actively marketing. For example, in Maryland, the legislature **directed** the DOI to contact every approved short-term plan insurer to determine whether they are actively marketing. Similarly, Oregon is now reviewing advertisements for short-term products, and insurers marketing products that are at least five

years old have been asked to refile with the state. However, overall, few states are aware of which short-term insurers are actively marketing. A few DOI officials also explained that with the new rule, more short-term plan insurers are likely to market within their state.

Insurers Marketing Short-Term Plans Are Generally Different Than Those Marketing Individual Plans

We compared the list of 2018 marketplace insurers to those who have been approved to sell short-term policies. Four of the 17 states (Massachusetts, New York, Rhode Island, and Vermont) in our survey have no approved short-term sellers because they **require** such plans to play by some or all of the same rules as traditional coverage. While the data are limited,¹ it appears that 11 of the 17 states have more insurers approved to sell short-term plans than individual plans. There tends to be little overlap among the companies, although there are a few approved to sell in both the individual and short-term markets.

This separation poses a risk to individual market stability, as short-term sellers may target healthy marketplace consumers, undercutting ACA-compliant insurers. In return, ACA-compliant insurers may be incentivized to start selling short-term policies in order to shift and maintain their healthy enrollees in those plans. Indeed, the Trump administration **expects** that as many as 500,000 individual market enrollees will migrate to short-term plans in 2019. Because they will be relatively healthy, their departure will cause premiums in the individual market to increase by a projected 5 percent. This increase will come on top of other projected increases resulting from the repeal of the ACA's **individual mandate penalty** and the expansion of **association health plans**.

[A Sample of 2018 Marketplace Insurers Compared to Approved Short-Term Insurers](#)

State	Number of 2018 marketplace insurers	2018 marketplace insurers	Number of approved short-term insurers (eligible to sell)	State-reported approved short-term insurers (eligible to sell)
District of Columbia	2	Carefirst	6	Companion Life (provided by Pivot Health)
		Kaiser Permanente		Everest Prime – Med Sense Guaranteed Association
				LifeShield National Insurance Co.
				Madison National Life
				National General Accident & Health
Idaho	4	Blue Cross of Idaho	5	Blue Cross of Idaho Health Services, Inc.
		Pacific Source		Everest Reinsurance Company
		Select Health		HCC Life Insurance Company
		Mountain Health		National Health Insurance Company
Nevada	2	Health Plan of Nevada	10	SelectHealth Benefit Assurance Company
		Centene (SilverSummit)		Everest Reinsurance Company
				Freedom Life Insurance Company of America
				Golden Rule Insurance Company
				Independence American Insurance Company
				LifeShield National Insurance Co.
				Madison National Life Insurance Company Inc.
				National Foundation Life Insurance Company
				National Health Insurance Company
				Standard Security Life Insurance Company of New York
	United States Fire Insurance Company (recently approved)			

Notes: Data reflect state-reported marketplace and short-term insurer information, noting the limitations described in footnote 1. Approval of a short-term insurer does not mean the insurer is actively marketing short-term policies.

Source: Emily Curran et al., [“Understanding the Market for Short-Term Health Plans: States Prepare to Identify, Oversee Sellers and Products.”](#) *To the Point* (blog), Commonwealth Fund, Aug. 3, 2018.

[Top 10 Most Commonly Approved Short-Term Insurers in the State-Based Marketplace States](#)

Most Commonly Approved Short-Term Insurers

Standard Security Life Insurance Company

Everest Reinsurance Company

Golden Rule Insurance Company (a UnitedHealthcare subsidiary)

Independence American Insurance Company

LifeShield National Insurance Company

National Health Insurance Company

United States Fire Insurance Company

HCC Life Insurance Company

John Alden Life Insurance Company

Madison National Life

Note: Authors' analysis reflects data limitations described in footnote 1.

Source: Emily Curran et al., "[Understanding the Market for Short-Term Health Plans: States Prepare to Identifv. Oversee Sellers and Products](#)," *To the Point* (blog), Commonwealth Fund, Aug. 3, 2018.

Looking Forward

The final rule allowing short-term policies to be sold for longer durations puts enrollees at financial risk, as they unknowingly enroll in the skimpier policies that do not meet their health needs. In turn, the shift of large numbers of healthy consumers to the short-term market will increase prices for those remaining in the individual market. As a new market of long-term short-term plans emerges, states need to understand their short-term market in order to protect consumers and maintain a stable individual market. This can begin with an assessment of which insurers are actively marketing in the state. States also may want to ensure that any short-term plan sellers seeking to offer coverage that mimics the 12-month duration of ACA-compliant coverage submit plan designs, rates, and marketing materials for review and approval,

as **Vermont** has done recently. Doing so will allow states to have a firmer understanding of the insurance products being sold to their residents, and will better position them to reduce consumer confusion and monitor for potential fraud.

1. Eleven states (CA, CO, DC, ID, MD, MA, NV, NY, RI, VT, WA) provided feedback and their best available data on the list of insurers currently approved to sell short-term policies, noting that many of these lists are not comprehensive. Five states (AR, CT, MN, NM, OR) referred us to the System for Electronic Rate and Form Filing (SERFF) to identify approved insurers. We pulled approved short-term filings under the individual, “major medical” category in SERFF, dating back to January 1, 2010. This list does not include any short-term filings that were submitted under different SERFF categories, including group plans. One state, KY, did not provide a list of approved insurers and KY SERFF is not publicly accessible.

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Urban Wire :: Health and Health Policy

The voices of Urban Institute's researchers and staff

August 2, 2018



Linda J. Blumberg, Matthew Buettgens, Robin Wang

The Trump administration recently finalized regulations expanding access to short-term, limited-duration policies. A lawsuit filed today argues that the president is violating the Constitution by seeking to undermine the Affordable Care Act (ACA).

These new regulations increase the maximum length of short-term, limited-duration insurance policies to just less than one year. These plans, sold to individuals and families, are not federally required to comply with the ACA regulations that prohibit annual and lifetime benefit limits, require coverage of all essential health benefits, and otherwise prohibit insurers from setting premiums or choosing whether to sell coverage to people based on applicants' health status and health history.

As such, these plans do not meet minimum essential coverage standards under the law. The rule permits these plans to compete against ACA-compliant plans.

In March, we released an analysis of the potential consequences of the proposed expansion of short-term, limited-duration policies. Since that release, Hawaii and Vermont have passed legislation that will effectively prevent the expansion of short-term, limited-duration policies in their markets. Plus, New Jersey passed a state individual mandate to replace the federal penalties eliminated in 2019 under the 2017 Tax Cuts and Jobs Act.

We've provided updated tables [pdf] taking these state legislative changes into account. Three key findings from our update are the following:

1. 2.2 million fewer people are estimated to have ACA-compliant nongroup insurance coverage in 2019, a decrease of 15.5 percent.

Approximately 600,000 fewer people will enroll in ACA compliant nongroup coverage using premium tax credits and 1.6 million fewer people will enroll in compliant coverage without the benefit of tax credits.

2. The number of people without minimum essential coverage is estimated to increase by 2.6 million.

The introduction of expanded short-term, limited-duration policies will increase the number of people without minimum essential coverage by 2.6 million in 2019, to 36.9 million people. Of those without minimum essential coverage, 32.5 million will be completely uninsured, and 4.3 million will enroll in expanded short-term, limited-duration plans.

3. Premiums in the ACA-compliant nongroup market are estimated to increase by more than 18 percent in the states most affected.

The combined effect of eliminating the individual mandate penalties and expanding short-term, limited-duration policies will increase 2019 ACA-compliant nongroup insurance premiums 18.3 percent on average in the 43 states (including the District of Columbia) that do not prohibit or limit short-term plans.

President Donald Trump holds up the executive order he just signed on health insurance which, among other things, extends short-term coverage policies, on October 12, 2017 in Washington, DC. The executive order was widely seen as a big blow to the Affordable Healthcare Act. Photo by Mandel Ngan/AFP/Getty Images.

By Jessica Van Parys

ACA Marketplace Premiums Grew More Rapidly In Areas With Monopoly Insurers Than In Areas With More Competition

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ABSTRACT Premiums have increased rapidly in the two most recent years of the health insurance Marketplaces, with notable variation across state rating areas. Some experts have speculated that these increases are due to greater enrollment among sicker patients, the expiration of market stabilization policies, or the federal government's discontinuation of funding for cost-sharing subsidies. However, these factors do not explain why some rating areas have experienced rapid premium growth, while others have experienced more modest increases. I used a comprehensive database of information about premiums and market characteristics for rating areas in states with federally facilitated Marketplaces to demonstrate that higher premiums are associated with local health insurance monopolies. In 2018, Marketplace premiums were 50 percent (\$180) higher, on average, in rating areas with monopolist insurers, compared to those with more than two insurers. This was driven by large premium increases for the monopolist insurers' lowest-cost plans. Understanding how insurer competition has affected enrollment, costs, and quality will help guide future individual-market reforms.

Premiums have increased rapidly in the two most recent years of the health insurance Marketplaces established by the Affordable Care Act (ACA) in 2014, but increases have not been consistent in state rating areas around the country. Some experts have speculated that large premium increases in 2017 were due to the expiration of the risk corridors and reinsurance policies used to stabilize the individual insurance market.^{1,2} More recently, health policy experts, insurance company representatives, and the media have pointed to the federal government's discontinuation of support for cost-sharing subsidies as the reason for premium increases in 2018.^{3,4} While these macro-level factors may explain why premiums are increasing overall, they do not explain why some state rating areas have experienced rapid premium growth, while others have not.

This article explores three theories regarding the geographic variation in premiums observed in the thirty-five federally facilitated Marketplaces (those run wholly by or in partnership with the federal government in states that chose not to establish their own state-based Marketplaces). I evaluated three potential factors: the health of enrollees, provider market power, and insurer market power. The evidence from several methods and data sets suggests that insurer monopoly is the most important predictor of premium levels and growth rates. Given that more than 40 percent of all rating areas in states with federally facilitated Marketplaces have a single insurer, future premium increases seem likely.

Previous research has investigated the relationship between insurer competition and plan premiums in the Marketplaces before 2016.⁵⁻⁷ The results show that insurer competition had modest effects on premiums and cost sharing,

with the addition of one insurer in a Marketplace reducing premiums by about 3 percent between 2014 and 2015.^{8,9} However, there was not much variation in premiums across ACA market areas from 2014 to 2015, so the effects of insurer competition on premiums might have been understated. For example, in 2014 the unadjusted average monthly premium for twenty-nine-year-old single nonsmokers in the second-lowest-cost silver plan in the federally facilitated Marketplaces was \$27 (8 percent) more per month in rating areas with one insurer compared to areas with more than two insurers (results not shown), but that difference increased to \$180 (48 percent) more per month by 2018. Recent work by Jane Zhu and coauthors shows that premium growth between 2016 and 2017 was highly correlated with the number of insurers competing in a market, although the authors did not explore other factors that might have affected premiums or go into the reasons why insurer monopolies are associated with higher premiums.¹⁰ This study explored several factors associated with higher premiums in the federally facilitated Marketplaces during 2014–18 and shows that the lack of insurer competition is the most important factor associated with higher premiums.

There are three main theories about why Marketplace premiums are higher in some areas than in others. The first, which I refer to as “enrollee health,” suggests that the uninsured population before the ACA was sicker in some areas than in others, and sicker populations were more costly to insure because they used more resources. Thus, premiums became higher in “sicker” rating areas than in “healthier” ones. The second, which I refer to as “provider market power,” hypothesizes that providers can negotiate higher prices from insurers in markets where they have greater market share. If insurers can pass the increases on to consumers, then areas with greater provider concentration might have higher premiums.¹¹ The third, which I refer to as “insurer market power,” hypothesizes that competition among insurers is greater in some markets than in others and that monopolist insurers can increase premiums relative to nonmonopolists because they benefit from captive demand for insurance along with few pricing constraints. This article explores each theory and finds the most support for the third: that insurer monopolies are the most strongly associated with Marketplace premium levels and growth rates.

Study Data And Methods

DATA SOURCES This study combined data from five sources to identify the factors associated

with higher premiums on the federally facilitated Marketplaces. The dependent variable was the 2018 premium for a twenty-nine-year-old single nonsmoker in the second-lowest-cost silver plan in each rating area in states with federally facilitated Marketplaces. (Rating areas are established by each state. They often are counties, but they can also be groups of counties, Metropolitan Statistical Areas, or three-digit ZIP codes.) The Centers for Medicare and Medicaid Services (CMS) produced plan-level Health Insurance Marketplace Public Use Files for the period 2014–18 on plan attributes, premiums, and service areas, from which I collected data on premiums and the number of insurers offering plans in each rating area. In the main results, I focus on the second-lowest-cost silver plans because premium tax credits are benchmarked to those plans and because previous research has shown that most enrollees select low-cost plans.¹² In additional analyses presented in the online appendix,¹³ I explore how insurer market power is associated with premiums in the lowest-cost, average-cost, and highest-cost silver plans.

By law, premiums can vary only by enrollees’ age, rating area, smoking status, and family status. Consistent with previous research,⁶ I focused on the premium for the second-lowest-cost silver plans for twenty-nine-year-old single nonsmokers in each rating area-year. Varying the age of the insured adult does not affect the results because insurers tend to set premiums for twenty-one-year-old single nonsmokers by rating area and then use the maximum allowable multipliers for older enrollees.

Information about the remainder of the independent variables in this study came from four data sets: the 2013 Small Area Health Insurance Estimates produced by the Census Bureau, the 2013–17 Robert Wood Johnson Foundation County Health Rankings, the 2015 Area Health Resources Files produced by the Health Resources and Services Administration, and the 2014 American Hospital Association Annual Survey.

The 2013 Small Area Health Insurance Estimates data contain estimates of the number of uninsured people by race, sex, age group, and income group by county. From these data, I calculated the percentage of each county’s population that was uninsured in 2013 and the percentage of the county’s uninsured population with incomes of 138–400 percent of the federal poverty level in 2013, and I then converted these estimates to the rating-area level. The hypothesis is that rating areas with more uninsured people who qualified for premium tax credits would have higher premiums by 2018 because fewer people in those areas would pay the full amounts of the premium increases for the second-lowest-

cost silver plans. I also created an indicator variable for rating areas in states that expanded eligibility for Medicaid to childless nonelderly adults after 2010. The hypothesis is that expanding Medicaid reduced premiums because fewer low-income people enrolled in plans through the Marketplaces.

From the 2013–17 County Health Rankings, I collected data on age-adjusted potential years of life lost per 100,000 people by county for each year. I focused on this measure because it was available for most counties in the period 2013–17. Then I sorted counties across the US according to these rankings, with lower rankings indicating poorer health; constructed nationwide county rankings based on them; and constructed rating-area averages. The hypothesis is that areas with lower rankings of potential years of life lost per 100,000 people would have higher premiums because the populations in those counties were sicker and costlier to insure.

From the 2015 Area Health Resources Files, I obtained the National Center for Health Statistics urban-rural classification codes for county size (based on census data). I defined large rating areas as those that contained at least one large metropolitan county.

Next I used the 2014 American Hospital Association data to measure competition in hospital markets. I selected variables related to hospital system identifiers, teaching hospital status, number of inpatient days, and physician-hospital integration, following the *physician-hospital integration* definitions of Laurence Baker and coauthors.¹⁴ I also collected data on whether hospitals had a Blue Cross and Blue Shield (BCBS) contract, because BCBS plans are ubiquitous on the Marketplaces. Using the number of inpatient days, I constructed Herfindahl-Hirschman Indices (HHIs) for hospital systems, measured at the rating-area level, using the definitions of David Cutler and Fiona Scott Morton.¹⁵ The hypothesis is that premiums would be higher in more concentrated hospital markets if hospitals had leverage to negotiate higher prices with insurers, and if insurers could pass these higher prices on to consumers.

ANALYSIS After matching the rating-area data on Marketplace plan premiums and insurer participation by year to other rating-area characteristics, I standardized the continuous variables to have means equal to 0 and variances equal to 1. Then I estimated a multivariable regression model that related 2018 premiums for the second-lowest-cost silver plans to insurer market power in 2018, provider market power in 2014, and other rating-area characteristics measured in the period 2013–17. The regression model used the natural log of 2018 plan premiums, so the

marginal effects are interpreted as percentage changes. The model was also weighted using the number of people in each rating area with 2017 Marketplace coverage. The standard errors were clustered at the state level. The multivariable regression model is described in more detail in the appendix.¹³

In robustness tests, I estimated multivariable regression models in which the dependent variable was the growth rate from 2014 to 2018 for the second-lowest-cost silver plan premium to show how insurer market power in 2018 is associated with premium growth rates from 2014 to 2018. Further, I plotted data to show how the second-lowest-cost silver plan premiums changed from 2014 to 2018 across rating areas that ended up with one insurer (monopolies), two insurers (duopolies), or more than two insurers in 2018. Finally, the thirty-five states included in this study are listed in appendix table A.¹³ States were included if CMS collected data on Marketplace plan participation every year in 2014–18.

LIMITATIONS This study had four main limitations. First, it used data only from states with federally facilitated Marketplaces, and the trends occurring in these states might not be the same as those occurring in states operating their own Marketplaces.

Second, data on hospital market structure and vertical integration were not readily available after 2014, so this study did not investigate how changes in provider market power might have affected premium growth rates.

Third, this analysis describes robust associations between insurer market power and premiums. It does not present causal evidence that decreasing the number of insurers serving a market would necessarily increase premiums.

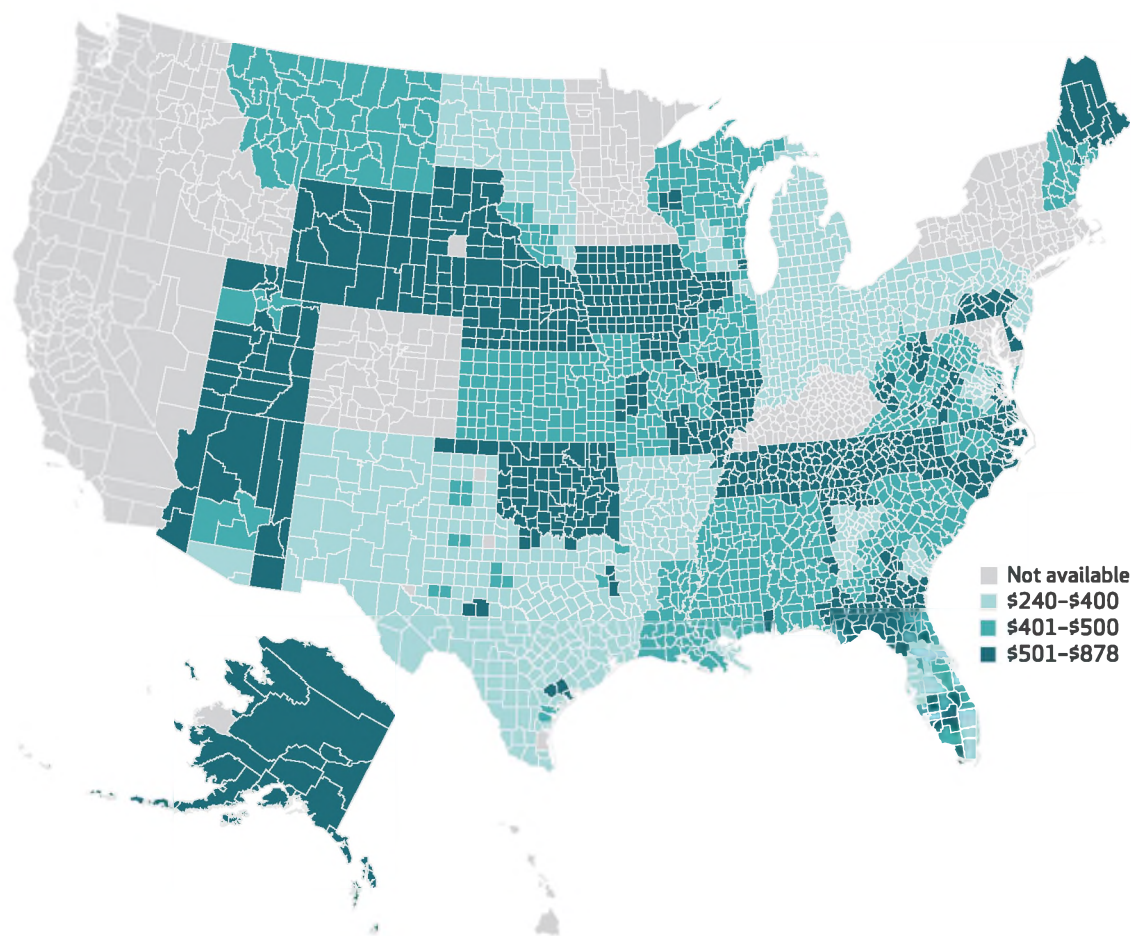
Fourth, risk selection across insurers is an alternative explanation for the relationship between premium growth and insurer market power. I could not rule out this explanation because I did not have data on consumers enrolled in different plans.

Study Results

Health insurance premiums varied dramatically across the country (exhibit 1). In Arizona, Iowa, Nebraska, Oklahoma, Tennessee, Utah, and Wyoming, for example, the 2018 second-lowest-cost silver plan premiums were \$501–878 per month, whereas premiums were \$240–400 per month in Arkansas, Indiana, Michigan, North Dakota, New Mexico, and Ohio. In most cases, states with the highest premiums in 2018 also had the highest rates of premium growth from 2014 to 2018 (data not shown). Only in

EXHIBIT 1

Monthly premiums for the second-lowest-cost silver plan in federally facilitated Marketplaces in 2018, by county



SOURCE Author's analysis of data from the Center for Consumer Information and Insurance Oversight of the Centers for Medicare and Medicaid Services. The exhibit combines data from the Plan Attributes, Rate, and Service Area Public Use Files. **NOTE** Federally facilitated Marketplace states are explained in the text, as is the premium calculation and its attribution to counties.

southern states such as Georgia were premiums high in 2018 because they started high in 2014.

Average monthly premiums for the second-lowest-cost silver plan were \$230 in 2014 and increased to \$430 in 2018 (exhibit 2). However, premium tax credits would have covered most of the increases for most enrollees.

The average enrollee lives in a rating area that had two million residents in 2013, of whom about one in seven were uninsured. Slightly fewer than half of the uninsured had family incomes of 138–400 percent of poverty, which qualified them for premium tax credits. Slightly more than one-fourth of enrollees lived in states that had expanded eligibility for Medicaid after 2010.

In 2014 the average enrollee lived in a rating area with thirty-three hospitals, of which two were teaching hospitals, six were integrated with at least one physician group, and nineteen had BCBS contracts. The average enrollee lived in a

rating area with a hospital system HHI of 2,971, meaning that the hospital markets were “highly concentrated,” according to federal guidelines.¹⁶ (The HHI ranges from 1 to 10,000, with an index of 10,000 indicating that the rating area has a single hospital system or monopoly provider. Note that systems may include many hospitals, which is why rating areas can have many hospitals yet still be considered concentrated.)

In 2014, 5 percent of enrollees lived in rating areas with insurance monopolies, a share that decreased to 1 percent in 2015 and 2016 as insurers such as UnitedHealthcare entered the Marketplaces. However, several insurers exited after 2016. Thus, 18 percent of enrollees lived in rating areas with monopoly insurers in 2017, and that share grew to 22 percent in 2018.

Exhibit 3 illustrates the association between premiums and rating-area characteristics in the 2018 ACA individual markets. Insurer market

EXHIBIT 2
Selected characteristics of the 400 rating areas in states with federally facilitated Marketplaces, 2014–18

Characteristic	Mean	SD
Monthly premium for second-lowest-cost silver plan in Marketplace		
2014	\$230.35	\$ 35.72
2015	234.61	35.53
2016	251.17	45.13
2017	313.67	85.48
2018	430.11	101.85
Growth, 2014–18	199.76	102.55
Rating-area population in 2013		
Number in 2013	2,096,045	2,273,881
Population uninsured	16%	5%
Uninsured population with incomes 138–400% FPL	47	3
Rating areas in expansion states ^a	27%	44%
Average County Health Ranking ^b	1,240	645
Hospitals in rating area in 2014		
All	32.63	35.00
Teaching hospitals	1.97	2.89
Integrated with physician groups	6.31	7.77
With BCBS contracts	19.25	21.36
Hospital system HHI in 2014 ^c	2,971	2,106
Rating areas with insurance monopolies		
2014	5%	22%
2015	1	9
2016	1	12
2017	18	38
2018	22	42
Rating areas with insurance duopolies in 2018	19%	40%
Rating areas with more than two insurers in 2018	58%	49%

SOURCE Author's analysis of data from CMS Center for Consumer Information and Insurance Oversight (the exhibit combines data from the Plan Attributes, Rate, and Service Area Public Use Files), 2013 Small Area Health Insurance Estimates, the 2017 County Health Rankings, the 2015 Area Health Resources Files, and the 2014 American Hospital Association Annual Survey. **NOTES** Federally facilitated Marketplaces are explained in the text. Premiums are for individual coverage for a twenty-nine-year-old nonsmoker. The means and standard deviations (SDs) are weighted using the number of Marketplace enrollees in the rating area in 2017. FPL is federal poverty level. BCBS is Blue Cross and Blue Shield. ^aStates that expanded eligibility for Medicaid after 2010. ^bThe County Health Rankings rank the 2,500 counties according to age-adjusted potential years of life lost, where higher rankings indicate better population health. ^cThe hospital system Herfindahl-Hirschman Index (HHI) is explained in the text. The Federal Trade Commission considers an average HHI of 2,971 to be highly concentrated.

power was the characteristic that had the largest association with premiums. In 2018 premiums were 50 percent (\$180) higher in rating areas with a monopoly insurer, compared to those in areas with more than two insurers. In the same year premiums were 21 percent (\$88) higher in areas with two insurers (duopoly), compared to areas with more than two insurers.

Several of the rating-area characteristics—hospitals with BCBS contracts, hospital system HHIs, and the County Health Rankings—were uncorrelated with premiums, since they were centered on zero. Premiums were 4.9 percent (\$22) lower in rating areas that contained a large metropolitan county and 5.4 percent (\$24) higher in areas with a one-standard-deviation increase in the share of the uninsured population that qualified for premium tax credits. Premiums were 10.4 percent (\$43) lower in states

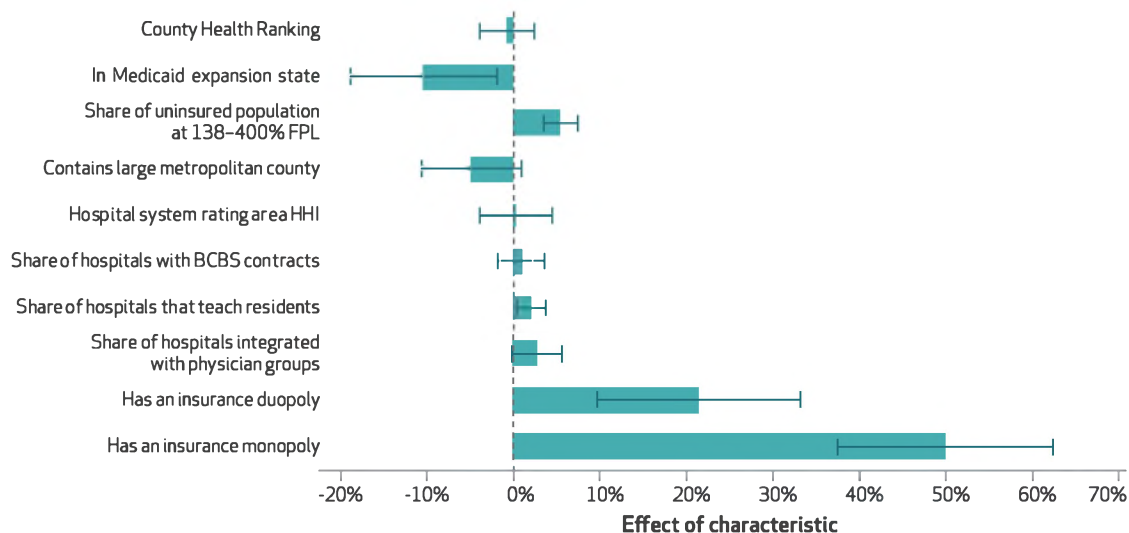
that expanded Medicaid eligibility, compared to those that did not—which is consistent with work by Aditi Sen and Thomas DeLeire.¹⁷

Hospital market structure had relatively weak associations with premiums across markets. Premiums were 2.8 percent (\$12) higher when the share of hospitals integrated with physician groups increased by one standard deviation, and 2.1 percent (\$8) higher when the share of teaching hospitals increased by one standard deviation. However, the other hospital market structure variables lacked significance. The direction of the results was generally consistent with previous work that related hospital concentration to premium growth in the ACA Marketplaces,⁹ but the magnitudes were smaller.

Overall, exhibit 3 shows that the presence of a monopolist insurer was the strongest, and most precise, predictor of 2018 premiums in the indi-

EXHIBIT 3

Rating-area characteristics associated with monthly premiums for the second-lowest-cost silver plan in federally facilitated Marketplaces, 2018



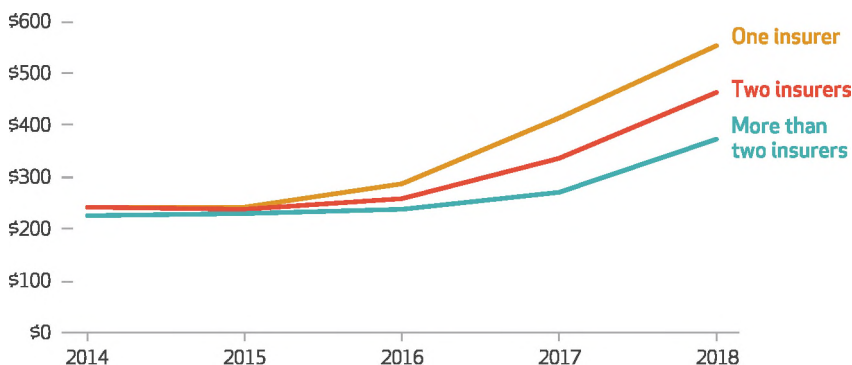
SOURCE Author's analysis of data from the Center for Consumer Information and Insurance Oversight of the Centers for Medicare and Medicaid Services, the 2013 Small Area Health Insurance Estimates, the 2017 Robert Wood Johnson Foundation County Health Rankings, the 2015 Area Health Resources Files, and the 2014 American Hospital Association Annual Survey. **NOTES** Federally facilitated Marketplaces are explained in the text. The exhibit shows the marginal effects estimates from a multivariable regression. The whiskers represent 95% confidence intervals. The following independent variables were standardized to have means equal to 0 and variances equal to 1 before I estimated the model: County Health Ranking; percent of uninsured population with incomes of 138-400 percent of the federal poverty level (FPL); hospital system's Herfindahl-Hirschman Index (HHI) in rating area; and shares of hospitals with Blue Cross and Blue Shield (BCBS) contracts, that teach residents, and that were integrated with physician groups. The remaining independent variables (whether rating area is located in a state that expanded eligibility for Medicaid, contains a large metropolitan county, had duopoly insurers in 2018, and had a monopoly insurer in 2018) are binary. The full set of results from the model are in column 1 in online appendix A2 (see note 13 in text).

vidual markets. To examine the monopoly phenomenon more closely, exhibit 4 presents changes in premiums in areas that were insurance monopolies (one insurer), duopolies (two

insurers), or competitive (more than two insurers) markets in 2018. In 2014-15 most rating areas were price-competitive—there were only small differences in premiums across areas that would later become insurance monopolies. By 2016 premiums in the rating areas that would become insurance monopolies increased more quickly than premiums in areas that would end up as insurance duopolies. Similarly, premiums in the latter areas increased more quickly than those in areas that would end up as competitive. The differences in premiums across these markets increased substantially through 2018.

EXHIBIT 4

Average monthly premiums for the second-lowest-cost silver plan in federally facilitated Marketplaces in 2014-18, by number of insurers per rating area in 2018



SOURCE Author's analysis of data from the Center for Consumer Information and Insurance Oversight of the Centers for Medicare and Medicaid Services. The exhibit combines data from the Plan Attributes, Rate, and Service Area Public Use Files. **NOTES** Federally facilitated Marketplaces are explained in the text. Premiums are for individual coverage for a twenty-nine-year-old nonsmoker.

Discussion

This study investigated the association between insurer market power and premium growth in the federally facilitated Marketplaces in 2014-18. I found that by 2018, premiums for a twenty-nine-year-old nonsmoker in the second-lowest-cost silver plans were about 50 percent higher in rating areas with monopolist insurers, compared to areas with two or more insurers. This study also showed that areas that became

insurance monopolies by 2018 did not have unusually high or low premiums in 2014–15. Instead, premiums in those areas started to diverge from premiums in more competitive markets in 2016, a divergence that continued into 2018. In 2018, 43 percent of rating areas in the federally facilitated Marketplaces had monopolist insurers (data not shown), and 22 percent of Marketplace consumers had only one insurance option during the last open enrollment period.

There are two possible explanations for the association between premiums and the competitiveness of local insurance markets. The first is that there was risk selection across plans within markets. To illustrate this possibility, suppose that within a rating area, all of the “healthier” consumers (that is, low-cost to the insurer) migrated to company A’s silver insurance plan in 2015, while all of the “sicker” consumers (high-cost to the insurer) migrated to company B’s silver plan. Company B would face a dynamic pricing problem: It could increase its premiums, but doing so would risk driving away its least sick enrollees, who might also switch to company A. Or it could decrease its premiums to attract the healthier consumers who had enrolled in company A’s plan. Unless company B takes a considerable market share from company A, it will lose money by charging low premiums to sicker (and costlier) consumers, especially after the reinsurance and risk corridors expire in 2016. Seeing no profitable pricing solution, company B exits the Marketplace, leaving company A as a monopolist. In the following year, all of the sicker enrollees who had enrolled in company B switch back to monopolist company A—which, anticipating the influx of relatively high-cost consumers, has increased its premiums to maintain profitability.

This sequence of events could explain why premiums increased more quickly in rating areas that became monopolistic. In efforts to reduce the likelihood of risk selection occurring across plans, the ACA markets used risk-adjustment mechanisms to compensate insurers with the sickest enrollees.^{18,19} However, Michael Geruso and coauthors show that Marketplace insurers can construct their drug formularies to avoid enrollees for whom risk adjustment is not well developed.²⁰ Their results suggest that the ACA’s risk-adjustment methodology might not completely eliminate the possibility of risk selection across insurers.

The second explanation for the association between premium increases and insurer concentration relies on elements of imperfect competition. Suppose that some insurers priced their premiums artificially low in the early years of the Marketplaces, expecting to incur early losses but hoping to gain market share by driving com-

petitors out of the market. Once establishing themselves as monopolists, the insurers increase premiums because of the lack of competition. There are reasons to suspect that this pricing strategy might be part of the story. From 2014 to 2016 the federal government’s reinsurance policy granted partial reimbursement to insurers that enrolled unexpectedly high-cost consumers, so the years 2014–16 presented a unique opportunity for insurers to price low to gain market share. A 2017 Urban Institute study investigated the determinants of premium growth across states and concluded that “underpricing was substantial in the early years of the Affordable Care Act” and that the lack of insurer competition is likely a driver of high premium growth since then, because “a dominant insurer is generally free to increase premiums because no viable competitors can challenge it for market share.”²¹ For this type of dynamic pricing strategy to be viable, however, one must assume that insurers face considerable barriers to entry in the Marketplaces. Otherwise, new insurers could enter profitable monopolistic markets, offer lower-price plans, and capture demand from price-sensitive consumers.

This study explored which mechanism—risk selection or insurer market power—was more likely. I identified the rating areas that became insurance monopolies and the insurers that became monopolists. I then looked back in time at the monopolists’ and nonmonopolists’ premiums in those rating areas before they became monopolies. I focused on the lowest-cost, second-lowest-cost, and highest-cost silver plans offered by the monopolists and their previous competitors (appendix table C1).¹³ Insurers that later became monopolists offered the lowest-cost silver plans 28 percent of the time, the second-lowest-cost silver plans 50 percent of the time, and the highest-cost silver plans 60 percent of the time. Plan characteristics changed in the year before versus after rating areas transitioned to insurance monopolies: The percentages of bronze, silver, and gold plans remained the same, but the percentage of preferred provider organization (PPO) plans increased from 24 percent to 36 percent. (appendix table C2).¹³ PPOs have wider networks than other types of plans that are available on the Marketplaces, so these results suggest that insurers that exited the Marketplaces offered plans that were disproportionately lower cost with narrower networks. Thus, if sicker enrollees wanted plans with more generous out-of-network coverage,²² then they would have gravitated toward the future monopolists’ plans, not its competitors’ plans.

If the monopolist insurer did not typically offer the lowest-cost silver plan before becoming a

monopolist, then how much of the second-lowest-cost silver plan premium increase was due to the fact that the lowest-cost silver plan insurer exited, versus the monopolist increasing its prices? Monopolist insurers increased the prices of their lowest-cost plans by \$100, on average, in markets where they had not offered the lowest-cost silver plan, and by \$116 in markets where they had offered that plan (appendix table C3).¹³ Thus, at least 67 percent of the lowest-cost silver plan premium increases in monopoly markets is due to monopolist insurers' raising the prices on their existing low-cost plans (see the appendix for details).¹³ Because most enrollees select low-cost plans, the monopolist's pricing results in higher costs for the government, because its subsidies are linked to the second-lowest-cost silver plans. Thus, the ACA's price-linked subsidy policy may have enabled monopolist insurers to increase prices above what a market with fixed-price subsidies would allow,²³ which is consistent with Sonia Jaffe and Mark Shepard's results on Massachusetts's health care reform²⁴ and Peitro Tebaldi's results on California's ACA markets.²⁵

Monopolist insurers most likely increased premiums for their lowest-cost plans from 2016 to 2018 because competition from new entrants was unlikely. New insurers entered 75 percent of Marketplace rating areas in 2014–15, but that share dropped to 13 percent from 2015 to 2016, dropped to only 4 percent from 2016 to 2017, and rebounded modestly to 7 percent from 2017 to 2018 (results not shown). Thus, the nadir of insurer entry was 2017, after the expiration of risk corridors and reinsurance and in the midst of the ACA's political uncertainty. Coincidentally, monopolist insurers increased their second-lowest-cost silver plan premiums the most in 2017, compared to all other years (appendix B2).¹³ Therefore, monopolist insurers could have been profitable in 2017–18, and their potential competitors might not have entered the mar-

kets because of the high fixed costs of entry—combined with the policy uncertainty related to the individual mandate and cost-sharing subsidies.

Among those insurers that still serve the federally facilitated Marketplaces, the largest is the Blue Cross and Blue Shield (BCBS) federation. Its thirty-five licensees served more than 84 percent of rating areas in 2017, and 40 percent of those areas were insurance monopolies. Of the remaining rating areas where BCBS did not offer Marketplace plans in 2017, only 8 percent were insurance monopolies. A recent analysis by S&P Global used BCBS claims data to show that many licensees became profitable starting in 2016.²⁶ For example, BCBS medical loss ratios (claims outlays divided by premium receipts) declined from 2015 to 2016 in thirty-one of the thirty-seven states where plans were offered. More recent data on insurer profitability are unavailable, but premiums have increased considerably since 2016, and there is little evidence that the aggregate enrollee risk pool has changed.²⁷ Thus, it is likely that the Marketplaces are becoming increasingly profitable for the insurers who remain. The concern going forward is that monopolist insurers will have leverage to propose large premium increases, and state insurance regulators may approve those requests to keep the markets stable.

Conclusion

One of the goals of the ACA was to foster competition among insurers in the hope of moderating premium growth in the Marketplaces. However, competition is no longer viable in many areas of the country. Future research should show how individual market enrollment and quality of care has changed in markets with insurance monopolies. Understanding how insurer competition has affected enrollment, costs, and quality will help guide future Marketplace reforms. ■

This research was presented in small seminars in the Department of Economics at Hunter College on November 15, 2017, and at Rutgers University on December 8, 2017.

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Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**CMS DID NOT ALWAYS
ACCURATELY AUTHORIZE
FINANCIAL ASSISTANCE
PAYMENTS TO QUALIFIED
HEALTH PLAN ISSUERS IN
ACCORDANCE WITH FEDERAL
REQUIREMENTS DURING THE
2014 BENEFIT YEAR**

*Inquiries about this report may be addressed to the Office of Public Affairs at
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**Daniel R. Levinson
Inspector General**

**August 2018
A-02-15-02013**

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Section 8M of the Inspector General Act, 5 U.S.C. App., requires that OIG post its publicly available reports on the OIG Web site.

OFFICE OF AUDIT SERVICES FINDINGS AND OPINIONS

The designation of financial or management practices as questionable, a recommendation for the disallowance of costs incurred or claimed, and any other conclusions and recommendations in this report represent the findings and opinions of OAS. Authorized officials of the HHS operating divisions will make final determination on these matters.

Report in Brief

Date: August 2018

Report No. A-02-15-02013

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
OFFICE OF INSPECTOR GENERAL



Why OIG Did This Review

The Patient Protection and Affordable Care Act (ACA) established marketplaces to allow individuals and small businesses to shop for health insurance in all 50 States and the District of Columbia. The Centers for Medicare & Medicaid Services (CMS) operates the Federal marketplace and is responsible for reviewing, approving, and generating financial assistance payments (i.e., advance premium tax credits and advance cost-sharing reductions) for the Federal and State-based marketplaces. During the 2014 benefit year, CMS used an interim process for approving financial assistance payments. We previously reviewed CMS's internal controls under its interim process to ensure the accuracy of aggregate financial assistance payments and determined that the controls were not effective.

The objective of this review was to determine whether CMS accurately authorized financial assistance payments in accordance with Federal requirements for policies associated with individuals enrolled in qualified health plans (QHPs) operating through the Federal marketplace.

How OIG Did This Review

We reviewed a stratified random sample of 140 policies for individuals who enrolled through the Federal marketplace and for whom financial assistance payments were made to QHP issuers during the 2014 benefit year. We obtained documentation from CMS and QHP issuers supporting these payments.

CMS Did Not Always Accurately Authorize Financial Assistance Payments to Qualified Health Plan Issuers in Accordance With Federal Requirements During the 2014 Benefit Year

What OIG Found

We found that of the 140 policies in our sample, CMS accurately authorized financial assistance payments for 109 policies; however, financial assistance payments for 26 policies were not accurately authorized in accordance with Federal requirements. For the remaining five policies, CMS authorized potentially improper financial assistance payments to QHP issuers that did not provide documentation to support that enrollees had paid their premiums, a requirement for receiving these payments.

On the basis of our sample results, we estimated that CMS authorized improper financial assistance payments totaling almost \$434.4 million for 461,127 policies that were not in accordance with Federal requirements and authorized potentially improper financial assistance payments totaling almost \$504.9 million for 183,983 policies during the 2014 benefit year. In 2016, CMS fully transitioned QHP issuers operating through the Federal marketplace to an automated payment system that makes financial assistance payments on an individual policy-level basis.

What OIG Recommends and CMS's Comments

We recommend that CMS (1) work with the U.S. Department of the Treasury (Treasury) and QHP issuers to collect improper financial assistance payments, which we estimate to be almost \$434.4 million, for policies for which the payments were not authorized in accordance with Federal requirements; (2) work with Treasury and QHP issuers to resolve the potentially improper financial assistance payments, which we estimate to be almost \$504.9 million, for policies for which there was no documentation provided to verify enrollees had paid their premiums; and (3) clarify guidance with QHP issuers on Federal requirements for terminating an enrollee's coverage when the enrollee fails to pay his or her monthly premium.

CMS partially concurred with our first and second recommendations and concurred with our third recommendation. CMS stated that it will not require QHP issuers to return improper financial assistance payments for policies on which issuers acted in good faith, nor will it resolve potentially improper financial assistance payments for issuers that are out of business. CMS also provided documentation to support some payments to QHP issuers that we identified as improper in our draft report. After reviewing the documentation, we revised some findings but maintain that our recommendations are valid.

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INTRODUCTION

WHY WE DID THIS REVIEW

The Patient Protection and Affordable Care Act (ACA)¹ established health insurance exchanges (commonly referred to as “marketplaces”) to allow individuals and small businesses to shop for health insurance in all 50 States and the District of Columbia. A marketplace allows insurance companies (issuers) to offer individuals private health insurance plans, known as qualified health plans (QHPs), and enrolls individuals in those plans. The Centers for Medicare & Medicaid Services (CMS) operates the Federal marketplace and is responsible for reviewing, approving, and generating financial assistance payments (i.e., advance premium tax credits (APTCs) and advance cost-sharing reductions (CSRs)) for the Federal and State-based marketplaces (State marketplaces).

We previously reviewed CMS’s internal controls (i.e., its processes to prevent or detect any possible substantial errors) under an interim process for approving financial assistance payments to ensure the accuracy of aggregate financial assistance payments and determined that these controls were not effective.²

OBJECTIVE

Our objective was to determine whether CMS accurately authorized financial assistance payments in accordance with Federal requirements for policies associated with individuals enrolled in QHPs operating through the Federal marketplace.

BACKGROUND

Health Insurance Marketplaces

A marketplace is designed to serve as a one-stop shop at which individuals get information about their health insurance options; are evaluated for eligibility for a QHP and, when applicable, eligibility for financial assistance payments; and enroll in the QHP of their choice. QHPs are grouped into four “metal levels”: bronze, silver, gold, and platinum. An issuer may offer multiple QHPs through a marketplace.

Individuals in States without a State marketplace could choose a QHP through the CMS-administered Federal marketplace. States could also establish State-partnership marketplaces in which they share responsibilities for core functions with CMS or could establish a State

¹ P.L. No. 111-148 (Mar. 23, 2010), as amended by the Health Care and Education Reconciliation Act of 2010, P.L. No. 111-152 (Mar. 30, 2010), is known as the Affordable Care Act.

² *CMS’s Internal Controls Did Not Effectively Ensure the Accuracy of Aggregate Financial Assistance Payments Made to Qualified Health Plan Issuers Under the Affordable Care Act*, ([A-02-14-02006](#)), issued June 16, 2015.

marketplace—Federal platform in which States perform all core functions but rely on the Federal marketplace to enroll individuals. As of January 1, 2017, 39 States used the Federal marketplace,³ and the other 12 States (including the District of Columbia) had State marketplaces.

CMS’s Processes for Reviewing, Approving, and Generating Financial Assistance Payments to Qualified Health Plan Issuers

The ACA provides financial assistance payments to lower certain enrollees’ insurance premiums or out-of-pocket insurance costs or both. The Federal Government distributes financial assistance payments to QHP issuers on behalf of eligible enrollees:

- **Advance Premium Tax Credits:** APTCs are advance payments of premium tax credits (PTCs).⁴ PTCs assist certain low-income enrollees with the cost of their premiums and are available at tax filing time or in advance.⁵ For enrollees determined eligible for APTCs, the applicable marketplace determines the maximum APTC amount using the price of the second-lowest-priced silver-level plan available in the area in which the enrollee resides and the enrollee’s reported income and family size.⁶ Eligible enrollees may opt to enroll in any plan, regardless of metal level.
- **Cost-Sharing Reductions:**⁷ CSRs assist qualifying low-income enrollees with out-of-pocket costs, such as deductibles, coinsurance, and copayments.⁸ To receive CSRs:

³ This includes six State-partnership marketplaces and five State marketplaces—Federal platform.

⁴ ACA §§ 1401 and 1412, and 45 CFR § 155.20 (definition of “advance payment of the premium tax credit”).

⁵ The Federal Government pays the APTC monthly to the QHP issuer on behalf of the enrollee to offset a portion of the cost of the premium. For example, if an enrollee who selects a QHP with a \$500 monthly insurance premium qualifies for a \$400 monthly APTC (and chooses to use it all as advance payment), the enrollee pays \$100 to the QHP issuer. The Federal Government pays the remaining \$400 to the QHP issuer.

⁶ The maximum allowable amount of the credit is the total amount of the PTC for which an individual may be eligible in a benefit year (26 U.S.C. §§ 36B(a) and (b)). Enrollees may elect to receive any portion of the maximum allowable amount of the credit.

⁷ During our audit period of January 1, 2014, to December 31, 2014, CMS authorized CSR payments to QHP issuers. However, on October 12, 2017, the Department of Health and Human Services (HHS) determined that it would no longer make CSR payments to QHP issuers. (See <https://www.hhs.gov/sites/default/files/csr-payment-memo.pdf>. Accessed on January 10, 2018). Accordingly, CMS stopped authorizing CSR payments as of that date. Nevertheless, to comply with ACA regulations, QHP issuers are required to offer plans with CSR benefits even though the Federal Government will not reimburse QHP issuers for these CSR payments. ACA § 1402(a).

⁸ For example, an individual who visits a physician may be responsible for a \$30 copayment. If the individual qualifies for a CSR of \$20 for the copayment, the individual pays only \$10. The Federal Government pays the remaining \$20.

eligible enrollees must enroll in a silver-level plan, which generally covers 70 percent of covered medical services costs. CSRs assist these enrollees in paying a portion of their remaining costs. The Federal Government makes an advance monthly CSR payment to QHP issuers to cover the issuers' estimated CSR costs.⁹

During the 2014 benefit year, CMS used an interim process for approving financial assistance payments. Under this process, issuers submitted to CMS a monthly "Enrollment and Payment Data Template" (template) covering enrollees in all of the issuers' plans. Each template contained aggregate financial assistance amounts that the issuer submitted for reimbursement on the basis of its confirmed enrollment totals. Confirmed enrollees are defined as those who had paid their first month's premium to the QHP issuer and had their enrollment information approved by the issuer. CMS also required QHP issuers to submit attestation agreements stating that all template information was accurate and in compliance with Federal policies and regulations before CMS processed the issuers' payments.

As of May 2016, CMS had fully transitioned QHP issuers operating through the Federal marketplace to an automated payment system that makes financial assistance payments to QHP issuers on an individual policy-level basis. CMS plans to fully transition most QHP issuers operating through State marketplaces to the automated system in 2018.

Treasury's Processes for Paying Financial Assistance Payments and Reconciling Advance Premium Tax Credits

HHS was required to establish a program to determine the amount of financial assistance payments to each QHP issuer and to submit these amounts to the U.S. Department of the Treasury (Treasury) for payment.¹⁰

HHS and Treasury have established a process that CMS uses to determine financial assistance payment amounts. After an eligibility determination is made by the marketplaces, CMS accesses Treasury's Secure Payment System to authorize financial assistance payments to QHP issuers. Treasury is responsible for ensuring that sufficient funds are available at the beginning of the fiscal year and that sufficient funding has been transferred into an account that the Treasury's Internal Revenue Service (IRS) and CMS jointly established to disburse financial assistance payments. Treasury is required to ensure that all unobligated funds for financial assistance payments are returned to its account at the end of the benefit year. The IRS is responsible for reconciling APTC payments made to QHP issuers on behalf of confirmed enrollees to enrollees' individual taxpayer returns.¹¹

⁹ CMS makes these advance CSR payments to protect QHP issuers from being required to bear the entire financial burden of providing CSRs over a benefit year (78 Fed. Reg. 15410, 15486 (March 11, 2013)).

¹⁰ ACA § 1412.

¹¹ ACA § 1401(a); Internal Revenue Code (IRC) § 36B(f)(2).

HOW WE CONDUCTED THIS REVIEW

Our review covered 2,959,262 policies¹² for individuals enrolled through the Federal marketplace with financial assistance payments totaling \$11,962,621,282 from January 1, 2014, through December 31, 2014, known as the 2014 benefit year. We reviewed a stratified random sample of 140 policies and the financial assistance payments made to QHP issuers on behalf of all enrollees in these policies.¹³ For the 2014 benefit year, the IRS reconciled APTC payments based on personal tax returns filed in 2015. We worked with the Treasury's Inspector General for Tax Administration (TIGTA) to estimate the total amount of improper payments associated with these policies during the 2014 benefit year using APTC reconciliation data.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix A contains the details of our audit scope and methodology, Appendix B contains our statistical sampling methodology, and Appendix C contains our sample results and estimates.

FINDINGS

CMS did not always accurately authorize financial assistance payments to QHP issuers in accordance with Federal requirements. Of the 140 policies in our sample, CMS accurately authorized financial assistance payments for 109 policies; however, financial assistance payments for 26 policies were not accurately authorized in accordance with Federal requirements. For the remaining five policies, CMS authorized potentially improper financial assistance payments to QHP issuers that did not provide documentation supporting that the associated enrollees had paid their premiums, a requirement for receiving financial assistance payments.

CMS did not have an effective process in place to ensure that financial assistance payments were made only for confirmed enrollees and in the correct amounts. Instead, CMS relied on QHP issuers to verify that their enrollees were confirmed and to attest that the financial

¹² A policy can comprise one or more individuals. For the purposes of this report, we define a policy as all policies associated with an enrollment application. For example, an individual in our sample was enrolled in one policy from May through October 2014 before being terminated from that policy and was enrolled in a different policy from November through December 2014. We included the two policies associated with this enrollment application as one sample unit.

¹³ We did not review whether an enrollee was eligible to receive financial assistance payments. This work is detailed in *Not All of the Federally Facilitated Marketplace's Internal Controls Were Effective in Ensuring That Individuals Were Properly Determined Eligible for Qualified Health Plans and Insurance Affordability Programs (A-09-14-01011)*, issued August 6, 2015.

assistance payment information they reported on their templates was accurate. CMS obtained financial assistance payment information for the 2014 benefit year on an aggregate basis rather than on a policy-level basis. As a result, it was unable to verify the amounts QHP issuers attested to and the amounts requested for each policy. If CMS had been able to obtain financial assistance payment data on a policy-level basis, it could review financial assistance payments to ensure QHP issuers requested payments on behalf of confirmed enrollees and in the correct amounts.

On the basis of our sample results, we estimated that CMS authorized improper financial assistance payments totaling \$434,398,168 for 461,127 policies that were not in accordance with Federal requirements and authorized potentially improper financial assistance payments totaling \$504,889,518 related to 183,983 policies.¹⁴

CMS AUTHORIZED INACCURATE FINANCIAL ASSISTANCE PAYMENTS

Qualified Health Plan Issuers Received Payments on Behalf of Ineligible Enrollees

To be eligible for financial assistance payments, individuals must enroll in a QHP through one of the marketplaces.¹⁵ In addition, the marketplace must allow an enrollee to pay directly to the QHP issuer any applicable premium owed.¹⁶ CMS is responsible for ensuring that financial assistance payments are made only for confirmed enrollees.¹⁷ As described earlier, confirmed enrollees are defined as those who have paid their first month's premium to the QHP issuer and had their enrollment information approved by the issuer.

Enrollees who receive APTC payments and have paid at least 1 full month's premium during the benefit year but then fail to pay their monthly premiums are provided a 3-consecutive-month grace period to pay any outstanding premiums.¹⁸ If the 3-month grace period lapses without the enrollee paying all outstanding premiums, the QHP issuer must return to Treasury the APTC payment for the second and third month of the grace period, while the enrollee is responsible for paying back the first month's APTC payment through his or her Federal tax return.¹⁹

¹⁴ The 90-percent confidence interval is \$104,566,655 to \$764,229,682 for the improper financial assistance payments and \$106,643,599 to \$903,135,437 for the potentially improper financial assistance payments.

¹⁵ 26 CFR § 1.36B-2(a)(1) and 45 CFR § 156.410(b)(1).

¹⁶ 45 CFR § 155.240(a).

¹⁷ *MOU Between IRS and CMS*; CMS control numbers MOU 13-150 (effective January 31, 2013) and MOU 14-127 (effective January 17, 2014).

¹⁸ ACA § 1412(c)(2)(B)(iv)(II).

¹⁹ 45 CFR § 156.270(e)(2) and 77 Fed. Reg. 18310, 18429 (Mar. 27, 2012).

For 21 of the 140 sampled policies, QHP issuers requested and CMS authorized financial assistance payments on behalf of enrollees who were not eligible to receive such payments. Specifically:

- For 15 sampled policies, CMS authorized payments to QHP issuers for enrollees who did not pay their first month's premium and, therefore, were not confirmed enrollees. For example, for one sampled policy, individuals were enrolled in a QHP through the marketplace with a plan start date of May 2014. The enrollees associated with this policy did not pay their first month's premium until August 2014. However, CMS authorized financial assistance payments for this policy even though payment was not made on time to effectuate the policy.
- For five sampled policies, the 3-month grace period ended, but QHP issuers did not return APTC payments authorized by CMS for the second and third months of the grace period, as required. For example, CMS authorized APTC payments for one sampled policy during a 3-month grace period from June 2014 through August 2014. After the grace period ended, the enrollees had not paid all outstanding premiums; however, the QHP issuer did not return the July 2014 APTC payment made on behalf of the enrollees associated with this policy, which represented the second month of the 3-month grace period.²⁰
- For one sampled policy, CMS authorized payments to a QHP issuer for 5 months after the QHP issuer terminated the policy. Specifically, the QHP issuer terminated coverage in July 2014, but CMS authorized payments for August through December 2014.

Qualified Health Plan Issuers Inappropriately Terminated Enrollees' Coverage

QHP issuers must provide a grace period of 3 consecutive months for an enrollee who receives APTC and has paid at least 1 full month's premium during the benefit year.²¹ If the 3-month grace period lapses without the enrollee paying all outstanding premiums, the issuer must terminate the enrollee's coverage, retroactive to the last day of the first month of the grace period.²²

²⁰ The QHP issuer did return the August 2014 payment.

²¹ 45 CFR § 156.270(d).

²² 45 CFR §§ 156.270(g), 155.430(d)(4).

For six sampled policies,²³ QHP issuers inappropriately terminated enrollees' coverage before the end of the 3-month grace period. For example, as the figure below illustrates, coverage for one policy was confirmed after the enrollee paid her first month's premium for March 2014. The enrollee also paid her April and May 2014 premiums but did not pay the June and July 2014 premiums. The QHP issuer terminated coverage for this policy in July 2014. According to Federal regulations, the enrollee should have been granted a 3-month grace period from June through August 2014 to make a premium payment, during which time CMS should have authorized financial assistance payments. The QHP issuer was required to terminate coverage if the enrollee did not make *all outstanding* premium payments by the end of August 2014.

Figure: Example of Qualified Health Plan Issuer's Timeline for Inappropriately Terminating Enrollees Early

Month	Enrollee's Portion of Premium Paid to QHP Issuer	3-Consecutive-Month Grace Period in Effect	APTC Payments Made to QHP Issuer on Behalf of Enrollees	APTC Payments Should Have Been Made to QHP Issuer on Behalf of Enrollees
March 2014	Yes	No	Yes	Yes
April 2014	Yes	No	Yes	Yes
May 2014	Yes	No	Yes	Yes
June 2014	No	Yes	Yes	Yes
July 2014	No	Yes	No*	Yes
August 2014	No	Yes	No	Yes
September 2014	No	No**	No	No

* The QHP issuer terminated the policy as of July 15, 2014. As such, CMS did not authorize the APTC payments that should have been made to the QHP issuer during the remainder of the grace period (i.e., July and August 2014).

** The grace period should have ended in September 2014 if the QHP issuer had not received all outstanding premium payments by August 2014. The QHP issuer should have terminated the policy after this date, not on July 15, 2014.

QHP issuers inappropriately terminating enrollees' coverage before the end of the 3-month grace period could result in individuals and families being without medical coverage during a time in which they were entitled to such coverage.

²³ One of these sampled policies is also included in our prior finding related to QHP issuers that requested and for which CMS authorized financial assistance payments on behalf of enrollees who were not eligible to receive such payments. There were no improper payments associated with the remaining five sampled policies because the QHP issuers terminated these policies.

QUALIFIED HEALTH PLAN ISSUERS DID NOT PROVIDE DOCUMENTATION TO VERIFY THAT ENROLLEES PAID THEIR MONTHLY PREMIUMS

Issuers offering QHPs in the Federal marketplace must maintain, for 10 years, documents and records that are sufficient to enable CMS or its designees to evaluate the marketplaces' compliance with Federal requirements.²⁴ CMS is also responsible for ensuring that financial assistance payments are made only for confirmed enrollees.

For 5 of 140 sampled policies, QHP issuers did not provide documentation to verify that enrollees paid their monthly premium to be eligible to receive financial assistance payments. Specifically:

- For three sampled policies, we attempted to contact the QHP issuers; however, they were out of business and no longer offering health insurance plans through the Federal marketplace. Accordingly, we were unable to obtain information to verify that the enrollees paid their premiums to be eligible to receive financial assistance payments.
- For two sampled policies, despite our multiple attempts to obtain documentation to verify that the enrollees associated with these policies made their premium payments, the QHP issuers did not provide any documentation.

Without this documentation, we could not determine whether enrollees associated with the sampled policies were confirmed and whether CMS should have authorized financial assistance payments to QHP issuers on behalf of the enrollees associated with these policies, resulting in potential inappropriate Federal expenditures.

CMS PROCESS DID NOT ENSURE THAT IT AUTHORIZED ACCURATE FINANCIAL ASSISTANCE PAYMENTS FOR THE 2014 BENEFIT YEAR

CMS did not have an effective system in place to ensure that financial assistance payments were made only for confirmed enrollees and in the correct amounts for the 2014 benefit year. Instead, CMS relied on QHP issuers to verify that their enrollees were confirmed and to attest that the financial assistance payment information they reported on their templates was accurate. CMS obtained financial assistance payment information for the 2014 benefit year on an aggregate basis rather than on a policy-level basis. As a result, it was unable to verify the amounts QHP issuers attested to and the amounts requested for each policy. If CMS had been able to obtain financial assistance payment data on a policy-level basis, it could perform tests on financial assistance payments to ensure that QHP issuers requested payments on behalf of confirmed enrollees and in the correct amounts. It should be noted that as of May 2016, CMS had fully transitioned QHP issuers operating through the Federal marketplace to an automated payment system that makes financial assistance payments to QHP issuers on an individual

²⁴ 45 CFR § 156.705.

policy-level basis. CMS plans to fully transition most QHP issuers operating through State marketplaces to the automated system in 2018.

RECOMMENDATIONS

We recommend that CMS:

- work with Treasury and QHP issuers to collect improper financial assistance payments, which we estimate to be \$434,398,168, for policies for which the payments were not authorized in accordance with Federal requirements;
- work with Treasury and QHP issuers to resolve the potentially improper financial assistance payments, which we estimate to be \$504,889,518, for policies for which there was no documentation provided to verify enrollees had paid their premiums; and
- clarify guidance for QHP issuers on Federal requirements for terminating an enrollee's coverage when the enrollee fails to pay his or her monthly premium.

CMS COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

In written comments on our draft report, CMS partially concurred with our first and second recommendations and concurred with our third recommendation. CMS stated that it is conducting audits of 2014 financial assistance payments to issuers and adjusting financial assistance payments to issuers for any overpayments or underpayments found. However, CMS indicated that it will not require QHP issuers to return improper financial assistance payments for policies on which issuers provided coverage in 2014 while acting in good faith and does not plan to resolve the potentially improper financial assistance payments for issuers that are out of business. CMS also stated that it has strengthened its guidance on terminating coverage for failure to pay premiums through updates to its enrollment manual.²⁵ CMS further stated that it will continue to review its processes to ensure it provides QHP issuers with reliable and transparent data on terminations of enrollee coverage for nonpayment of premiums. Finally, CMS provided additional documentation under separate cover to support some payments to QHP issuers that we identified as improper in our draft report.

Regarding our first recommendation, CMS stated that it developed a coordinated, risk-based audit process to determine the accuracy and integrity of 2014 financial assistance payments. According to CMS, the audits it is conducting will cover 49 percent of the total financial assistance payments authorized to QHP issuers operating in the Federal marketplace during the 2014 benefit year. The audits conducted so far have found a net payment error rate of around 0.1 percent. CMS stated that it is adjusting financial assistance payments to QHP issuers for any

²⁵ CMS, *FFM* [Federally Facilitated Marketplace] and *FF-SHOP* [Federally Facilitated Small Business Health Options Program] *Enrollment Manual*. Available at https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/ENR_FFMSHOP_Manual_080916.pdf. Accessed on July 3, 2018.

overpayments or underpayments found as part of these audits. CMS also noted that QHP issuers faced technical challenges during the first year that the Federal marketplace began operating; therefore, CMS allowed issuers various “flexibilities” for approving financial assistance payments. Because of the first-year technical challenges and those flexibilities, CMS accepted issuer attestations for confirmed enrollees’ coverage dates. Therefore, CMS disagreed with our analysis regarding effective dates and financial assistance payments and stated that it does not plan to require QHP issuers to return financial assistance payments for policies for which they provided coverage in 2014 while acting in good faith based on CMS’s above-referenced flexibilities.

In response to our second recommendation, CMS stated that it has received documentation from QHP issuers included in its audits and plans to adjust the issuers’ financial assistance payments accordingly. CMS further stated that many of the QHP issuers associated with the financial assistance payments we identified as potentially improper were no longer in business or were experiencing financial distress or liquidation. To make the most efficient use of its audit resources, CMS stated that it does not plan to audit QHP issuers no longer in business.

After reviewing the additional documentation provided, we revised our determinations for financial assistance payments for 10 policies identified in our draft report as not accurately authorized. However, two of these policies did not meet Federal requirements for another reason; therefore, we continue to question the financial assistance payments made for these policies. We revised our findings and first recommendation to reflect our revised determination that the remaining eight policies were accurately authorized. We maintain that our findings and recommendations, as revised, are valid. Specifically, CMS did not provide any information related to its risk-based audit process; therefore, we cannot determine whether its audits will identify the deficiencies we identified. In addition, although 2014 was the first year the marketplace was in effect, CMS was still responsible for ensuring that it accurately authorized financial assistance payments in accordance with Federal requirements. Therefore, it is responsible for ensuring any improper or potentially improper financial assistance payments made to QHP issuers during the first year of the marketplace—and any period thereafter—are resolved and collected.

CMS also provided technical comments, which we addressed as appropriate. CMS’s comments, excluding the technical comments, are included as Appendix D.

OTHER MATTERS: CMS IS NOT REQUIRED TO IDENTIFY AND RECOVER POTENTIALLY INAPPROPRIATE COST-SHARING REDUCTIONS

The IRS is responsible for reconciling APTC payments made on behalf of confirmed enrollees to individual taxpayer returns and to verify that the PTCs were correctly calculated.²⁶ As such, taxpayers must reconcile—or compare—their APTC payments with their allowable PTC. If the calculations differ, taxpayers must increase or reduce their taxes accordingly.²⁷ However, the ACA does not require CMS to similarly identify and recover CSR payments made to QHP issuers on behalf of enrollees whose income for the benefit year exceeded the maximum allowable amount to be eligible to receive these payments.

At present, CMS is not making CSR payments. If CMS were to make such payments in the future, we would encourage CMS to consider methods to identify potentially inappropriate CSR payments made on behalf of enrollees whose income for the benefit year exceeded the maximum amount allowed to be eligible for these payments and to recover inappropriate payments.

Because CMS is not required to identify potentially inappropriate CSR payments, it has not implemented a process to recover those payments. As a result, there is a risk that some of the \$2,160,409,204 in CSR payments that CMS authorized during the 2014 benefit year were made on behalf of ineligible enrollees.

²⁶ ACA § 1401(a); IRC § 36B(f)(2).

²⁷ If taxpayers' APTC payments total more than their PTC, that will increase the taxes they owe or reduce their tax refund. If their PTC is greater than their total APTC payments, they can increase their tax refund or lower their balance due by the difference (IRS Publication 5120 (Rev. 1-2016)).

APPENDIX A: AUDIT SCOPE AND METHODOLOGY

SCOPE

Our audit covered policies for individuals who enrolled through the Federal marketplace and for whom financial assistance payments were made to QHP issuers during the 2014 benefit year.

We limited our review of internal controls to those applicable to our objective. Our objective did not require an understanding of all internal controls related to enrolling in a QHP or the eligibility of enrollees to receive financial assistance payments. Accordingly, our scope did not include a broad review of CMS's controls over eligibility for enrollment in a QHP operating through the Federal marketplace. Prior Office of Inspector General (OIG) work assessed those controls.¹²

METHODOLOGY

To accomplish our objective, we:

- reviewed applicable Federal laws, regulations, and other requirements related to the administration of financial assistance payments;
- obtained from CMS databases of all policies with individuals who elected to have APTCs and advance CSRs paid to QHP issuers operating through the Federal marketplace and the associated payments for the 2014 benefit year;
- obtained from CMS the financial assistance payment amounts it should have authorized based on its enrollment system and the total amount of financial assistance payments disbursed for the 2014 benefit year and reconciled these amounts;
- created a sampling frame of 2,959,262 policies from CMS's Multidimensional Insurance Data Analytics System (MIDAS) with applied financial assistance payment amounts totaling \$11,962,621,282;
- selected a stratified random sample of 140 policies for which CMS authorized financial assistance payments to QHP issuers operating through the Federal marketplace during the 2014 benefit year;
- for each of the sampled policies, obtained from CMS the associated electronic health insurance records detailing PTC and CSR amounts determined by the Federal

¹² We did not review whether enrollees were eligible to receive financial assistance payments. That work is detailed in *Not All of the Federally Facilitated Marketplace's Internal Controls Were Effective in Ensuring That Individuals Were Properly Determined Eligible for Qualified Health Plans and Insurance Affordability Programs (A-09-14-01011)*, issued August 6, 2015.

marketplace and the associated Form 1095A, Health Insurance Marketplace Statement, detailing the amount of PTCs determined by the Federal marketplace and any APTCs paid to QHP issuers related to each policy for the 2014 benefit year;

- interviewed officials from 80 QHP issuers to obtain an understanding of their procedures for documenting their receipt of premium payments from enrollees and requesting reimbursement of financial assistance payments from CMS;
- obtained and reviewed documentation supporting advance financial assistance payments made to QHP issuers for each sample item and:
 - verified that the Federal marketplace transmitted the correct financial assistance payment amounts to QHP issuers,
 - confirmed that enrollees paid their monthly premiums to be eligible to receive financial assistance payments,
 - identified any subsequent changes in eligibility status that could affect the amount of financial assistance payments enrollees could receive, and
 - identified any discrepancy between the advance financial assistance payments enrollees were eligible to receive and the actual amounts paid to QHP issuers on their behalf;
- estimated the total number of policies not in accordance with Federal requirements;
- obtained from TIGTA the calculation of the total amount of improper financial assistance payments using APTC reconciliation data (i.e., Federal tax information (FTI)) for the 140 sampled policies and the estimated total amount of improper financial assistance payments authorized during the 2014 benefit year;²⁸
- estimated the total number of policies for which QHP issuers received potentially improper financial assistance payments and the total amount of potentially improper financial assistance payments authorized to QHP issuers during the 2014 benefit year; and
- discussed the results of our review with CMS officials.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain

²⁸ Because we did not have the authority to access FTI for this review, TIGTA used an Office of Audit Services' (OAS's) calculation tool in conjunction with enrollees' FTI to determine the estimated total amount of improper financial assistance payments. We did not obtain any FTI for enrollees associated with our sampled policies.

sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

APPENDIX B: STATISTICAL SAMPLING METHODOLOGY

TARGET POPULATION

The target population consisted of all health insurance coverage policies for individuals enrolled through the Federal marketplace and for whom CMS authorized financial assistance payments from January 1, 2014, through December 31, 2014.

SAMPLING FRAME

The sampling frame consisted of Access databases containing 2,959,262 policies with applied financial assistance payment amounts totaling \$11,962,621,282. The data for the enrollment applications were obtained from CMS's MIDAS.

SAMPLE UNIT

The sample unit was a policy.

SAMPLE DESIGN

We used a stratified random sample:

- Stratum 1: policies CMS identified as confirmed with applied payment amounts of less than \$3,942.02.
- Stratum 2: policies CMS identified as confirmed with applied payment amounts of greater than or equal to \$3,942.02 and less than \$7,065.24.
- Stratum 3: policies CMS identified as confirmed with applied payment amounts of greater than or equal to \$7,065.24.
- Stratum 4: policies CMS identified as canceled policies.

SAMPLE SIZE

We selected a sample of 140 policies, as follows:

- 37 policies from stratum 1,
- 37 policies from stratum 2,
- 36 policies from stratum 3, and
- 30 policies from stratum 4.

SOURCE OF RANDOM NUMBERS

We generated the random numbers using the OIG/OAS statistical software.

METHOD FOR SELECTING SAMPLE UNITS

We consecutively numbered the policies within each stratum. After generating the random numbers for each of these strata, we selected the corresponding policies in the sampling frame for our sample.

ESTIMATION METHODOLOGY

We used the OIG/OAS statistical software to estimate (1) the total number of policies not in accordance with Federal requirements and the total value of the resulting improper financial assistance payments and (2) the total number of policies with potentially improper payments and the potentially improper financial assistance payment amount. We also used this software to calculate the corresponding lower and upper limits of the two-sided 90-percent confidence intervals.

Using a calculation tool in an Excel spreadsheet we provided, TIGTA used APTC reconciliation data (i.e., FTI) in conjunction with our results to calculate the estimate of the total improper financial assistance payment amount. TIGTA also used this calculation tool to provide the corresponding lower and upper limit of the two-sided 90-percent confidence interval.

APPENDIX C: SAMPLE RESULTS AND ESTIMATES

Table 1: Sample Detail and Results for Improper Payments and Policies Not in Accordance with Federal Requirements

Stratum	Policies in Frame	Value of Frame	Sample Size	Value of Sample	Number of Policies Not in Accordance With Federal Requirements	Value of Improper Payments Not Including Reconciled APTC Amounts
1	1,726,826	\$3,610,490,178	37	\$91,697	6	\$6,165
2	813,444	4,278,241,812	37	188,830	7	4,331
3	406,362	4,001,203,058	36	356,728	2	7,746
4	12,630	72,686,234	30	141,424	11	37,476
Totals	2,959,262	\$11,962,621,282	140	\$778,679	26	\$55,718

Table 2: Sample Detail and Results for Policies With Potentially Improper Financial Assistance Payments

Stratum	Policies in Frame	Value of Frame	Sample Size	Value of Sample	Number of Policies With Potentially Improper Payments	Value of Payments for Policies With Potentially Improper Payments
1	1,726,826	\$3,610,490,178	37	\$91,697	3	\$6,065
2	813,444	4,278,241,812	37	188,830	2	10,090
3	406,362	4,001,203,058	36	356,728	0	0
4	12,630	72,686,234	30	141,424	0	0
Totals	2,959,262	\$11,962,621,282	140	\$778,679	5	\$16,155

ESTIMATES

Table 3: Estimated Number of Policies Not in Accordance With Federal Requirements and the Estimated Value of Improper Financial Assistance Payments²⁹
(Limits Calculated at the 90-Percent Confidence Level)

	Total Number of Policies Not in Accordance With Federal Requirements	Total Value of Improper Payments Not Including Reconciled APTC Amounts³⁰	Total Value of Improper Payments Including Reconciled APTC Amounts
Point estimate	461,127	\$ 486,168,679	\$434,398,168
Lower limit	264,281	146,812,055	104,566,655
Upper limit	657,973	825,525,304	764,229,682

Table 4: Estimated Number of Policies With Potentially Improper Financial Assistance Payments and Value of Associated Payments
(Limits Calculated at the 90-Percent Confidence Level)

	Total Number of Policies With Potentially Improper Payments	Total Value of Payments Associated With These Policies
Point estimate	183,983	\$504,889,518
Lower limit	45,276	106,643,599
Upper limit	322,690	903,135,437

²⁹ Reconciled APTC amounts were included in the calculation of the total value of payments associated with these policies based on the calculation tool used by TIGTA referenced in Appendices A and B.

³⁰ We calculated these values using the OIG/OAS statistical software. However, because these values do not include reconciled APTC amounts, we did not use them for the statistical estimate in this report.

APPENDIX D: CMS COMMENTS



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

200 Independence Avenue SW
Washington, DC 20201

DATE: MAY - 3 2018

TO: Daniel R. Levinson
Inspector General

FROM: Seema Verma *SV*
Administrator

SUBJECT: Office of Inspector General (OIG) Draft Report: CMS Did Not Always Accurately Authorize Financial Assistance Payments to Qualified Health Plan Issuers in Accordance with Federal Requirements During the 2014 Benefit Year (A-02-15-02013)

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the Office of Inspector General's (OIG) draft report on financial assistance payments for individuals enrolled through the Federally-facilitated Exchange (FFE). CMS is committed to working with qualified health plan (QHP) issuers to ensure the accuracy of financial assistance payments.

CMS takes the stewardship of tax dollars seriously and has implemented a series of payment and system controls to assist in making accurate and timely financial assistance payments to issuers. In May 2016, CMS fully transitioned issuers operating through the FFE to an automated payment system, allowing for the processing of financial assistance payments on a policy-level basis. The automated system allows CMS, the FFE, and issuers to share enrollment and health insurance information, such as individuals included in a policy, the QHP selected, the associated premium amount, and the financial assistance payment amount, if applicable. CMS is transitioning most State-based Exchanges (SBEs) over to the automated payment system in 2018.

Both the Government Accountability Office (GAO) and the OIG have previously reviewed the automated payment system, with GAO reporting that CMS properly designed and implemented control activities related to the accuracy of advance payments of premium tax credits (APTC) made to certified issuers¹ and OIG indicating that CMS can independently verify financial assistance payment data.² In addition, under CMS's Office of Management and Budget A-123 internal controls review over financial reporting, key controls surrounding the payment process were tested and determined to be operating effectively. Moreover, an independent certified public accounting firm conducted its review of the payment process and reported no significant issues. Lastly, CMS has undergone an Agreed Upon Procedures review to evaluate the payments and controls under the payment processes. These reports are shared with GAO and the Internal Revenue Service annually. No major findings were noted during fiscal years 2014-2017.

¹ "IMPROPER PAYMENTS: Improvements Needed in CMS and IRS Controls over Health Insurance Premium Tax Credit" (GAO-17-467, Released July 13, 2017)

² "Initial Review of the Centers for Medicare & Medicaid Services' Automated System for Processing Financial Assistance Payments" (A-02-17-02001, Released May 8, 2017)

Instituting strong program safeguards to ensure that only individuals who are eligible are enrolled in Exchange coverage, and that they are only receiving the amount of financial assistance they are eligible for, is essential to ensuring that the Exchanges operate as intended. In order to better protect consumers and taxpayer dollars, CMS is implementing a number of initiatives to enhance operations with a focus on program integrity. CMS has expertise in preventing and detecting fraud, waste, and abuse from its other programs and is applying program integrity best practices to the FFE through its Center for Program Integrity. As recommended by the GAO,³ CMS's Center for Program Integrity is conducting an Exchange Fraud Risk Assessment, leveraging the GAO's fraud risk framework.⁴ The GAO's framework identifies leading practices for managing fraud risks and was developed to help managers combat fraud and preserve integrity in government agencies and programs. CMS is using this framework to identify and prioritize key areas for potential risk in the Exchange. In addition, CMS has developed a coordinated, risk-based audit process to determine the accuracy and integrity of past years' financial assistance payments to issuers. CMS is auditing 49 percent of 2014 FFE payments and plans to audit both 2014 SBE and 2015 FFE payments in 2018.

OIG's recommendations and CMS' responses are below.

Recommendation

CMS should work with Treasury and QHP issuers to collect improper financial assistance payments, which we estimate to be \$642,785,910 for policies for which the payments were not authorized in accordance with Federal requirements.

CMS Response

CMS partially concurs with this recommendation. CMS has developed a coordinated, risk-based audit process to determine the accuracy and integrity of 2014 financial assistance payments to issuers, which includes verification of premium payment for a sample of issuer records. These audits cover 49 percent of total FFE payments to issuers for 2014 and have found a net payment error rate of around 0.1 percent. We note that these payment audits conducted certain checks for consistency with FFE records on a sample of 100 percent of each of the selected issuer's enrollment records. For any errors identified in a sample of records, the issuer was required to identify all other cases of the same error across their records for purposes of quantifying overall impact. CMS considers this method of assessing total error more robust than extrapolation. CMS is adjusting financial assistance payments to issuers for any overpayments or underpayments found.

It is also important to note that because 2014 was the first year of Exchange coverage, the FFE and issuers faced technological challenges and often had to create multiple policies per individual/family, process enrollment or updates retroactively, and perform manual workarounds. CMS communicated with issuers through a number of channels about additional flexibilities in enforcing premium payment dates and threshold payment amounts in cases of very small amounts owed by the consumer, which could include a single payment date for the full premium or an initial payment date for a threshold amount of the premium with subsequent payment dates for the remaining amounts. Due to these first-year technical challenges and flexibilities, CMS accepted issuer attestation for effectuation of coverage dates, including for those consumers receiving APTC. We therefore disagree with the OIG's analysis regarding effective dates and financial assistance payments and do not plan to require issuers to return

³ "Patient Protection and Affordable Care Act: CMS Should Act to Strengthen Enrollment Controls and Manage Fraud Risk" (GAO-16-29, released February 2016)

⁴ "A Framework for Managing Fraud Risks in Federal Programs" (GAO-15-593SP, released July 2015)

APTC payment for policies on which they provided coverage in 2014 while acting in good faith on the basis of CMS-provided flexibility.

Recommendation

CMS should work with Treasury and QHP issuers to resolve the potentially improper financial assistance payments, which we estimate to be \$504,889,518 for policies for which there was no documentation provided to verify enrollees had paid their premiums.

CMS Response

CMS partially concurs with this recommendation. As discussed above, CMS is conducting audits of 2014 financial assistance payments to issuers and adjusting financial assistance payments to issuers for any overpayments or underpayments found. All issuers selected in these audits have provided documentation to CMS as requested. Many of the cases OIG identified as potentially improper, and subsequently extrapolated from, were either out of business or undergoing financial distress or liquidation. To make the most efficient use of its audit resources, CMS does not plan to audit issuers that are out of business, given the minimal return on investment.

Recommendation

CMS should clarify guidance for QHP issuers on Federal requirements for terminating an enrollee's coverage when the enrollee fails to pay his or her monthly premium.

CMS Response

CMS concurs with this recommendation. CMS has strengthened guidance to issuers on terminating coverage for failure to pay premiums through updates to the Enrollment Manual. Issuers are required to collect the first month's "binder" premium (or an amount within the premium payment threshold if the issuer utilizes such a threshold) to effectuate coverage, and observe a three consecutive month grace period before terminating coverage for those enrollees who are eligible for and have elected to receive the benefit of APTC. If an individual fails to pay their premium, the issuer terminates the individual for failure to pay a premium after the appropriate grace period and notifies the FFE. Adjustments to APTC are subsequently processed and made within 1-2 payment cycles from when the FFE is updated with the termination. CMS has developed a coordinated, risk-based audit process to determine the accuracy and integrity of 2014 financial assistance payments to issuers, including review of grace periods. CMS will continue to review its processes to ensure it has reliable and transparent data on terminations of enrollee coverage for nonpayment of premiums in order to protect the integrity of the Exchanges.

By Sandra L. Decker, Asako S. Moriya, and Aparna Soni

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 The People-to-People Health
 Foundation, Inc.

DATAWATCH

Coverage For Self-Employed And Others Without Employer Offers Increased After 2014

Little is known about how the Affordable Care Act might have differentially affected insurance coverage for self-employed workers, wage earners with and without offers of employer-sponsored insurance, and people not employed. We found that the self-employed and wage earners without employer coverage offers had coverage gains equal to or greater than those of people not employed.

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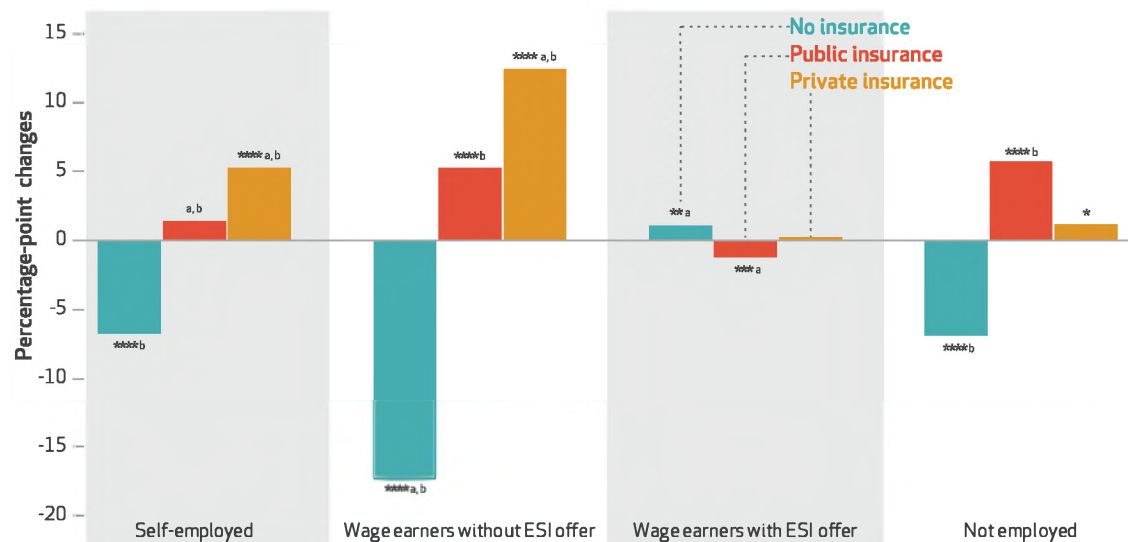
Aparna Soni is a PhD candidate in the Department of Business Economics and Public Policy, Indiana University, in Bloomington.

In the debate about the effects of the Affordable Care Act (ACA) on insurance coverage, little attention has been paid to how the ACA may have differentially affected insurance coverage for self-employed workers, wage/salary earners (hereafter, “wage earners”) with and without offers of employer-sponsored insurance, and those not employed. Because eligibility for Marketplace

subsidies under the ACA was means-tested, adults with limited involvement in the labor force and therefore limited income may have benefited the most. On the other hand, the ACA’s guaranteed issue and community rating regulations and employer mandate were designed to offer affordable coverage options to families without employer coverage offers, including the self-employed and wage earners.

EXHIBIT 1

Changes in health insurance status from 2010–13 to 2014–16, by employment status



SOURCE Authors’ analysis of data for 2010–16 from the National Health Interview Survey (NHIS). **NOTES** The exhibit presents coefficients from linear regressions that estimated the percentage change in each insurance category for 2014–16 compared to 2010–13. Full regression results are in the appendix (see note 10 in text). The estimated change in public plus private insurance might not equal the absolute value of the change in the percentage uninsured, since some respondents might not have specified whether their coverage was public or private. The sample (N = 148,428) was restricted to adults ages 26–64 who were either US citizens or noncitizen residents who had been in the US for more than five years. Those whose employment status was unavailable were omitted. ^aDifferent from the estimate for those not employed (p < 0.05). ^bDifferent from the estimate for wage earners with an offer of employer-sponsored insurance (ESI) through self or spouse (p < 0.05). *p < 0.10 **p < 0.05 ***p < 0.01 ****p < 0.001

We used data for 2010–16 from the National Health Interview Survey (NHIS) to analyze changes in insurance status after the ACA for those not employed compared to workers, including the self-employed and wage earners with and without employer coverage offers. We found that the self-employed and wage earners without such offers had insurance gains (phrased differently, reductions in uninsurance rates) equal to or greater than those of people not employed (exhibit 1). The percentage of not-employed adults who were uninsured declined by 6.9 percentage points after 2014, when the ACA's major coverage provisions were enacted. The reduction in uninsurance was similar for self-employed workers (6.7 percentage points) and much larger for wage earners without employer coverage offers (17.3 percentage points).

Study Data And Methods

DATA, SAMPLE, AND MEASURES We measured changes in insurance coverage between 2010–13 (pre-2014) and 2014–16 (post-2014, or post-ACA) by employment status, using data for 2010–16 from the NHIS, a nationally representative survey of the US noninstitutionalized civilian population.¹ We restricted our sample to adults ages 26–64 because they were the primary targets of the ACA expansions. We excluded younger adults because they were exposed to an earlier ACA provision that allowed them to stay on their parents' insurance until age 26. We also omitted people who were not citizens or residents of the US for at least five years (because they were not eligible for Medicaid under the 2014 expansion) and a small number of people whose employment status was unavailable. Our final sample size was 148,428 people.

We analyzed changes in insurance coverage for four employment groups: those not employed, the self-employed, wage earners without employer-sponsored insurance offers (through self or spouse), and wage earners with such offers. Outcomes included indicator measures for being uninsured, publicly insured (having Medicaid or other governmental insurance), or privately insured (having employer coverage or self-purchased coverage through the Marketplace or another source). Although measuring the source of private coverage is prone to error in the NHIS, we also analyzed changes in private group versus nongroup coverage.

METHODS We calculated pre-2014 means for each outcome and the probability of being uninsured over time for each employment category. We also estimated linear regression models that estimated post-2014 changes in each outcome for each employment category. Specifically, we

estimated the probability of each insurance outcome (no coverage, public coverage, private coverage) as a function of an annual linear time trend, an indicator for the post-ACA time period, indicators for each employment category (omitting nonemployed as the reference category), and interactions between the post-ACA indicator and the employment category indicators. Control variables measured educational attainment, race/ethnicity, sex, age group, marital status, and health status. Estimates incorporated NHIS survey weights, and standard errors accounted for the complex design of the NHIS.

We interpreted the coefficient on the post-ACA indicator as the change in each outcome for the omitted category (not employed) after 2014. The sum of this coefficient and the coefficient on its interaction with each (nonomitted) employment category indicator was interpreted as the estimated post-2014 change in the outcome for that category. We conducted F-tests to determine whether estimated post-2014 changes for each employment category were significantly different from one another. All effects and differences noted in the text are significant at the 5 percent level unless otherwise indicated.

LIMITATIONS Our study had several limitations. First, because there was no possible control group, we employed an interrupted time-series analysis. Therefore, changes not related to the ACA that occurred in 2014 and affected insurance status differently by employment category could have influenced our results.

Second, we examined changes not only in the chance of having no insurance by employment category, but also in public versus private coverage. Because this study used publicly available data without state identifiers, we could not estimate changes separately for states that did or did not expand Medicaid in 2014 or after.

A third potential limitation might result from changes in the composition of the sample by employment status after ACA implementation. There has been criticism that the ACA may have reduced the labor supply for two reasons: one, if adults reduced work hours or stopped working in order to become eligible for Medicaid or income-based Marketplace subsidies; or two, if adults quit working since they no longer needed to work to obtain health insurance.^{2,3} Further, ACA provisions, including the employer mandate, could have changed firms' decisions on whether to offer coverage and therefore the characteristics of adults with employer coverage. Empirical studies have found little or no evidence of significant effects of the ACA on overall work status or hours worked,^{4–6} people's decisions to become self-employed,⁷ or firms' decisions to offer coverage.^{8,9}

EXHIBIT 2

Employment status of nonelderly adults, before and after the Affordable Care Act (ACA) insurance coverage expansions

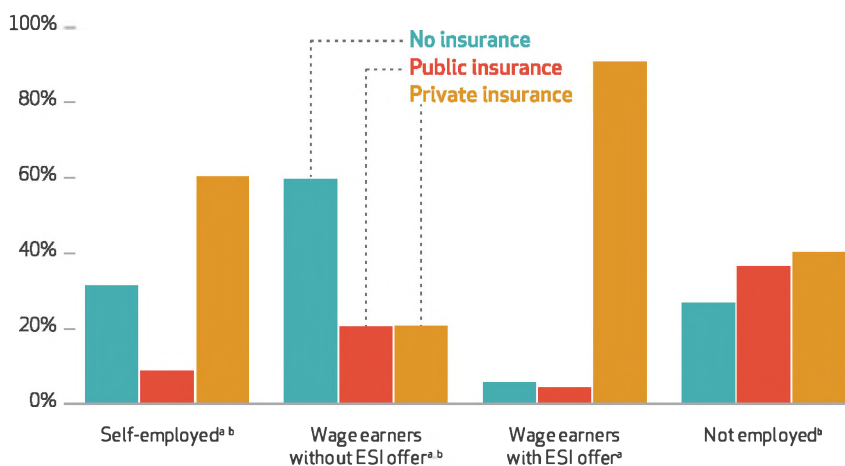
	Pre-ACA mean (2010-13)	Post-ACA change (2014-16) ^a
Self-employed	7.0%	0.066
Wage earners without ESI offer	10.5	-0.077
Wage earners with ESI offer	54.4	-0.582
Not employed	28.1	0.593

SOURCE Authors' analysis of data for 2010-16 from the National Health Interview Survey (NHIS). **NOTES** N = 148,428; see notes to exhibit 1. The second column reports coefficients from linear regressions that estimated the percentage change in each employment group for 2014-16 compared to 2010-13; none of the estimates were significant ($p < 0.05$). Full regression results are in appendix exhibit 2 (see note 10 in text). ESI is employer-sponsored coverage (self or spouse). ^aPercentage points.

Because our identification strategy assumed that the composition or characteristics of the sample by employment status did not change after ACA implementation, we also conducted our own analysis of post-2014 changes in the probability of being in various employment categories. We used linear probability models to estimate the probability of being in each employment category as a function of a linear time trend, a post-ACA indicator variable, and the control variables in the main model.

EXHIBIT 3

Percentages of people with public, private, and no insurance, by employment status, 2010-13



SOURCE Authors' analysis of data for 2010-13 from the National Health Interview Survey (NHIS). **NOTES** The exhibit shows unadjusted means. The percentage with public insurance plus the percentage with private insurance might not equal 100 percent minus the percentage with no insurance, since some respondents might not have specified whether their coverage was public or private. The sample (N = 84,497) was restricted to adults ages 26-64 who were either US citizens or noncitizen residents who had been in the US for more than five years in 2010-13. Standard errors are in appendix exhibit 3 (see note 10 in text). ^aFor each outcome, the mean is significantly different ($p < 0.05$) from that of those not employed. ^bFor each outcome, the mean is significantly different ($p < 0.05$) from that of wage earners with an offer of employer-sponsored insurance (ESI) through self or spouse.

Fourth, we omitted people whose employment status was not available. However, as shown in appendix exhibit 1,¹⁰ this amounted to less than 1 percent of the sample—a share that did not change significantly after 2014.

Study Results

Wage earners without employer-sponsored insurance offers experienced a 17-percentage-point gain in insurance after 2014, while the self-employed gained nearly 7 percentage points, equal to or better than gains by those not employed (exhibit 1). In 2010-13, 54 percent of our sample of nonelderly adults were wage earners with employer coverage offers, 28 percent were not employed, 11 percent were wage earners without such offers, and 7 percent were self-employed (exhibit 2).¹¹ When we adjusted for other factors, regression estimates showed no significant change in the probability of being in each employment category in 2014-16 compared to 2010-13. (See appendix exhibit 2 for full regression results.)¹⁰ These findings provide confidence in our assumption that the sample composition did not change after the ACA coverage expansions once we controlled for other factors, including a linear time trend.

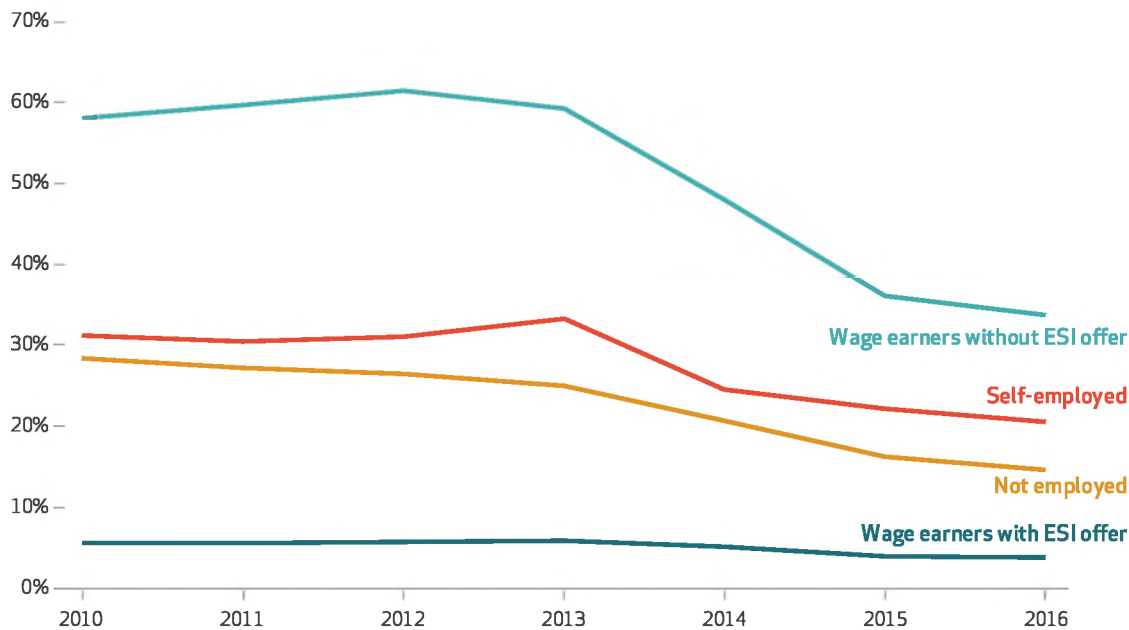
In 2010-13, wage earners with employer coverage offers had the lowest chance of being uninsured (5.8 percent), while wage earners without such offers had the highest chance (59.7 percent) (exhibit 3). The self-employed (31.4 percent) and those who were not employed (26.8 percent) were in the middle. The source of insurance coverage was overwhelmingly private insurance for wage earners with employer coverage offers and the self-employed, while those not employed and wage earners without employer coverage offers relied more equally on public and private coverage.

Uninsurance rates were relatively stable before 2014 and then dropped considerably for self-employed workers and those not employed in 2014 (exhibit 4). For wage earners with employer-sponsored insurance offers, the drop between 2013 and 2014 was relatively small (less than 1 percentage point), but for wage earners without such offers, it was quite large (more than 11 percentage points). Uninsurance continued to decrease in 2015-16 for all groups, but more slowly.

Regression results show that beginning in 2014, wage earners without employer coverage offers experienced a substantial 17.3-percentage-point decline in uninsurance (exhibit 1). This was a nearly 30 percent decline relative to their 59.7 percent chance of being uninsured before 2014 (exhibit 3)—significantly greater than the decline for all other employment categories.

EXHIBIT 4

Percentages of people with no insurance, by employment status, 2010–16



SOURCE Authors' analysis of data for 2010–16 from the National Health Interview Survey. **NOTES** N = 148,428; see notes to exhibit 1. Employer-sponsored insurance (ESI) could be offered through self or spouse.

Declines in the percentage uninsured were similar for the self-employed (6.7 percentage points, or 21 percent) and those not employed (6.9 percentage points, or 26 percent). (See appendix exhibits 3 and 4 for full results.)¹⁰ Uninsurance reductions primarily stemmed from increased public insurance (presumably Medicaid) for those not employed and increased private insurance (presumably mostly Marketplace) for workers (exhibit 1). Exhibit 5 shows that, as expected, most of the post-ACA increases in private coverage appeared to come from non-group coverage.¹² (See appendix exhibits 5 and 6 for full results.)¹⁰

Discussion

After the expanded coverage provisions of the ACA were implemented in 2014, the chance of being uninsured declined by nearly 7 percentage points, or about 26 percent, for nonelderly adults who were not working. This gain was mostly attributable to increases in public coverage—presumably Medicaid. However, certain categories of workers benefited from these provisions as much as or more than the group not employed. Specifically, self-employed people and wage earners without employer-sponsored insurance offers experienced large post-2014 declines in uninsurance.¹³

Coverage gains among the self-employed and

EXHIBIT 5

Private insurance coverage before and after the Affordable Care Act (ACA) insurance coverage expansions, by type of private coverage

	Privately insured	Type of private coverage		
		Group	Nongroup	Missing
Pre-ACA mean (2010–13) ^a				
Self-employed	60.4%	40.5%	19.4%	0.5%
Wage earners without ESI offer	20.7	10.4	9.7	0.6
Wage earners with ESI offer	90.8	88.4	1.0	1.4
Not employed	40.4	34.0	5.0	1.3
Post-ACA change (2014–16) (percentage points)				
Self-employed	5.2**** ^{bc}	-3.0** ^c	5.1**** ^{bc}	3.1**** ^{bc}
Wage earners without ESI offer	12.4**** ^{bc}	1.4* ^{bc}	6.5**** ^{bc}	4.5**** ^{bc}
Wage earners with ESI offer	0.2	-0.2 ^b	-0.1 ^b	0.5** ^b
Not employed	1.1*	-2.2*** ^c	1.5**** ^c	1.9**** ^c

SOURCE Authors' analysis of data for 2010–16 from the National Health Interview Survey (NHIS). **NOTES** N = 148,428; see notes to exhibit 1. The top panel reports unadjusted means, and the bottom panel reports coefficients from linear regressions that estimated the percentage change in each insurance category for 2014–16 (post-ACA) compared to 2010–13 (pre-ACA). Results, including standard errors, are in appendix exhibit 5 (see note 10 in text). ^aThe differences between the estimate for people in each employment group and that for those not employed (and also for wage earners without an offer of employer-sponsored insurance [ESI] through self or spouse) were significant ($p < 0.05$) for all of the outcomes except the difference in the rate of having missing group coverage information between wage earners with an offer and those not employed. ^bDifferent from the estimate for those not employed ($p < 0.05$). ^cDifferent from the estimate for wage earners with an ESI offer ($p < 0.05$). * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$ **** $p < 0.001$

wage earners without employer coverage offers came from both private and public sources, with the increase in private coverage (presumably primarily through the Marketplaces) being dominant. This is notable, given that the distributions of income were similar between wage earners without access to employer coverage and those not employed. For example, 38.4 percent and 36.7 percent of the people in these groups, respectively, had incomes below 138 percent of the federal poverty level (appendix exhibit 7).¹⁰ Additionally, our regression results were similar if we included income as a control variable (appendix exhibit 8),¹⁰ which suggests that workers' relative gains in private insurance versus gains in public insurance for those not employed were not purely a result of different income levels.

Post-2014 increases in private coverage among the self-employed and wage earners without employer coverage offers stemmed mostly from nongroup, as opposed to group, coverage. This finding suggests that any recent destabilization in the Marketplaces¹⁴ might differentially affect the self-employed and workers without employer coverage offers. Since the majority of both

groups had low-to-moderate incomes (for example, appendix exhibit 7 shows that 84.3 percent of wage earners without an employer coverage offer and 53.1 percent of the self-employed had incomes below 400 percent of poverty before 2014),¹⁰ it is possible that premium and cost-sharing subsidies substantially helped these workers gain coverage.

Conclusion

Health insurance expansions have the potential to disproportionately benefit workers who have historically experienced relatively low rates of insurance coverage. Insurance coverage among the self-employed and other workers without access to employer-sponsored insurance significantly increased after 2014. In addition to increasing coverage among workers without employer coverage offers, ACA provisions could reduce labor-market distortions in the long run by making it easier to maintain coverage while changing jobs, working part time, retiring before age sixty-five, or being self-employed. ■

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Louisiana. The authors appreciate the helpful comments of Joel Cohen, Patricia Keenan, and Thomas Selden, as well as seminar participants at Indiana University. The views expressed in this

article are those of the authors and do not necessarily represent the views of the Agency for Healthcare Research and Quality of the Department of Health and Human Services.

NOTES

- 1 National Center for Health Statistics. National Health Interview Survey [Internet]. Hyattsville (MD): NCHS; [last updated 2018 Jun 19; cited 2018 Jun 20]. Available from: <https://www.cdc.gov/nchs/nhis/>
- 2 Speaker Paul Ryan's Press Office. President Obama pauses to sign "jobs" bill while still twisting arms for a job-killing health care plan. Speaker Paul Ryan [blog on the Internet]; 2010 Mar 17 [cited 2018 Jun 20]. Available from: <http://www.speaker.gov/general/economists-agree-government-takeover-health-care-massive-job-killer>
- 3 Congressional Budget Office. The budget and economic outlook: 2014 to 2024 [Internet]. Washington (DC): CBO; 2014 Feb [cited 2018 Jun 20]. Appendix C: labor market effects of the Affordable Care Act: updated estimates. Available from: <https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/45010-outlook2014feb0.pdf>
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- 5 Gooptu A, Moriya AS, Simon KI, Sommers BD. Medicaid expansion did not result in significant employment changes or job reductions in 2014. *Health Aff (Millwood)*. 2016;35(1):111–8.
- 6 Levy H, Buchmueller TC, Nikpay S. Health reform and retirement. *J Gerontol B Psychol Sci Soc Sci*. 2018;73(4):1–10.
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- 8 Abraham J, Royalty AB, Drake C. Employer-sponsored insurance offers: largely stable in 2014 following ACA implementation. *Health Aff (Millwood)*. 2016;35(11):2133–7.
- 9 While there is no evidence of large-scale changes in employer-sponsored insurance offerings post-ACA, there was a small increase in take-up, possibly because of the individual mandate. See notes 4 and 5.
- 10 To access the appendix, click on the Details tab of the article online.
- 11 Exhibit 2 also shows that 83.8 percent of wage earners had employer coverage offers (through self or spouse). Although the data are not shown, only 41.9 percent of the self-employed and only 26.8 percent of the nonemployed had such offers.
- 12 These results should be interpreted with some caution, since the percentage of NHIS respondents with private coverage who did not indicate type of coverage (group versus nongroup) increased after 2014.
- 13 Although we were not able to apportion changes in coverage to groups of states that did and did not expand Medicaid, it is possible that if we were able to subset just to states that did not expand Medicaid, gains for workers might have exceeded those for people not employed—since for the country as a whole, most gains for the latter group came from public coverage. On the other hand, if all states had expanded Medicaid, gains for people not employed might have exceeded those for workers.
- 14 Sommers BD, Clark KL, Epstein AM. Early changes in health insurance coverage under the Trump administration. *N Engl J Med*. 2018;378(11):1061–3.



Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, January–March 2018

by Robin A. Cohen, Ph.D., Michael E. Martinez, M.P.H., M.H.S.A., and Emily P. Zammiti, M.P.H.
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What’s new?

This report presents health insurance estimates from the first quarter of the 2018 National Health Interview Survey.

Highlights

- In the first 3 months of 2018, 28.3 million (8.8%) persons of all ages were uninsured at the time of interview—not significantly different from 2017, but 20.3 million fewer persons than in 2010.
- In the first 3 months of 2018, among adults aged 18–64, 12.5% were uninsured at the time of interview, 19.2% had public coverage, and 70.0% had private health insurance coverage.
- In the first 3 months of 2018, among children aged 0–17 years, 4.6% were uninsured, 41.9% had public coverage, and 54.6% had private health insurance coverage.
- Among adults aged 18–64, 70.0% (138.6 million) were covered by private health insurance plans at the time of interview in the first 3 months of 2018. This includes 4.2% (8.3 million) covered by private health insurance plans obtained through the Health Insurance Marketplace or state-based exchanges.
- The percentage of persons under age 65 with private health insurance enrolled in a high-deductible health plan increased, from 43.7% in 2017 to 47.0% in the first 3 months of 2018.

Introduction

This report from the National Center for Health Statistics (NCHS) presents selected estimates of health insurance coverage for the civilian noninstitutionalized U.S. population based on data from the 2018 National Health Interview Survey (NHIS), along with comparable estimates from previous calendar years. Estimates for the first 3 months of 2018 are based on data for 19,510 persons.

Three estimates of lack of health insurance coverage are provided: (a) uninsured at the time of interview, (b) uninsured at least part of the year prior to interview (which includes persons uninsured for more than 1 year), and (c) uninsured for more than 1 year at the time of interview. Estimates of public and private coverage, coverage through

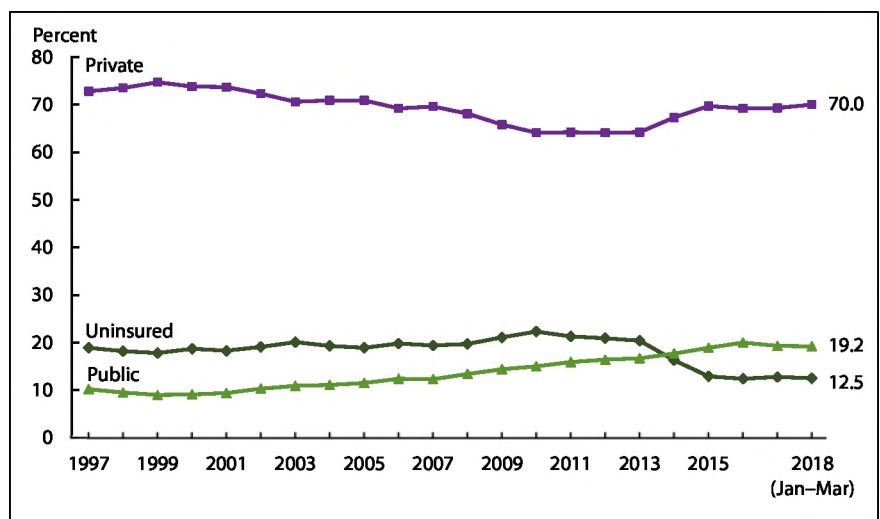
exchanges, and enrollment in high-deductible health plans (HDHPs) and consumer-directed health plans (CDHPs) are also presented. Detailed appendix tables at the end of this report show estimates by selected demographics. Definitions are provided in the [Technical Notes](#) at the end of this report.

This report is updated quarterly and is part of the NHIS Early Release (ER) Program, which releases updated selected estimates that are available from the NHIS website at:

<https://www.cdc.gov/nchs/nhis.htm>.

Estimates for each calendar quarter, by selected demographics, are also available as a separate set of tables through the ER Program. For more information about NHIS and the ER Program, see [Technical Notes](#) and [Additional Early Release Program Products](#) at the end of this report.

Figure 1. Percentage of adults aged 18–64 who were uninsured or had private or public coverage at the time of interview: United States, 1997–March 2018



NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.
SOURCE: NCHS, National Health Interview Survey, 1997–2018, Family Core component.

Results

In the first 3 months of 2018, the percentage of persons of all ages who were uninsured at the time of interview was 8.8% (28.3 million). There was no significant change from the 2017 uninsured rate of 9.1% (29.3 million). A total of 20.3 million fewer persons lacked health insurance coverage in the first 3 months of 2018 compared with 2010 (48.6 million or 16.0%).

Long-term trends

In the first 3 months of 2018, among adults aged 18–64, 12.5% were uninsured at the time of interview, 19.2% had public coverage, and 70.0% had private health insurance coverage (Figure 1). After generally increasing, more recently, the percentage of adults aged 18–64 who were uninsured at the time of interview generally decreased and then stabilized. Corresponding increases have occurred in both public and private coverage among adults aged 18–64.

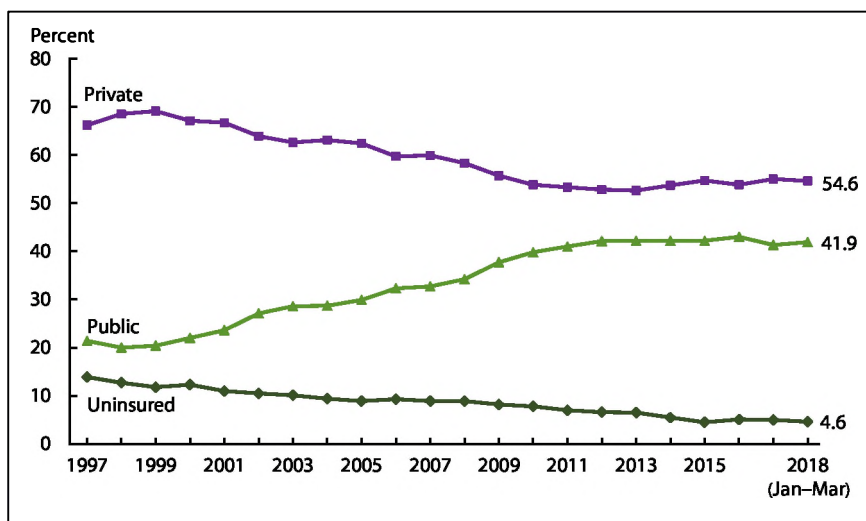
In the first 3 months of 2018, among children aged 0–17 years, 4.6% were uninsured, 41.9% had public coverage, and 54.6% had private health insurance coverage (Figure 2). The percentage of children who were uninsured generally decreased over time. While the percentage of children with private health insurance coverage has decreased and public coverage has increased over time, more recently, the percentage of children with public or private coverage has leveled off.

Short-term trends by age

In the first 3 months of 2018, adults aged 25–34 were more likely than adults aged 18–24 and 45–64 to lack health insurance coverage (16.2% compared with 12.8% and 9.7%, respectively) (Figure 3). However, the difference in the percentage of adults aged 25–34 (16.2%) and adults aged 35–44 (13.7%) who were uninsured at the time of interview was not significant.

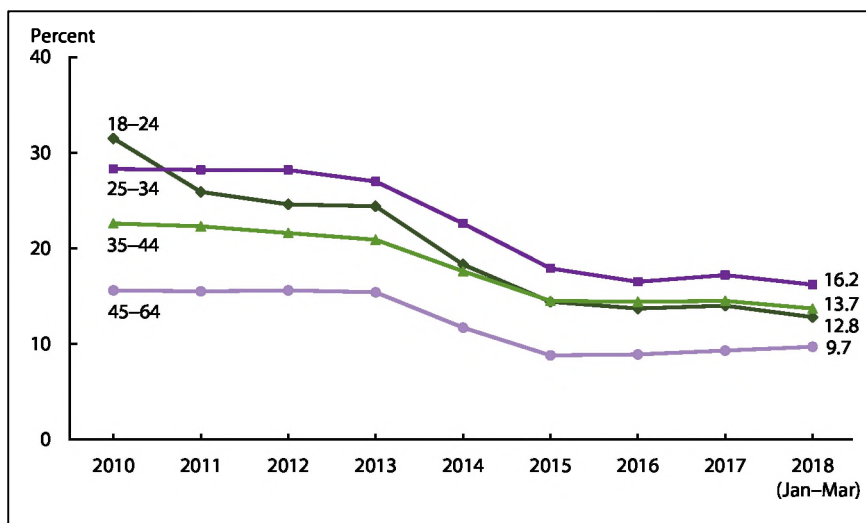
The percentage of those uninsured at the time of interview remained relatively stable from 2010 through 2013 for all age groups except adults aged 18–24 (Figure 3). Among adults aged 18–24, the percentage of those who were

Figure 2. Percentage of children aged 0–17 years who were uninsured or had private or public coverage at the time of interview: United States, 1997–March 2018



NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 1997–2018, Family Core component.

Figure 3. Percentage of adults aged 18–64 who were uninsured at the time of interview, by age group: United States, 2010–March 2018



NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

uninsured decreased, from 31.5% in 2010 to 25.9% in 2011, and then remained stable through 2013. For all age groups, the percentage of those who were uninsured decreased significantly from 2013 through the first 3 months of 2018. The magnitude of the decreases ranged from –5.7 percentage points for adults aged 45–64 to –11.6 percentage points for adults aged 18–24. For adults aged 18–24, 25–34, 35–44, and 45–64, the percentage of those uninsured at the time

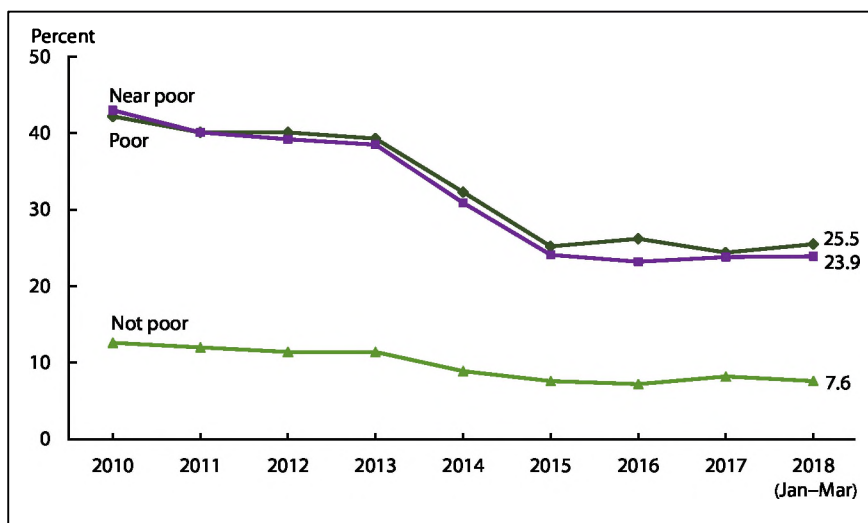
of interview did not change significantly from 2017 through the first 3 months of 2018.

Short-term trends by poverty status

In the first 3 months of 2018, among adults aged 18–64, 25.5% of those who were poor, 23.9% of those who were near poor, and 7.6% of those who were not poor lacked health insurance coverage at the time of interview (Figure 4). A decrease was observed in the percentage of uninsured adults from 2010 through the first 3 months of 2018 among all three poverty status groups. However, the greatest decreases in the uninsured rate since 2013 were among adults who were poor or near poor. More recently, among adults who were poor or near poor, there was no significant change in the percentage who were uninsured from 2015 through the first 3 months of 2018.

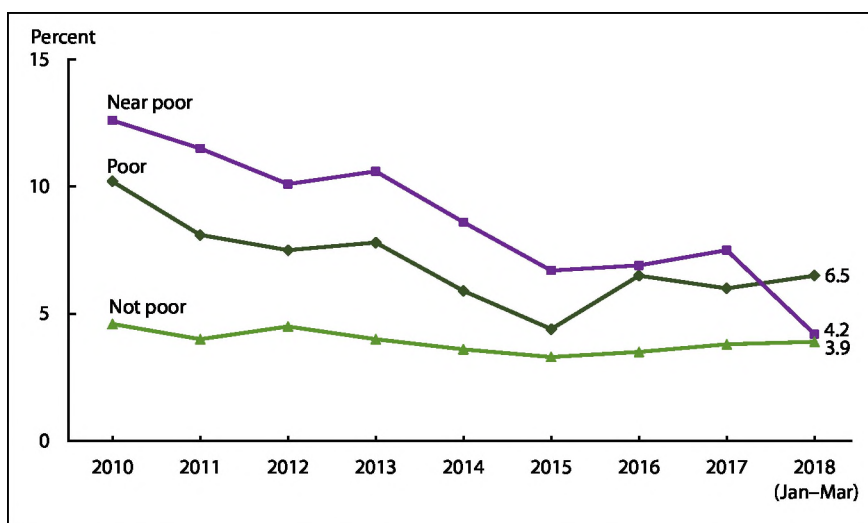
In the first 3 months of 2018, among children aged 0–17 years, 6.5% of those who were poor, 4.2% of those who were near poor, and 3.9% of those who were not poor lacked health insurance coverage at the time of interview (Figure 5). A general decrease in the percentage of uninsured children was observed among the poor, near poor, and not poor from 2010 through 2015. More recently, among children who were poor and not poor, there was no significant change in the percentage who were uninsured from 2015 through the first 3 months of 2018. Among near poor children, the percentage who were uninsured was relatively stable between 2015 and 2017 and then decreased 3.3 percentage points from 7.5% in 2017 to 4.2% in the first 3 months of 2018.

Figure 4. Percentage of adults aged 18–64 who were uninsured at the time of interview, by poverty status: United States, 2010–March 2018



NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Figure 5. Percentage of children aged 0–17 years who were uninsured at the time of interview, by poverty status: United States, 2010–March 2018



NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

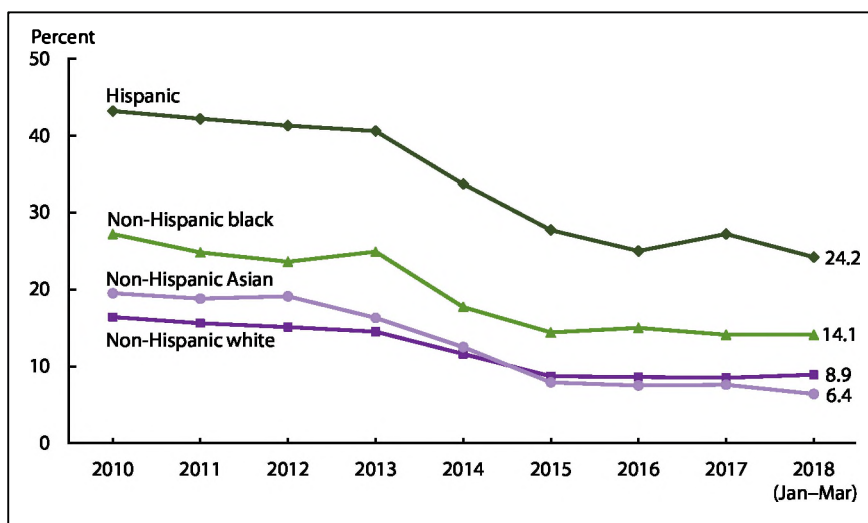
Short-term trends by race and ethnicity

In the first 3 months of 2018, 24.2% of Hispanic, 14.1% of non-Hispanic black, 8.9% of non-Hispanic white, and 6.4% of non-Hispanic Asian adults aged 18–64 lacked health insurance coverage at the time of interview (Figure 6). Significant decreases in the percentage of uninsured adults were observed from 2013 through the first 3 months of 2018 for Hispanic, non-Hispanic black, non-Hispanic white, and non-Hispanic Asian adults. Hispanic adults had the greatest percentage point decrease in the uninsured rate from 2013 (40.6%) through the first 3 months of 2018 (24.2%). The observed decrease among Hispanic adults between 2017 (27.2%) and the first 3 months of 2018 (24.2%) was not significant. For all other groups shown in Figure 6, the percentage of persons who were uninsured at the time of interview also did not change significantly from 2017 through the first 3 months of 2018.

Periods of noncoverage

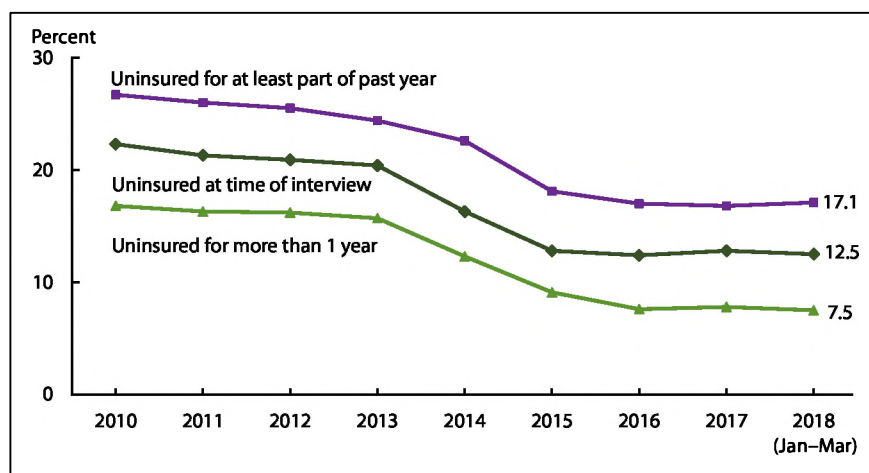
Among adults aged 18–64, the percentage of those who were uninsured at the time of interview decreased, from 22.3% (42.5 million) in 2010 to 12.5% (24.7 million) in the first 3 months of 2018 (Figure 7). The percentage of adults who were uninsured for at least part of the past year decreased, from 26.7% (51.0 million) in 2010 to 17.1% (33.8 million) in the first 3 months of 2018. The percentage of adults who were uninsured for more than 1 year decreased, from 16.8% (32.0 million) in 2010 to 7.5% (14.9 million) in the first 3 months of 2018. More recently, for all three measures of noncoverage, there were no significant changes from 2017 through the first 3 months of 2018.

Figure 6. Percentage of adults aged 18–64 who were uninsured at the time of interview, by race and ethnicity: United States, 2010–March 2018



NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Figure 7. Percentage of adults aged 18–64 without health insurance, by three measures of uninsurance: United States, 2010–March 2018



NOTES: Beginning in 2016, answer categories for those who were currently uninsured concerning the length of noncoverage were modified. Therefore, starting in 2016, estimates of “uninsured for at least part of past year” and “uninsured for more than 1 year” may not be completely comparable with previous years. For more information on this change, see Technical Notes in the report. Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

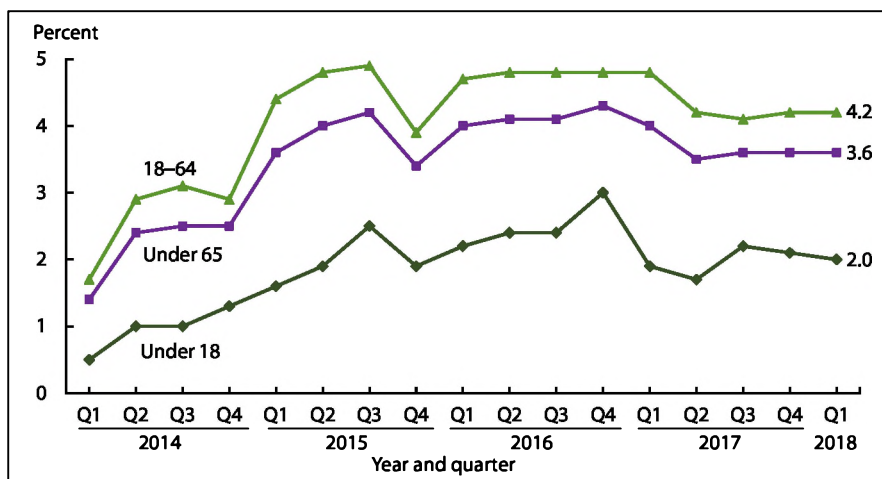
Private exchange coverage

Among persons under age 65, 65.8% (178.7 million) were covered by private health insurance plans at the time of interview in the first 3 months of 2018. This includes 3.6% (9.7 million) covered by private plans obtained through the Health Insurance Marketplace or state-based exchanges. The observed decrease in the percentage of persons under age 65 who were enrolled in exchange plans from the first quarter of 2017 (4.0% or 10.8 million) through the first quarter of 2018 (3.6% or 9.7 million) was not significant (Figure 8).

Among adults aged 18–64, 70.0% (138.6 million) were covered by private health insurance plans at the time of interview in the first 3 months of 2018. This includes 4.2% (8.3 million) covered by private health insurance plans obtained through the Health Insurance Marketplace or state-based exchanges. The observed decrease in the percentage of persons aged 18–64 who were enrolled in exchange plans from the first quarter of 2017 (4.8% or 9.4 million) through the first quarter of 2018 (4.2% or 8.3 million) was not significant (Figure 8).

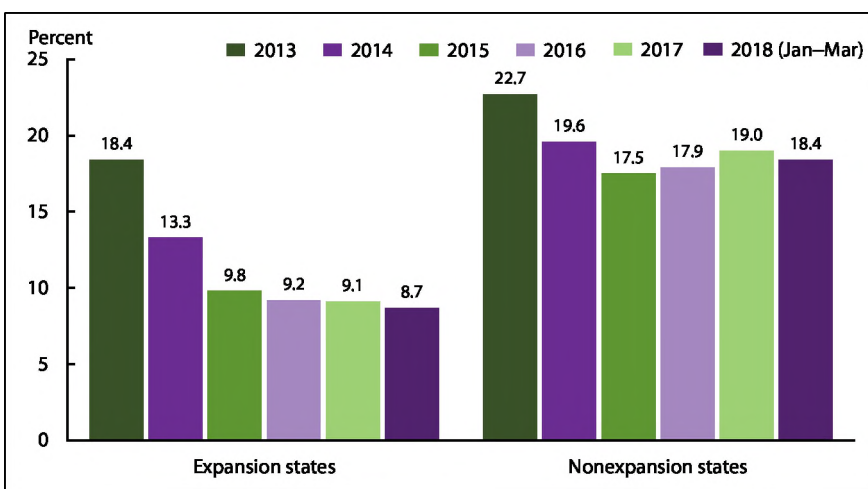
Among children aged 0–17 years, 54.6% (40.1 million) were covered by private health insurance at the time of interview in the first 3 months of 2018. This includes 2.0% (1.5 million) covered by plans obtained through the Health Insurance Marketplace or state-based exchanges. The percentage of children enrolled in exchange plans did not change significantly from 1.9% (1.4 million) in the first quarter of 2017 to 2.0% (1.5 million) in the first quarter of 2018 (Figure 8).

Figure 8. Percentage of persons under age 65 with private health insurance obtained through the Health Insurance Marketplace or state-based exchanges, by age group and quarter: United States, January 2014–March 2018



NOTES: Includes persons who had purchased a private health insurance plan through the Health Insurance Marketplace or state-based exchanges that were established as part of the Affordable Care Act of 2010 (PL 111–148, PL 111–152). 2014 is the first year that all states had exchange-based coverage. All persons who have exchange-based coverage are considered to have private health insurance. Data are based on household interviews of a sample of the civilian noninstitutionalized population.
SOURCE: NCHS, National Health Interview Survey, 2014–2018, Family Core component.

Figure 9. Percentage of adults aged 18–64 who were uninsured at the time of interview, by year and state Medicaid expansion status: United States, 2013–March 2018



NOTES: For 2013 and 2014, there were 26 Medicaid expansion states. For 2015, there were 29 Medicaid expansion states. For 2016–2018, there were 32 Medicaid expansion states. Data are based on household interviews of a sample of the civilian noninstitutionalized population.
SOURCE: NCHS, National Health Interview Survey, 2013–2018, Family Core component.

Health insurance coverage by state Medicaid expansion status

Under provisions of the Affordable Care Act (ACA) of 2010, states have the option to expand Medicaid coverage to those with low income. In the first 3 months of 2018, adults aged 18–64

residing in Medicaid expansion states were less likely to be uninsured than those residing in nonexpansion states (Figure 9). In Medicaid expansion states, the percentage of uninsured adults decreased, from 18.4% in 2013 to 8.7% in the first 3 months of 2018. In nonexpansion states, the percentage of

uninsured adults decreased, from 22.7% in 2013 to 17.5% in 2015. There was a significant increase in the percentage who were uninsured, from 17.5% in 2015 to 19.0% in 2017, and no significant change between 2017 and the first 3 months of 2018 (18.4%).

Health insurance coverage by state Health Insurance Marketplace type

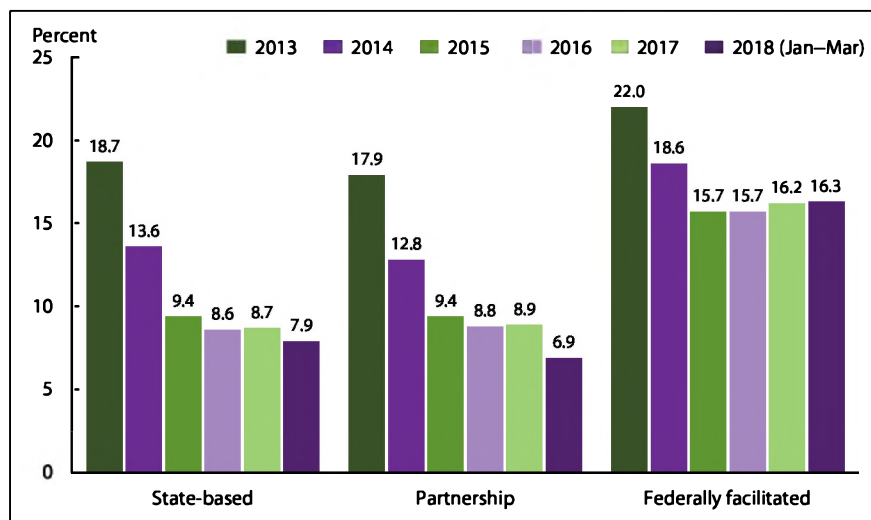
Under provisions of ACA, each state has the option to set up and operate its own Health Insurance Marketplace, rely on a Federally Facilitated Marketplace operated solely by the federal government, or have a hybrid partnership Marketplace that is operated by the federal government but where the state runs certain functions and makes key decisions. In the first 3 months of 2018, adults aged 18–64 in states with a Federally Facilitated Marketplace were more likely to be uninsured than those in states with a state-based Marketplace or states with a partnership Marketplace (Figure 10).

Among adults aged 18–64, significant decreases were observed in the uninsured rates from 2013 through the first 3 months of 2018 in states with a state-based Marketplace, a partnership Marketplace, and a Federally Facilitated Marketplace. The observed decrease in uninsured adults aged 18–64 in partnership Marketplace states from 8.9% in 2017 to 6.9% in the first 3 months of 2018 was not statistically significant. Additionally, for state-based and federally facilitated Marketplace states, the percentage of adults aged 18–64 who were uninsured at the time of interview did not change significantly from 2017 through the first 3 months of 2018 (Figure 10).

Estimates of enrollment in HDHPs and CDHPs

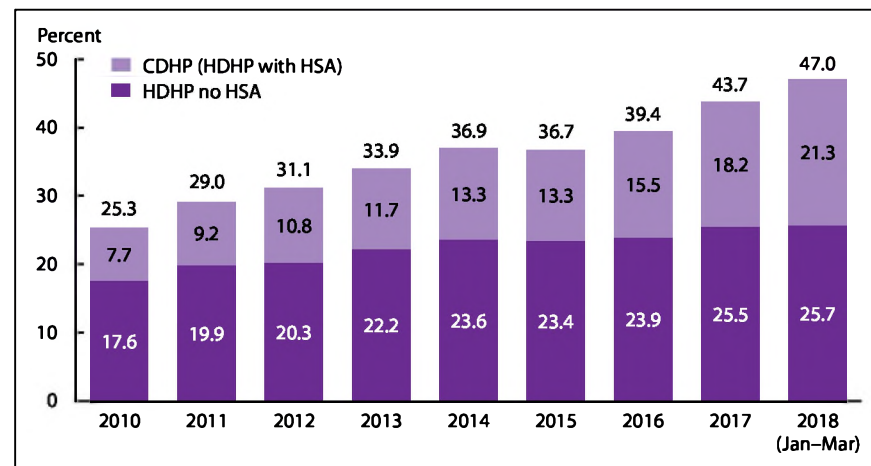
In the first 3 months of 2018, 47.0% of persons under age 65 with private health insurance were enrolled in an HDHP, including 21.3% who were enrolled in a CDHP (an HDHP with a health savings account [HSA]) and 25.7% who were enrolled in an HDHP without an HSA (Figure 11) (see [Technical Notes](#) for definitions of HDHP, CDHP, and HSA). Among those with private health insurance, enrollment in HDHPs has generally increased since 2010. The percentage of persons enrolled in an HDHP increased 21.7 percentage points, from 25.3% in 2010 to 47.0% in the first 3 months of 2018. More recently, the percentage of those enrolled in an HDHP

Figure 10. Percentage of adults aged 18–64 who were uninsured at the time of interview, by year and state Health Insurance Marketplace type: United States, 2013–March 2018



NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 2013–2018, Family Core component.

Figure 11. Percentage of persons under age 65 enrolled in a high-deductible health plan without a health savings account or in a consumer-directed health plan, among those with private health insurance coverage: United States, 2010–March 2018



NOTES: CDHP is consumer-directed health plan, which is a high-deductible health plan (HDHP) with a health savings account (HSA). HDHP no HSA is a high-deductible health plan without an HSA. The individual components of HDHPs may not add up to the total due to rounding. Data are based on household interviews of a sample of the civilian noninstitutionalized population. SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

increased, from 43.7% in 2017 to 47.0% in the first 3 months of 2018. The percentage of persons enrolled in a CDHP almost tripled, from 7.7% in 2010 to 21.3% in the first 3 months of 2018. More recently, the percentage of those enrolled in a CDHP increased, from 18.2% in 2017 to 21.3% in the first 3 months of 2018. The percentage of those enrolled in an HDHP without an HSA did not change significantly from 25.5% in

2017 to 25.7% in the first 3 months of 2018.

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Technical Notes

The National Center for Health Statistics (NCHS) is releasing selected estimates of health insurance coverage for the civilian noninstitutionalized U.S. population based on data from the first quarter of the 2018 National Health Interview Survey (NHIS), along with comparable estimates from previous calendar years.

To reflect different policy-relevant perspectives, three measures of lack of health insurance coverage are provided: (a) uninsured at the time of interview, (b) uninsured for at least part of the year prior to interview (which also includes persons uninsured for more than 1 year), and (c) uninsured for more than 1 year at the time of interview. The three time frames are defined as:

- *Uninsured at the time of interview*—Provides an estimate of persons who, at the given time, may have experienced barriers to obtaining needed health care.
- *Uninsured for at least part of the past year*—Provides an annual caseload of persons who may experience barriers to obtaining needed health care. This measure includes persons who have insurance at the time of interview but who had a period of noncoverage in the year prior to interview, as well as those who are currently uninsured and who may have been uninsured for a long period of time.
- *Uninsured for more than 1 year*—Provides an estimate of those with a persistent lack of coverage who may be at high risk of not obtaining preventive services or care for illness and injury.

These three measures are not mutually exclusive, and a given individual may be counted in more than one of the measures. Estimates of enrollment in public and private coverage are also provided.

Persons who were uninsured at the time of interview were asked the following question (HILAST): *Not including Single Service Plans, about how long has it been since [you/Alias] last had health care coverage?* In 2016, the answer categories for the HILAST question were

modified to align NHIS responses to those of other national federal surveys. Therefore, starting in 2016, estimates of “uninsured for at least part of the past year” and “uninsured for more than 1 year” may not be completely comparable with previous years. Prior to 2016, the answer categories for the HILAST question were: 6 months or less; More than 6 months, but not more than 1 year ago; More than 1 year, but not more than 3 years ago; More than 3 years; and Never. Beginning in 2016, the answer categories for the HILAST question are: 6 months or less; More than 6 months, but less than 1 year; 1 year; More than 1 year, but less than 3 years; 3 years or more; and Never.

This report also includes estimates for three types of consumer-directed private health care. Consumer-directed health care may enable individuals to have more control over when and how they access care, what types of care they use, and how much they spend on health care services. National attention to consumer-directed health care increased following enactment of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (P.L. 108–173), which established tax-advantaged health savings accounts (HSAs) (1). In 2007, three questions were added to the health insurance section of NHIS to monitor enrollment in consumer-directed health care among persons with private health insurance. Estimates are provided for enrollment in high-deductible health plans (HDHPs), plans with high deductibles coupled with HSAs (i.e., consumer-directed health plans or CDHPs), and being in a family with a flexible spending account (FSA) for medical expenses not otherwise covered. For a more complete description of consumer-directed health care, see [Definitions of selected terms](#).

The 2018 health insurance estimates are being released prior to final data editing and final weighting to provide access to the most recent information from NHIS. Differences between estimates calculated using preliminary data files and final data files are typically less than 0.1 percentage point. However, preliminary estimates of persons without health insurance coverage are generally 0.1–0.3 percentage

points lower than the final estimates due to the editing procedures used for the final data files.

Estimates for the first 3 months of 2018 are stratified by age group, sex, race and ethnicity, poverty status, marital status, employment status, region, and educational attainment.

Data source

NHIS is a multistage probability sample survey of the civilian noninstitutionalized population of the United States and is the source of data for this report. The survey is conducted continuously throughout the year by NCHS through an agreement with the U.S. Census Bureau.

NHIS is a comprehensive health survey that can be used to relate health insurance coverage to health outcomes and health care utilization. It has a low item nonresponse rate (about 1%) for the health insurance questions. Because NHIS is conducted throughout the year—yielding a nationally representative sample each month—data can be analyzed monthly or quarterly to monitor trends in health insurance coverage.

A new sample design was implemented with the 2016 NHIS. Sample areas were reselected to take into account changes in the distribution of the U.S. population since 2006, when the previous sample design was first implemented. Commercial address lists were used as the main source of addresses, rather than field listing; and the oversampling procedures for black, Hispanic, and Asian persons that were a feature of the previous sample design were not implemented in 2016. Some of the differences between estimates for 2016 and beyond and estimates for earlier years may be attributable to the new sample design. Visit the NHIS website at

<https://www.cdc.gov/nchs/nhis.htm> for more information on the design, content, and use of NHIS.

The data for this report are derived from the Family Core component of the 1997–2018 NHIS, which collects information on all family members in each household. Data analyses for the 2018 NHIS were based on 19,510 persons in the Family Core.

Data on health insurance status were edited using a system of logic checks. Information from follow-up questions, such as plan name(s), were used to reassign insurance status and type of coverage to avoid misclassification. The analyses excluded persons with unknown health insurance status (about 1% of respondents each year).

Data points for all figures can be found in the detailed appendix tables at the end of this report, appendix tables from previous reports, and quarterly tables available separately through the Early Release (ER) program.

Estimation procedures

NCHS creates survey weights for each calendar quarter of the NHIS sample. The NHIS data weighting procedure is described in more detail at: https://www.cdc.gov/nchs/data/series/sr_02/sr02_165.pdf. Estimates were calculated using NHIS survey weights, which are calibrated to census totals for sex, age, and race and ethnicity of the U.S. civilian noninstitutionalized population. Weights for 2010 and 2011 were derived from 2000 census-based population estimates. Beginning with 2012 NHIS data, weights were derived from 2010 census-based population estimates.

Point estimates and estimates of their variances were calculated using SUDAAN software (RTI International, Research Triangle Park, N.C.) to account for the complex sample design of NHIS, taking into account stratum and primary sampling unit (PSU) identifiers. The Taylor series linearization method was chosen for variance estimation.

Trends in coverage were generally assessed using joinpoint regression (2), which characterizes trends as joined linear segments. A joinpoint is the year where two segments with different slopes meet. Joinpoint software uses statistical criteria to determine the fewest number of segments necessary to characterize a trend and the year(s) when segments begin and end. A limitation of using aggregated data and joinpoint software alone for trend analysis of NHIS is that this approach does not account for year-to-year correlation or use the recommended degrees of freedom for statistical testing. Trends from 2010

through the first 3 months of 2018 were also evaluated using logistic regression analysis.

Beginning with the 2017 NHIS, all estimates shown meet the NCHS standards of reliability as specified in “National Center for Health Statistics Data Presentation Standards for Proportions” (3), unless otherwise noted. Current state estimates as well as other estimates based on the 2016 and earlier NHIS meet the former NCHS standard of having less than or equal to 30% relative standard error, unless otherwise noted. Differences between percentages or rates were evaluated using two-sided significance tests at the 0.05 level. All differences discussed are significant unless otherwise noted. Lack of comment regarding the difference between any two estimates does not necessarily mean that the difference was tested and found to be not significant.

Definitions of selected terms

Private health insurance coverage—Includes persons who had any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care.

Public health plan coverage—Includes Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plans, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

Uninsured—A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, CHIP, state-sponsored or other government-sponsored health plan, or military plan at the time of interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

Directly purchased coverage—Private insurance that was originally obtained through direct purchase or other means not related to employment.

Employment-based coverage—Private insurance that was originally obtained through a present or former employer, union, or professional association.

Exchange-based coverage—A private health insurance plan purchased through the Health Insurance Marketplace or state-based exchanges that were established as part of the Affordable Care Act (ACA) of 2010 (P.L. 111–148, P.L. 111–152). In response to ACA, several questions were added to NHIS to capture health care plans obtained through exchange-based coverage.

In general, if a family member is reported to have coverage through the exchange, that report is considered accurate unless there is other information (e.g., plan name or information about premiums) that clearly contradicts that report. Similarly, if a family member is not reported to have coverage through the exchange, that report is considered accurate unless other information clearly contradicts that report. For a more complete discussion of the procedures used in classifying exchange-based coverage, see <https://www.cdc.gov/nchs/nhis/insurance.htm>.

Based on these classification procedures, an average of 3.6% (standard error [SE] 0.25) of persons under age 65, 4.2% (SE 0.29) of adults aged 18–64, 2.0% (SE 0.33) of children under age 18 years, and 3.4% (SE 0.61) of adults aged 19–25 had exchange-based private health insurance coverage in the first 3 months of 2018. This equates to 9.7 million persons under age 65, 8.3 million adults aged 18–64, 1.5 million children, and 1.0 million adults aged 19–25. If these procedures had not been used and reports of coverage through the exchanges (or lack thereof) had been taken at face value, the estimates would have been higher. For example, an average of 4.7% (12.7 million) of persons under age 65 would have been reported to have obtained their coverage through exchanges in the first 3 months of 2018.

High-deductible health plan (HDHP)—For persons with private health insurance, a question was asked regarding the annual deductible of each private health insurance plan. HDHP was defined in 2018 as a private health plan with an annual deductible of at least \$1,350 for self-only coverage or \$2,700 for family coverage. The deductible is adjusted annually for inflation. For 2015 through 2017, the annual deductible was \$1,300 for self-only coverage and \$2,600 for family coverage. For 2013 and 2014, the annual deductible was \$1,250 for self-only coverage and \$2,500 for family coverage. For 2010 through 2012, the annual deductible was \$1,200 for self-only coverage and \$2,400 for family coverage.

Consumer-directed health plan (CDHP)—An HDHP with a special account to pay for medical expenses. Unspent funds are carried over to subsequent years. For plans that are considered HDHPs, a follow-up question was asked regarding these special accounts. A person is considered to have a CDHP if there is a “yes” response to the following question: *With this plan, is there a special account or fund that can be used to pay for medical expenses? The accounts are sometimes referred to as Health Savings Accounts (HSAs), Health Reimbursement Accounts (HRAs), Personal Care accounts, Personal Medical funds, or Choice funds, and are different from Flexible Spending Accounts.*

Health savings account (HSA)—A tax-advantaged account or fund that can be used to pay medical expenses. It must be coupled with an HDHP. The funds contributed to the account are not subject to federal income tax at the time of deposit. Unlike flexible spending accounts (FSAs), HSA funds roll over and accumulate year to year if not spent. HSAs are owned by the individual. Funds may be used to pay qualified medical expenses at any time without federal tax liability. HSAs may also be referred to as health reimbursement accounts (HRAs), personal care accounts, personal medical funds, or choice funds. The term “HSA” in this report includes accounts that use these alternative names.

Flexible spending account (FSA) for medical expenses—Persons are considered to be in a family with an FSA if

there is a “yes” response to the following question: *[Do you/Does anyone in your family] have a Flexible Spending Account for health expenses? These accounts are offered by some employers to allow employees to set aside pretax dollars of their own money for their use throughout the year to reimburse themselves for their out-of-pocket expenses for health care. With this type of account, any money remaining in the account at the end of the year, following a short grace period, is lost to the employee.*

The measures of HDHP enrollment, CDHP enrollment, and being in a family with an FSA for medical expenses are not mutually exclusive; a person may be counted in more than one measure.

Medicaid expansion status—Under provisions of ACA, states have the option to expand Medicaid eligibility to cover adults who have income up to and including 138% of the federal poverty level. There is no deadline for states to choose to implement the Medicaid expansion, and they may do so at any time. As of October 31, 2013, 26 states and the District of Columbia were moving forward with Medicaid expansion. As of January 1, 2016, 32 states and the District of Columbia were moving forward with Medicaid expansion.

Health Insurance Marketplace—A resource where individuals, families, and small businesses can learn about their health coverage options; compare health insurance plans based on cost, benefits, and other important features; choose a plan; and enroll in coverage. The Marketplace also provides information on programs that help people with low-to-moderate income and resources pay for coverage. There are three types of Health Insurance Marketplaces: (a) a state-based Marketplace set up and operated solely by the state; (b) a hybrid partnership Marketplace in which the state runs certain functions, makes key decisions, and may tailor the Marketplace to local needs and market conditions but is operated by the federal government; and (c) the Federally Facilitated Marketplace operated solely by the federal government.

Education—Categories are based on the years of school completed or highest degree obtained for persons aged 18 and over.

Employment—Employment status is assessed at the time of interview and is obtained for persons aged 18 and over. In this report, it is presented only for persons aged 18–64.

Hispanic or Latino origin and race—Hispanic or Latino origin and race are two separate and distinct categories. Persons of Hispanic or Latino origin may be of any race or combination of races. Hispanic or Latino origin includes persons of Mexican, Puerto Rican, Cuban, Central and South American, or Spanish origin. Race is based on the family respondent’s description of his or her own racial background, as well as the racial background of other family members. More than one race may be reported for a person. For conciseness, the text, tables, and figures in this report use shorter versions of the 1997 Office of Management and Budget terms for race and Hispanic or Latino origin. For example, the category “not Hispanic or Latino, black or African American, single race” is referred to as “non-Hispanic black, single race” in the text, tables, and figures. Estimates for non-Hispanic persons of races other than white only, black only, and Asian only, or of multiple races, are combined into the “non-Hispanic, other races and multiple races” category.

Poverty status—Poverty categories are based on the ratio of the family’s income in the previous calendar year to the appropriate poverty threshold (given the family’s size and number of children), as defined by the U.S. Census Bureau for that year (4–14). Persons categorized as “poor” have a ratio less than 1.0 (i.e., their family income is below the poverty threshold); “near poor” persons have incomes of 100% to less than 200% of the poverty threshold; and “not poor” persons have incomes that are 200% of the poverty threshold or greater. The remaining group of respondents is coded as “unknown” with respect to poverty status. The percentage of respondents with unknown poverty status (19.1% in 1997, 28.9% in 2005, 12.2% in 2010, 11.5% in 2011, 11.4% in 2012, 10.2% in 2013, 8.8% in 2014, 8.8% in 2015, 7.8% in 2016, 7.5% in 2017, and 7.3% in the first quarter of 2018) is disaggregated by age and insurance status in Tables IV, V, and VI.

For more information on unknown income and unknown poverty status, see the NHIS Survey Description documents for 1997–2017 (available from: https://www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm).

NCHS imputes income for approximately 30% of NHIS records. The imputed income files are released a few months after the annual release of NHIS microdata and are not available for the ER updates. Therefore, ER health insurance estimates stratified by poverty status are based on reported income only and may differ from similar estimates produced later (e.g., in *Health, United States* [15]) that are based on both reported and imputed income.

Region—In the geographic classification of the U.S. population, states are grouped into the following four regions used by the U.S. Census Bureau:

Region	States included
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont
Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin
South	Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia
West	Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming

Expanded regions—Based on a subdivision of the four regions into nine divisions. For this report, the nine Census divisions were modified by moving Delaware, the District of Columbia, and Maryland into the Middle Atlantic division. This approach was used previously by Holahan *et al.* (16).

Additional Early Release Program Products

Two additional periodical reports are published through the NHIS ER Program. “Early Release of Selected Estimates Based on Data From the National Health Interview Survey” (17) is published quarterly and provides estimates of 14 selected measures of health including estimates of having a usual place to go for medical care, obtaining needed medical care, influenza vaccination, pneumococcal vaccination, obesity, leisure-time physical activity, current smoking, alcohol consumption, HIV testing, general health status, personal care needs, serious psychological distress, diagnosed diabetes, and asthma episodes and current asthma. Starting with the June 2018 release, this report has an online dynamic report format.

“Wireless Substitution: Early Release of Estimates From the National Health Interview Survey” (18) is published semiannually and provides selected estimates of telephone coverage in the United States.

Other ER reports and tabulations on special topics are released as needed (available from: <https://www.cdc.gov/nchs/nhis/releases.htm>.)

In addition to these reports, preliminary microdata files containing selected NHIS variables are produced as part of the ER Program. For each data collection year (January through December), these variables are made available four times approximately 5–6 months following the completion of data collection. NHIS data users can analyze these files through the NCHS Research Data Centers (<https://www.cdc.gov/rdc/>) without having to wait for the final annual NHIS microdata files to be released.

New measures and products may be added as work continues and in response to changing data needs. Feedback on these releases is welcome (nhislist@cdc.gov).

Announcements about ERs, other new data releases, and publications, as well as corrections related to NHIS, will be sent to members of the HISUSERS electronic mailing list. To join, visit the Centers for Disease Control and

Prevention (CDC) website at: https://www.cdc.gov/nchs/products/nchs_listservs.htm, click on the “National Health Interview Survey (NHIS) Researchers” button, and follow the directions on the page.

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Table I. Percentages (and standard errors) of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, and for more than 1 year, by age group and selected years: United States, 1997–March 2018

Age group and year	Uninsured ¹ at time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than 1 year ²
All ages			
1997	15.4 (0.21)	19.5 (0.24)	10.4 (0.18)
2005	14.2 (0.21)	17.6 (0.23)	10.0 (0.18)
2010	16.0 (0.27)	19.8 (0.29)	11.7 (0.22)
2011	15.1 (0.25)	19.2 (0.29)	11.2 (0.21)
2012	14.7 (0.23)	18.6 (0.27)	11.1 (0.22)
2013	14.4 (0.26)	17.8 (0.27)	10.7 (0.23)
2014	11.5 (0.23)	16.5 (0.25)	8.4 (0.19)
2015	9.1 (0.19)	13.2 (0.23)	6.2 (0.15)
2016	9.0 (0.27)	12.5 (0.29)	5.2 (0.23)
2017	9.1 (0.25)	12.4 (0.28)	5.4 (0.18)
2018 (Jan–Mar)	8.8 (0.36)	12.4 (0.39)	5.1 (0.29)
Under 65 years			
1997	17.4 (0.24)	21.9 (0.28)	11.8 (0.21)
2005	16.0 (0.24)	19.9 (0.26)	11.3 (0.21)
2010	18.2 (0.30)	22.5 (0.33)	13.3 (0.24)
2011	17.3 (0.29)	21.8 (0.33)	12.7 (0.25)
2012	16.9 (0.27)	21.3 (0.31)	12.7 (0.24)
2013	16.6 (0.30)	20.4 (0.32)	12.4 (0.27)
2014	13.3 (0.26)	19.0 (0.29)	9.7 (0.22)
2015	10.5 (0.22)	15.3 (0.27)	7.2 (0.17)
2016	10.4 (0.31)	14.5 (0.33)	6.1 (0.26)
2017	10.7 (0.29)	14.5 (0.32)	6.3 (0.21)
2018 (Jan–Mar)	10.3 (0.42)	14.4 (0.45)	6.0 (0.34)
0–17 years			
1997	13.9 (0.36)	18.1 (0.41)	8.4 (0.29)
2005	8.9 (0.29)	12.6 (0.33)	5.3 (0.24)
2010	7.8 (0.32)	11.6 (0.37)	4.5 (0.23)
2011	7.0 (0.27)	10.9 (0.36)	3.7 (0.19)
2012	6.6 (0.27)	10.4 (0.35)	3.7 (0.19)
2013	6.5 (0.26)	10.0 (0.33)	3.6 (0.20)
2014	5.5 (0.27)	9.4 (0.40)	3.0 (0.19)
2015	4.5 (0.24)	7.7 (0.32)	2.3 (0.16)
2016	5.1 (0.31)	8.0 (0.31)	2.2 (0.22)
2017	5.0 (0.40)	8.2 (0.43)	2.4 (0.28)
2018 (Jan–Mar)	4.6 (0.44)	7.5 (0.55)	1.9 (0.29)
18–64 years			
1997	18.9 (0.23)	23.6 (0.26)	13.3 (0.21)
2005	18.9 (0.26)	22.8 (0.28)	13.8 (0.23)
2010	22.3 (0.35)	26.7 (0.37)	16.8 (0.30)
2011	21.3 (0.34)	26.0 (0.37)	16.3 (0.31)
2012	20.9 (0.31)	25.5 (0.34)	16.2 (0.29)
2013	20.4 (0.37)	24.4 (0.38)	15.7 (0.34)
2014	16.3 (0.31)	22.6 (0.34)	12.3 (0.27)
2015	12.8 (0.27)	18.1 (0.33)	9.1 (0.22)
2016	12.4 (0.36)	17.0 (0.38)	7.6 (0.31)
2017	12.8 (0.32)	16.8 (0.36)	7.8 (0.24)
2018 (Jan–Mar)	12.5 (0.52)	17.1 (0.57)	7.5 (0.44)

See footnotes at end of table.

Table I. Percentages (and standard errors) of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, and for more than 1 year, by age group and selected years: United States, 1997–March 2018—Con.

Age group and year	Uninsured ¹ at time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than 1 year ²
19–25 years			
1997	31.4 (0.63)	39.2 (0.67)	20.8 (0.51)
2005	31.2 (0.65)	37.9 (0.68)	21.6 (0.54)
2010	33.9 (0.73)	41.7 (0.78)	24.1 (0.61)
2011	27.9 (0.71)	36.1 (0.77)	20.1 (0.61)
2012	26.4 (0.72)	33.0 (0.72)	19.6 (0.62)
2013	26.5 (0.71)	31.3 (0.79)	19.8 (0.61)
2014	20.0 (0.65)	26.9 (0.73)	14.2 (0.56)
2015	15.8 (0.58)	22.2 (0.68)	10.2 (0.43)
2016	14.7 (0.71)	20.1 (0.78)	7.7 (0.61)
2017	15.2 (0.64)	19.9 (0.77)	8.1 (0.53)
2018 (Jan–Mar)	13.7 (0.96)	19.0 (1.17)	7.3 (0.80)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²In references to “part of the past year” and “more than 1 year,” 1 year is defined as the 12 months prior to interview. Beginning in 2016, answer categories concerning the length of noncoverage were modified for those who were currently uninsured. Therefore, starting in 2016, estimates of “uninsured for at least part of the past year” and “uninsured for more than 1 year” may not be completely comparable with previous years. For more information on this change, see Technical Notes.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 1997, 2005, and 2010–2018, Family Core component.

Table II. Numbers (in millions) of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, and for more than 1 year, by age group and selected years: United States, 1997–March 2018

Age group and year	Uninsured ¹ at time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than 1 year ²
All ages			
1997	41.0	51.9	27.7
2005	41.2	51.3	29.2
2010	48.6	60.3	35.7
2011	46.3	58.7	34.2
2012	45.5	57.5	34.1
2013	44.8	55.4	33.4
2014	36.0	51.6	26.3
2015	28.6	41.7	19.6
2016	28.6	39.9	16.7
2017	29.3	39.8	17.3
2018 (Jan–Mar)	28.3	39.9	16.5
Under 65 years			
1997	40.7	51.4	27.6
2005	41.0	50.9	29.0
2010	48.2	59.6	35.4
2011	45.9	58.0	33.9
2012	45.2	56.8	33.9
2013	44.3	54.7	33.1
2014	35.7	50.8	26.1
2015	28.4	41.1	19.4
2016	28.2	39.3	16.5
2017	28.9	39.2	17.0
2018 (Jan–Mar)	28.0	39.2	16.3
0–17 years			
1997	9.9	12.9	6.0
2005	6.5	9.3	3.9
2010	5.8	8.7	3.4
2011	5.2	8.1	2.7
2012	4.9	7.7	2.7
2013	4.8	7.3	2.6
2014	4.0	6.9	2.2
2015	3.3	5.7	1.7
2016	3.8	5.9	1.6
2017	3.7	6.0	1.8
2018 (Jan–Mar)	3.4	5.5	1.4
18–64 years			
1997	30.8	38.5	21.7
2005	34.5	41.7	25.2
2010	42.5	51.0	32.0
2011	40.7	49.9	31.2
2012	40.3	49.2	31.2
2013	39.6	47.4	30.5
2014	31.7	44.0	23.9
2015	25.1	35.5	17.8
2016	24.5	33.4	14.9
2017	25.2	33.2	15.3
2018 (Jan–Mar)	24.7	33.8	14.9

See footnotes at end of table.

Table II. Numbers (in millions) of persons who lacked health insurance coverage at the time of interview, for at least part of the past year, and for more than 1 year, by age group and selected years: United States, 1997–March 2018—Con.

Age group and year	Uninsured ¹ at time of interview	Uninsured ¹ for at least part of the past year ²	Uninsured ¹ for more than 1 year ²
19–25 years			
1997	7.7	9.7	5.1
2005	8.8	10.7	6.1
2010	10.0	12.3	7.1
2011	8.4	10.8	6.0
2012	7.9	9.9	5.9
2013	8.0	9.5	6.0
2014	6.0	8.1	4.3
2015	4.8	6.7	3.1
2016	4.4	6.0	2.3
2017	4.5	5.9	2.4
2018 (Jan–Mar)	4.1	5.7	2.2

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²In references to “part of the past year” and “more than 1 year,” 1 year is defined as the 12 months prior to interview. Beginning in 2016, answer categories concerning the length of noncoverage were modified for those who were currently uninsured. Therefore, starting in 2016, estimates of “uninsured for at least part of the past year” and “uninsured for more than 1 year” may not be completely comparable with previous years. For more information on this change, see Technical Notes.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 1997, 2005, and 2010–2018, Family Core component.

Table III. Percentages (and standard errors) of persons who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group and selected years: United States, 1997–March 2018

Age group and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
All ages			
1997	15.4 (0.21)	23.3 (0.27)	70.7 (0.32)
2005	14.2 (0.21)	26.4 (0.30)	67.3 (0.37)
2010	16.0 (0.27)	31.4 (0.39)	60.2 (0.48)
2011	15.1 (0.25)	32.4 (0.37)	60.1 (0.48)
2012	14.7 (0.23)	33.4 (0.35)	59.6 (0.43)
2013	14.4 (0.26)	33.8 (0.36)	59.5 (0.49)
2014	11.5 (0.23)	34.6 (0.37)	61.8 (0.45)
2015	9.1 (0.19)	35.6 (0.42)	63.2 (0.46)
2016	9.0 (0.27)	36.8 (0.36)	62.5 (0.44)
2017	9.1 (0.25)	36.2 (0.37)	62.6 (0.45)
2018 (Jan–Mar)	8.8 (0.36)	36.6 (0.59)	63.1 (0.73)
Under 65 years			
1997	17.4 (0.24)	13.6 (0.25)	70.8 (0.35)
2005	16.0 (0.24)	16.8 (0.29)	68.4 (0.39)
2010	18.2 (0.30)	22.0 (0.38)	61.2 (0.50)
2011	17.3 (0.29)	23.0 (0.37)	61.2 (0.51)
2012	16.9 (0.27)	23.5 (0.37)	61.0 (0.47)
2013	16.6 (0.30)	23.8 (0.35)	61.0 (0.52)
2014	13.3 (0.26)	24.5 (0.36)	63.6 (0.46)
2015	10.5 (0.22)	25.3 (0.43)	65.6 (0.50)
2016	10.4 (0.31)	26.3 (0.41)	65.0 (0.48)
2017	10.7 (0.29)	25.3 (0.39)	65.4 (0.46)
2018 (Jan–Mar)	10.3 (0.42)	25.4 (0.69)	65.8 (0.80)
0–17 years			
1997	13.9 (0.36)	21.4 (0.48)	66.2 (0.57)
2005	8.9 (0.29)	29.9 (0.56)	62.4 (0.60)
2010	7.8 (0.32)	39.8 (0.73)	53.8 (0.75)
2011	7.0 (0.27)	41.0 (0.74)	53.3 (0.76)
2012	6.6 (0.27)	42.1 (0.72)	52.8 (0.73)
2013	6.5 (0.26)	42.2 (0.70)	52.6 (0.76)
2014	5.5 (0.27)	42.2 (0.65)	53.7 (0.68)
2015	4.5 (0.24)	42.2 (0.79)	54.7 (0.78)
2016	5.1 (0.31)	43.0 (0.65)	53.8 (0.71)
2017	5.0 (0.40)	41.3 (0.77)	55.0 (0.67)
2018 (Jan–Mar)	4.6 (0.44)	41.9 (1.36)	54.6 (1.34)
18–64 years			
1997	18.9 (0.23)	10.2 (0.20)	72.8 (0.30)
2005	18.9 (0.26)	11.5 (0.22)	70.9 (0.36)
2010	22.3 (0.35)	15.0 (0.30)	64.1 (0.46)
2011	21.3 (0.34)	15.9 (0.29)	64.2 (0.45)
2012	20.9 (0.31)	16.4 (0.29)	64.1 (0.42)
2013	20.4 (0.37)	16.7 (0.30)	64.2 (0.47)
2014	16.3 (0.31)	17.7 (0.32)	67.3 (0.43)
2015	12.8 (0.27)	18.9 (0.36)	69.7 (0.43)
2016	12.4 (0.36)	20.0 (0.38)	69.2 (0.41)
2017	12.8 (0.32)	19.3 (0.30)	69.3 (0.41)
2018 (Jan–Mar)	12.5 (0.52)	19.2 (0.52)	70.0 (0.69)

See footnotes at end of table.

Table III. Percentages (and standard errors) of persons who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group and selected years: United States, 1997–March 2018—Con.

Age group and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
19–25 years			
1997	31.4 (0.63)	11.2 (0.46)	58.4 (0.71)
2005	31.2 (0.65)	12.9 (0.51)	56.5 (0.79)
2010	33.9 (0.73)	15.7 (0.55)	51.0 (0.84)
2011	27.9 (0.71)	16.8 (0.60)	56.2 (0.85)
2012	26.4 (0.72)	17.5 (0.59)	57.2 (0.85)
2013	26.5 (0.71)	16.1 (0.54)	58.1 (0.84)
2014	20.0 (0.65)	19.1 (0.64)	61.9 (0.88)
2015	15.8 (0.58)	19.5 (0.68)	65.7 (0.81)
2016	14.7 (0.71)	21.9 (0.79)	64.7 (0.88)
2017	15.2 (0.64)	19.9 (0.67)	65.7 (0.96)
2018 (Jan–Mar)	13.7 (0.96)	18.1 (1.34)	69.2 (1.65)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

³Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 1997, 2005, and 2010–2018, Family Core component.

Table IV. Percentages (and standard errors) of persons under age 65 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by poverty status and selected years: United States, 1997–March 2018

Poverty status ¹ and year	Uninsured ² at time of interview	Public health plan coverage ³	Private health insurance coverage ⁴
Poor (< 100% FPL)			
1997	32.7 (0.80)	46.1 (1.01)	22.9 (0.93)
2005	28.4 (0.78)	50.6 (0.98)	22.1 (0.89)
2010	29.5 (0.83)	56.0 (0.98)	15.5 (0.70)
2011	28.2 (0.66)	56.2 (0.82)	16.6 (0.77)
2012	28.3 (0.65)	57.1 (0.83)	16.1 (0.83)
2013	27.3 (0.68)	59.0 (0.81)	14.7 (0.72)
2014	22.3 (0.66)	62.1 (0.80)	16.6 (0.69)
2015	17.2 (0.63)	65.6 (0.87)	18.5 (0.78)
2016	18.7 (0.94)	66.8 (1.01)	16.2 (0.71)
2017	17.7 (0.72)	63.4 (0.85)	20.1 (0.94)
2018 (Jan–Mar)	18.5 (1.37)	66.5 (1.70)	16.0 (1.45)
Near poor (≥ 100% and < 200% FPL)			
1997	30.4 (0.70)	18.2 (0.56)	53.5 (0.80)
2005	28.6 (0.63)	30.0 (0.72)	43.2 (0.89)
2010	32.3 (0.69)	36.2 (0.63)	33.2 (0.77)
2011	30.4 (0.58)	37.7 (0.73)	33.5 (0.75)
2012	29.5 (0.56)	37.1 (0.66)	35.2 (0.75)
2013	29.3 (0.70)	39.1 (0.77)	33.4 (0.79)
2014	23.5 (0.60)	41.1 (0.74)	37.3 (0.81)
2015	18.2 (0.51)	45.1 (0.77)	39.1 (0.77)
2016	17.6 (0.63)	49.2 (0.89)	35.4 (0.85)
2017	18.2 (0.63)	48.1 (1.15)	35.7 (0.82)
2018 (Jan–Mar)	17.4 (1.06)	50.3 (1.54)	34.8 (1.34)
Not poor (≥ 200% FPL)			
1997	8.9 (0.22)	5.3 (0.19)	87.6 (0.27)
2005	9.1 (0.22)	7.4 (0.22)	84.7 (0.30)
2010	10.7 (0.24)	9.7 (0.28)	81.0 (0.36)
2011	10.1 (0.25)	9.9 (0.26)	81.4 (0.36)
2012	9.8 (0.23)	10.3 (0.33)	81.3 (0.39)
2013	9.6 (0.24)	10.5 (0.29)	81.2 (0.39)
2014	7.6 (0.20)	9.9 (0.28)	83.7 (0.36)
2015	6.6 (0.19)	10.6 (0.31)	84.1 (0.38)
2016	6.4 (0.23)	11.2 (0.21)	83.9 (0.32)
2017	7.2 (0.25)	11.6 (0.26)	82.5 (0.35)
2018 (Jan–Mar)	6.7 (0.43)	11.3 (0.50)	83.5 (0.59)
Unknown			
1997	21.6 (0.59)	13.2 (0.49)	66.7 (0.71)
2005	18.5 (0.48)	16.4 (0.48)	66.2 (0.68)
2010	22.7 (0.95)	21.0 (0.69)	57.3 (1.08)
2011	21.0 (0.64)	26.2 (0.95)	53.9 (1.09)
2012	20.4 (0.73)	28.8 (0.89)	52.1 (1.00)
2013	20.5 (0.76)	24.2 (0.94)	56.8 (1.24)
2014	15.0 (0.80)	22.2 (0.91)	64.1 (1.24)
2015	11.9 (0.80)	24.4 (1.16)	64.9 (1.20)
2016	13.2 (1.01)	27.0 (1.04)	61.6 (1.26)
2017	12.1 (0.92)	28.2 (1.24)	61.0 (1.39)
2018 (Jan–Mar)	13.7 (1.82)	31.7 (2.17)	55.8 (2.45)

¹FPL is federal poverty level, based on family income and family size, using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those with incomes below the poverty threshold; "near poor" persons have incomes of 100% to less than 200% of the poverty threshold; and "not poor" persons have incomes of 200% of the poverty threshold or greater. For more information on the "unknown" poverty status category, see Technical Notes. Estimates may differ from estimates that are based on both reported and imputed income.

²A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan at the time of interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

³Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

⁴Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 1997, 2005, and 2010–2018, Family Core component.

Table V. Percentages (and standard errors) of adults aged 18–64 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by poverty status and selected years: United States, 1997–March 2018

Poverty status ¹ and year	Uninsured ² at time of interview	Public health plan coverage ³	Private health insurance coverage ⁴
Poor (< 100% FPL)			
1997	40.2 (0.88)	34.3 (0.93)	26.8 (1.09)
2005	38.5 (0.95)	35.6 (0.98)	26.8 (1.03)
2010	42.2 (0.99)	38.8 (0.97)	19.6 (0.89)
2011	40.1 (0.92)	39.6 (0.93)	21.2 (1.02)
2012	40.1 (0.90)	40.8 (0.94)	20.2 (1.09)
2013	39.3 (1.00)	42.4 (0.95)	19.0 (0.97)
2014	32.3 (0.93)	46.6 (0.95)	21.9 (0.92)
2015	25.2 (0.90)	51.7 (1.08)	24.3 (1.04)
2016	26.2 (1.31)	53.7 (1.29)	21.6 (0.92)
2017	24.4 (1.06)	50.2 (1.07)	26.5 (1.22)
2018 (Jan–Mar)	25.5 (1.74)	54.5 (1.88)	21.4 (1.76)
Near poor (≥ 100% and < 200% FPL)			
1997	34.9 (0.71)	14.6 (0.51)	52.6 (0.76)
2005	36.6 (0.73)	20.0 (0.61)	45.0 (0.85)
2010	43.0 (0.74)	23.7 (0.55)	34.7 (0.74)
2011	40.1 (0.72)	25.9 (0.69)	35.4 (0.75)
2012	39.2 (0.68)	25.2 (0.57)	37.2 (0.74)
2013	38.5 (0.84)	26.6 (0.78)	36.4 (0.78)
2014	30.9 (0.72)	29.6 (0.76)	41.2 (0.81)
2015	24.1 (0.62)	34.2 (0.80)	43.8 (0.79)
2016	23.2 (0.76)	38.5 (0.91)	40.3 (0.95)
2017	23.8 (0.67)	37.6 (1.07)	40.5 (0.85)
2018 (Jan–Mar)	23.9 (1.44)	38.4 (1.69)	40.1 (1.49)
Not poor (≥ 200% FPL)			
1997	9.9 (0.22)	5.0 (0.18)	87.1 (0.26)
2005	10.7 (0.24)	6.2 (0.20)	84.4 (0.29)
2010	12.6 (0.27)	8.1 (0.27)	80.8 (0.36)
2011	12.0 (0.28)	8.3 (0.23)	81.1 (0.35)
2012	11.4 (0.26)	8.7 (0.29)	81.3 (0.38)
2013	11.4 (0.27)	8.9 (0.26)	81.2 (0.37)
2014	8.9 (0.23)	8.5 (0.26)	83.9 (0.35)
2015	7.6 (0.22)	9.1 (0.27)	84.7 (0.33)
2016	7.2 (0.25)	9.6 (0.22)	84.6 (0.29)
2017	8.2 (0.26)	9.9 (0.24)	83.3 (0.35)
2018 (Jan–Mar)	7.6 (0.46)	9.4 (0.44)	84.6 (0.55)
Unknown			
1997	22.9 (0.58)	10.1 (0.41)	68.6 (0.65)
2005	21.2 (0.52)	11.3 (0.36)	68.7 (0.61)
2010	27.1 (1.10)	15.6 (0.63)	58.4 (1.11)
2011	25.6 (0.77)	17.6 (0.73)	58.1 (0.96)
2012	25.7 (0.88)	18.9 (0.76)	56.9 (0.92)
2013	24.3 (0.87)	17.6 (0.77)	59.5 (1.11)
2014	17.2 (0.88)	17.2 (0.81)	67.0 (1.20)
2015	13.8 (0.82)	19.6 (0.94)	67.7 (1.09)
2016	14.6 (0.90)	21.6 (0.91)	65.6 (1.03)
2017	14.7 (1.07)	21.9 (1.21)	64.6 (1.30)
2018 (Jan–Mar)	16.2 (1.82)	24.6 (1.77)	60.8 (2.16)

¹FPL is federal poverty level, based on family income and family size, using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those with incomes below the poverty threshold; "near poor" persons have incomes of 100% to less than 200% of the poverty threshold; and "not poor" persons have incomes of 200% of the poverty threshold or greater. For more information on the "unknown" poverty status category, see Technical Notes. Estimates may differ from estimates that are based on both reported and imputed income.

²A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan at the time of interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

³Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

⁴Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 1997, 2005, and 2010–2018, Family Core component.

Table VI. Percentages (and standard errors) of children aged 0–17 years who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by poverty status and selected years: United States, 1997–March 2018

Poverty status ¹ and year	Uninsured ² at time of interview	Public health plan coverage ³	Private health insurance coverage ⁴
Poor (< 100% FPL)			
1997	22.4 (0.99)	62.1 (1.31)	17.5 (1.09)
2005	13.0 (0.92)	73.3 (1.32)	15.0 (1.10)
2010	10.2 (0.96)	82.0 (1.22)	9.2 (0.70)
2011	8.1 (0.62)	84.4 (0.87)	8.9 (0.72)
2012	7.5 (0.58)	85.9 (0.80)	8.8 (0.78)
2013	7.8 (0.62)	86.1 (0.88)	7.7 (0.69)
2014	5.9 (0.52)	87.3 (0.72)	8.0 (0.62)
2015	4.4 (0.47)	87.9 (0.86)	9.1 (0.81)
2016	6.5 (0.70)	88.0 (0.97)	7.4 (0.71)
2017	6.0 (0.59)	86.5 (0.95)	8.8 (0.81)
2018 (Jan–Mar)	6.5 (1.45)	86.8 (1.86)	6.9 (1.41)
Near poor (≥ 100% and < 200% FPL)			
1997	22.8 (0.96)	24.3 (0.93)	55.0 (1.15)
2005	14.7 (0.79)	47.3 (1.21)	40.0 (1.31)
2010	12.6 (0.73)	59.2 (1.16)	30.5 (1.18)
2011	11.5 (0.69)	60.8 (1.17)	29.9 (1.07)
2012	10.1 (0.70)	61.0 (1.30)	31.1 (1.18)
2013	10.6 (0.72)	64.4 (1.16)	27.3 (1.17)
2014	8.6 (0.65)	64.3 (1.23)	29.4 (1.19)
2015	6.7 (0.59)	66.4 (1.17)	29.8 (1.14)
2016	6.9 (0.62)	69.9 (1.11)	26.0 (1.01)
2017	7.5 (1.03)	67.9 (1.70)	26.6 (1.09)
2018 (Jan–Mar)	4.2 (0.85)	74.1 (2.05)	24.4 (2.21)
Not poor (≥ 200% FPL)			
1997	6.1 (0.33)	6.3 (0.32)	88.9 (0.43)
2005	4.6 (0.30)	10.7 (0.47)	85.6 (0.52)
2010	4.6 (0.29)	14.9 (0.57)	81.4 (0.61)
2011	4.0 (0.27)	15.0 (0.55)	82.1 (0.58)
2012	4.5 (0.31)	15.2 (0.62)	81.3 (0.64)
2013	4.0 (0.28)	15.6 (0.62)	81.2 (0.65)
2014	3.6 (0.28)	14.4 (0.56)	83.1 (0.58)
2015	3.3 (0.26)	15.5 (0.69)	82.1 (0.74)
2016	3.5 (0.27)	16.5 (0.52)	81.5 (0.58)
2017	3.8 (0.43)	17.2 (0.55)	80.1 (0.53)
2018 (Jan–Mar)	3.9 (0.47)	17.3 (1.11)	79.7 (1.13)
Unknown			
1997	18.3 (0.90)	21.4 (0.97)	61.7 (1.18)
2005	11.0 (0.66)	30.8 (1.05)	59.3 (1.16)
2010	8.8 (0.89)	38.1 (1.71)	53.7 (1.74)
2011	10.4 (0.76)	45.9 (1.70)	44.5 (1.66)
2012	8.2 (0.77)	51.8 (1.50)	41.2 (1.49)
2013	9.2 (1.00)	43.7 (2.16)	48.6 (2.20)
2014	8.0 (1.41)	37.9 (2.01)	54.8 (2.05)
2015	6.3 (1.36)	37.9 (2.33)	56.6 (2.24)
2016	8.9 (2.13)	43.6 (2.36)	49.3 (2.86)
2017	4.5 (0.95)	46.5 (2.24)	50.7 (2.48)
2018 (Jan–Mar)	*	50.6 (4.66)	42.5 (4.93)

*Estimate is not shown, as it does not meet standards of reliability or precision.

¹FPL is federal poverty level, based on family income and family size, using the U.S. Census Bureau's poverty thresholds. "Poor" persons are defined as those with incomes below the poverty threshold; "near poor" persons have incomes of 100% to less than 200% of the poverty threshold; and "not poor" persons have incomes of 200% of the poverty threshold or greater. For more information on the "unknown" poverty status category, see Technical Notes. Estimates may differ from estimates that are based on both reported and imputed income.

²A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan at the time of interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

³Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

⁴Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 1997, 2005, and 2010–2018, Family Core component.

Table VII. Percentages (and standard errors) of persons who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group and sex: United States, January–March 2018

Age group and sex	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
Age group (years)			
All ages	8.8 (0.36)	36.6 (0.59)	63.1 (0.73)
Under age 65	10.3 (0.42)	25.4 (0.69)	65.8 (0.80)
0–17	4.6 (0.44)	41.9 (1.36)	54.6 (1.34)
18–64	12.5 (0.52)	19.2 (0.52)	70.0 (0.69)
18–24	12.8 (0.89)	20.5 (1.20)	67.6 (1.43)
25–34	16.2 (1.17)	19.9 (0.92)	64.8 (1.36)
35–44	13.7 (1.04)	16.7 (0.99)	70.9 (1.42)
45–64	9.7 (0.47)	19.7 (0.83)	73.2 (0.81)
65 and over	0.6 (0.15)	96.0 (0.49)	48.8 (1.34)
19–25	13.7 (0.96)	18.1 (1.34)	69.2 (1.65)
Sex			
Male			
All ages	9.8 (0.45)	34.5 (0.74)	63.6 (0.83)
Under age 65	11.4 (0.53)	24.1 (0.84)	66.2 (0.93)
0–17	4.6 (0.60)	41.5 (1.64)	55.3 (1.62)
18–64	14.1 (0.71)	17.3 (0.69)	70.4 (0.83)
18–24	13.4 (1.16)	17.8 (1.48)	69.9 (1.66)
25–34	19.4 (1.90)	15.9 (1.22)	65.7 (1.98)
35–44	15.0 (1.46)	15.3 (1.22)	71.2 (1.89)
45–64	11.0 (0.64)	18.9 (0.96)	72.7 (0.86)
65 and over	0.7 (0.19)	95.5 (0.59)	48.5 (1.41)
19–25	15.2 (1.45)	14.4 (1.59)	71.4 (2.03)
Female			
All ages	7.7 (0.38)	38.6 (0.61)	62.7 (0.80)
Under age 65	9.2 (0.45)	26.7 (0.74)	65.5 (0.86)
0–17	4.5 (0.51)	42.3 (1.60)	53.9 (1.62)
18–64	10.9 (0.52)	21.1 (0.58)	69.7 (0.77)
18–24	12.3 (1.20)	23.1 (1.73)	65.4 (1.99)
25–34	13.1 (0.94)	24.0 (1.27)	63.8 (1.49)
35–44	12.5 (1.05)	18.1 (1.18)	70.5 (1.53)
45–64	8.6 (0.54)	20.4 (0.97)	73.7 (1.07)
65 and over	0.6 (0.17)	96.4 (0.55)	49.1 (1.53)
19–25	12.2 (1.20)	21.9 (1.86)	66.9 (2.08)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan at the time of interview. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

³Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2018, Family Core component.

Table VIII. Percentages (and standard errors) of persons under age 65 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by race and ethnicity and year: United States, 2010–March 2018

Race and ethnicity and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
Hispanic or Latino			
2010	31.9 (0.72)	32.0 (0.78)	36.6 (0.81)
2011	31.1 (0.68)	33.6 (0.74)	36.1 (0.82)
2012	30.4 (0.71)	34.0 (0.71)	36.4 (0.74)
2013	30.3 (0.66)	33.4 (0.62)	37.0 (0.76)
2014	25.2 (0.59)	34.6 (0.78)	41.2 (0.89)
2015	20.8 (0.56)	36.2 (0.84)	43.8 (0.81)
2016	19.3 (0.93)	37.1 (1.02)	44.9 (1.02)
2017	20.5 (0.77)	35.9 (1.23)	44.8 (1.37)
2018 (Jan–Mar)	18.1 (1.62)	34.9 (1.39)	47.8 (2.01)
Non-Hispanic white, single race			
2010	13.7 (0.30)	16.4 (0.42)	71.4 (0.57)
2011	13.0 (0.32)	17.1 (0.39)	71.4 (0.55)
2012	12.7 (0.28)	17.3 (0.39)	71.5 (0.51)
2013	12.1 (0.29)	17.9 (0.38)	71.6 (0.53)
2014	9.8 (0.25)	18.1 (0.41)	73.6 (0.50)
2015	7.4 (0.21)	18.9 (0.48)	75.4 (0.54)
2016	7.5 (0.24)	19.8 (0.40)	74.5 (0.42)
2017	7.5 (0.26)	18.9 (0.36)	75.2 (0.44)
2018 (Jan–Mar)	7.8 (0.38)	19.0 (0.79)	74.9 (0.84)
Non-Hispanic black, single race			
2010	20.8 (0.63)	36.3 (0.79)	44.6 (0.84)
2011	19.0 (0.51)	36.9 (0.83)	45.6 (0.85)
2012	17.9 (0.50)	38.2 (0.77)	45.4 (0.79)
2013	18.9 (0.51)	37.5 (0.92)	44.9 (1.01)
2014	13.5 (0.49)	40.3 (0.76)	47.7 (0.86)
2015	11.2 (0.48)	39.2 (1.01)	51.3 (1.02)
2016	11.7 (0.55)	40.0 (1.18)	50.1 (1.04)
2017	11.2 (0.41)	39.3 (1.20)	50.9 (1.28)
2018 (Jan–Mar)	11.3 (1.41)	39.8 (1.97)	51.5 (2.08)
Non-Hispanic Asian, single race			
2010	16.8 (0.76)	14.9 (0.98)	69.1 (1.17)
2011	16.0 (0.89)	17.6 (1.14)	67.0 (1.40)
2012	16.4 (0.93)	16.6 (0.85)	67.5 (1.24)
2013	13.8 (0.81)	17.5 (1.00)	69.4 (1.27)
2014	10.6 (0.61)	16.7 (0.86)	73.4 (1.01)
2015	6.7 (0.51)	18.0 (1.34)	75.9 (1.44)
2016	6.3 (0.60)	18.9 (1.26)	75.3 (1.18)
2017	6.7 (0.83)	17.9 (1.12)	75.8 (1.25)
2018 (Jan–Mar)	5.1 (0.82)	17.1 (2.28)	78.4 (2.57)
Non-Hispanic, other races and multiple races			
2010	22.4 (4.83)	30.3 (2.14)	48.7 (3.83)
2011	19.1 (1.78)	32.5 (1.60)	50.6 (1.89)
2012	16.4 (1.33)	35.8 (1.77)	50.8 (2.16)
2013	16.0 (1.17)	35.9 (1.75)	50.1 (1.97)
2014	12.8 (1.30)	36.2 (1.69)	52.7 (2.01)
2015	11.1 (1.00)	37.0 (1.86)	53.7 (1.99)
2016	12.6 (0.97)	37.3 (1.87)	52.7 (2.04)
2017	13.9 (1.33)	36.2 (2.03)	52.2 (2.30)
2018 (Jan–Mar)	13.1 (1.91)	39.4 (3.27)	50.1 (3.37)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

³Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Table IX. Percentages (and standard errors) of adults aged 18–64 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by race and ethnicity and year: United States, 2010–March 2018

Race and ethnicity and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
Hispanic or Latino			
2010	43.2 (0.91)	16.3 (0.64)	41.1 (0.85)
2011	42.2 (0.89)	18.1 (0.63)	40.3 (0.82)
2012	41.3 (0.89)	19.0 (0.64)	40.4 (0.73)
2013	40.6 (0.88)	18.0 (0.62)	42.1 (0.70)
2014	33.7 (0.76)	20.6 (0.73)	46.4 (0.86)
2015	27.7 (0.72)	23.0 (0.84)	50.0 (0.85)
2016	25.0 (1.20)	24.9 (1.15)	51.4 (1.08)
2017	27.2 (0.99)	23.7 (0.96)	50.2 (1.27)
2018 (Jan–Mar)	24.2 (2.16)	22.6 (1.52)	53.7 (1.98)
Non-Hispanic white, single race			
2010	16.4 (0.35)	12.8 (0.34)	72.2 (0.52)
2011	15.6 (0.35)	13.4 (0.31)	72.5 (0.48)
2012	15.1 (0.31)	13.7 (0.33)	72.7 (0.46)
2013	14.5 (0.34)	14.4 (0.32)	72.7 (0.49)
2014	11.6 (0.29)	14.6 (0.36)	75.3 (0.47)
2015	8.7 (0.25)	15.7 (0.42)	77.3 (0.47)
2016	8.6 (0.25)	16.6 (0.34)	76.6 (0.38)
2017	8.5 (0.28)	15.8 (0.32)	77.2 (0.41)
2018 (Jan–Mar)	8.9 (0.43)	15.8 (0.63)	77.2 (0.78)
Non-Hispanic black, single race			
2010	27.2 (0.75)	25.3 (0.70)	49.3 (0.81)
2011	24.8 (0.65)	26.2 (0.75)	50.5 (0.79)
2012	23.6 (0.61)	27.0 (0.68)	50.8 (0.75)
2013	24.9 (0.62)	26.6 (0.80)	50.0 (0.91)
2014	17.7 (0.60)	30.5 (0.73)	53.4 (0.84)
2015	14.4 (0.57)	29.7 (0.84)	57.8 (0.90)
2016	15.0 (0.62)	29.9 (1.06)	56.7 (0.95)
2017	14.1 (0.63)	30.3 (0.85)	57.0 (0.99)
2018 (Jan–Mar)	14.1 (1.46)	30.9 (1.96)	58.0 (1.98)
Non-Hispanic Asian, single race			
2010	19.5 (0.92)	11.2 (0.72)	70.2 (1.05)
2011	18.8 (0.96)	13.6 (0.87)	68.0 (1.27)
2012	19.1 (0.92)	13.2 (0.83)	68.2 (1.15)
2013	16.3 (0.88)	14.1 (0.91)	70.4 (1.28)
2014	12.5 (0.65)	13.7 (0.84)	74.5 (1.01)
2015	7.9 (0.58)	15.5 (1.16)	77.2 (1.27)
2016	7.5 (0.67)	16.2 (1.19)	76.8 (1.07)
2017	7.6 (0.94)	15.4 (1.11)	77.3 (1.13)
2018 (Jan–Mar)	6.4 (1.04)	15.9 (2.19)	78.4 (2.55)
Non-Hispanic, other races and multiple races			
2010	32.8 (5.76)	20.6 (1.94)	48.5 (4.77)
2011	27.1 (2.01)	23.6 (1.53)	52.1 (2.17)
2012	24.9 (1.78)	26.1 (1.62)	52.0 (2.24)
2013	23.8 (1.66)	26.8 (1.84)	51.6 (2.26)
2014	19.5 (1.65)	25.2 (1.51)	56.9 (2.06)
2015	16.1 (1.42)	29.0 (1.76)	56.9 (1.88)
2016	17.6 (1.29)	28.9 (1.64)	55.5 (2.13)
2017	20.1 (1.62)	28.0 (2.33)	53.6 (2.45)
2018 (Jan–Mar)	19.3 (2.66)	28.2 (2.67)	55.9 (3.57)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

³Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Table X. Percentages (and standard errors) of adults aged 18–64 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by selected demographic characteristics: United States, January–March 2018

Selected characteristic	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
Race and ethnicity			
Hispanic or Latino	24.2 (2.16)	22.6 (1.52)	53.7 (1.98)
Non-Hispanic:			
White, single race	8.9 (0.43)	15.8 (0.63)	77.2 (0.78)
Black, single race	14.1 (1.46)	30.9 (1.96)	58.0 (1.98)
Asian, single race	6.4 (1.04)	15.9 (2.19)	78.4 (2.55)
Other races and multiple races	19.3 (2.66)	28.2 (2.67)	55.9 (3.57)
Region			
Northeast	7.4 (1.26)	21.8 (1.36)	72.8 (1.56)
Midwest	10.6 (1.16)	17.7 (0.76)	73.2 (1.71)
South	17.6 (0.94)	16.7 (0.82)	67.5 (1.10)
West	9.6 (0.99)	22.9 (1.23)	69.1 (1.40)
Education			
Less than high school	28.9 (1.99)	35.5 (1.66)	36.8 (2.00)
High school diploma or GED ⁴	17.2 (0.98)	25.3 (0.86)	59.7 (1.18)
More than high school	7.4 (0.37)	13.9 (0.53)	80.3 (0.62)
Employment status			
Employed	11.5 (0.54)	11.4 (0.47)	78.1 (0.64)
Unemployed	29.2 (2.66)	36.2 (2.93)	35.1 (2.53)
Not in workforce	12.6 (0.88)	43.8 (1.23)	48.3 (1.13)
Poverty status⁵			
< 100% FPL	25.5 (1.74)	54.5 (1.88)	21.4 (1.76)
≥ 100% and ≤ 138% FPL	25.8 (2.75)	47.4 (3.03)	29.4 (2.47)
> 138% and ≤ 250% FPL	20.3 (1.18)	28.1 (1.40)	53.8 (1.61)
> 250% and ≤ 400% FPL	11.7 (0.89)	12.6 (0.79)	77.9 (1.05)
> 400% FPL	4.0 (0.50)	5.6 (0.46)	91.8 (0.56)
Unknown	14.4 (1.51)	21.0 (1.48)	66.0 (1.93)
Marital status			
Married	9.2 (0.76)	13.9 (0.61)	78.7 (0.85)
Widowed	12.8 (2.59)	38.9 (3.91)	53.1 (3.30)
Divorced or separated	13.9 (1.04)	29.6 (1.38)	59.6 (1.57)
Living with partner	19.5 (1.44)	22.7 (2.11)	59.0 (1.80)
Never married	16.0 (0.81)	24.2 (0.99)	61.0 (1.22)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

³Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

⁴GED is General Educational Development high school equivalency diploma.

⁵FPL is federal poverty level, based on family income and family size, using the U.S. Census Bureau's poverty thresholds. The percentage of respondents with "unknown" poverty status for this five-level categorization is 8.7%. This value is greater than the corresponding value for the three-level poverty categorization of poor, near poor, and not poor because of greater uncertainty when assigning individuals to more detailed poverty groups. For more information on poverty status, see Technical Notes. Estimates may differ from estimates that are based on both reported and imputed income.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2018, Family Core component.

Table XI. Percentages (and standard errors) of persons under age 65 with private health insurance coverage who were enrolled in a high-deductible health plan, in a high-deductible health plan without a health savings account, and in a consumer-directed health plan, and who were in a family with a flexible spending account for medical expenses, by year: United States, 2010–March 2018

Year	Enrolled in high-deductible health plan (HDHP) ¹	Enrolled in HDHP without health savings account (HSA) ²	Enrolled in consumer-directed health plan (CDHP) ³	In family with flexible spending account (FSA) for medical expenses
2010	25.3 (0.54)	17.6 (0.46)	7.7 (0.33)	20.4 (0.50)
2011	29.0 (0.54)	19.9 (0.41)	9.2 (0.35)	21.4 (0.53)
2012	31.1 (0.57)	20.3 (0.42)	10.8 (0.34)	21.6 (0.45)
2013	33.9 (0.68)	22.2 (0.48)	11.7 (0.43)	21.6 (0.48)
2014	36.9 (0.77)	23.6 (0.52)	13.3 (0.47)	21.2 (0.49)
2015	36.7 (0.68)	23.4 (0.50)	13.3 (0.42)	21.7 (0.51)
2016	39.4 (0.65)	23.9 (0.49)	15.5 (0.51)	22.1 (0.40)
2017	43.7 (0.64)	25.5 (0.52)	18.2 (0.38)	23.6 (0.40)
2018 (Jan–Mar)	47.0 (0.96)	25.7 (0.65)	21.3 (0.90)	24.7 (0.79)

¹HDHP was defined in 2018 as a health plan with an annual deductible of at least \$1,350 for self-only coverage and \$2,700 for family coverage. The deductible is adjusted annually for inflation. Deductibles for previous years are included in the Technical Notes.

²HSA is a tax-advantaged account or fund that can be used to pay for medical expenses. It must be coupled with an HDHP.

³CDHP is an HDHP coupled with an HSA.

NOTES: The measures of HDHP enrollment, CDHP enrollment, and being in a family with an FSA for medical expenses are not mutually exclusive. Therefore, a person may be counted in more than one measure. The individual components of HDHPs may not add up to the total due to rounding. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Table XII. Percentages (and standard errors) of persons under age 65 with private health insurance coverage who were enrolled in a high-deductible health plan, by year and source of coverage: United States, 2010–March 2018

Year	Employment based ¹	Directly purchased ²
2010	23.3 (0.54)	48.0 (1.48)
2011	26.9 (0.53)	52.4 (1.49)
2012	29.2 (0.60)	54.7 (1.61)
2013	32.0 (0.67)	56.4 (1.50)
2014	36.2 (0.73)	54.1 (1.43)
2015	36.6 (0.72)	50.9 (1.50)
2016	39.6 (0.69)	51.9 (1.38)
2017	44.1 (0.69)	55.3 (1.55)
2018 (Jan–Mar)	48.0 (1.12)	53.3 (2.84)

¹Private insurance that was originally obtained through a present or former employer or union, or through a professional association.

²Private insurance that was originally obtained through direct purchase or other means not related to employment.

NOTES: For persons under age 65, approximately 8% of private health plans were directly purchased from 2010 through 2013. In 2014 through the first quarter of 2018, approximately 9% of private plans were directly purchased. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Table XIII. Percentages (and standard errors) of persons under age 65 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group, state Medicaid expansion status, and year: United States, 2010–March 2018

Age group, state Medicaid expansion status, and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
Under 65 years			
Medicaid expansion states⁴			
2010	16.4 (0.42)	21.8 (0.54)	63.1 (0.70)
2011	15.3 (0.35)	23.1 (0.56)	62.9 (0.72)
2012	15.0 (0.34)	23.1 (0.50)	63.3 (0.63)
2013	14.9 (0.40)	24.1 (0.48)	62.3 (0.68)
2014	10.9 (0.29)	25.6 (0.49)	64.9 (0.59)
2015	8.2 (0.23)	26.7 (0.57)	66.4 (0.64)
2016	7.8 (0.24)	27.7 (0.53)	66.3 (0.60)
2017	7.6 (0.27)	26.9 (0.53)	67.0 (0.60)
2018 (Jan–Mar)	7.3 (0.48)	27.5 (0.95)	66.8 (1.06)
Non-Medicaid expansion states⁵			
2010	20.3 (0.48)	22.1 (0.51)	59.0 (0.76)
2011	19.6 (0.50)	22.7 (0.50)	59.1 (0.78)
2012	19.2 (0.45)	24.0 (0.55)	58.3 (0.75)
2013	18.4 (0.48)	23.4 (0.51)	59.6 (0.80)
2014	16.0 (0.44)	23.2 (0.52)	62.1 (0.76)
2015	14.0 (0.41)	23.2 (0.58)	64.4 (0.78)
2016	14.7 (0.56)	23.9 (0.58)	62.8 (0.84)
2017	15.7 (0.47)	22.8 (0.60)	62.7 (0.74)
2018 (Jan–Mar)	15.1 (0.78)	22.2 (1.07)	64.3 (1.29)
0–17 years			
Medicaid expansion states⁴			
2010	6.7 (0.46)	38.2 (1.05)	56.5 (1.06)
2011	5.9 (0.33)	40.2 (1.11)	55.4 (1.09)
2012	5.3 (0.32)	40.4 (1.00)	55.9 (1.07)
2013	5.6 (0.33)	41.3 (0.86)	54.5 (0.95)
2014	4.3 (0.33)	41.0 (0.84)	56.2 (0.88)
2015	3.8 (0.28)	41.1 (0.99)	56.7 (1.00)
2016	4.1 (0.33)	42.0 (0.92)	56.1 (0.97)
2017	3.5 (0.41)	40.4 (1.09)	57.7 (0.95)
2018 (Jan–Mar)	3.2 (0.50)	42.2 (2.08)	55.7 (2.02)
Non-Medicaid expansion states⁵			
2010	9.0 (0.47)	41.7 (0.99)	50.7 (1.08)
2011	8.3 (0.46)	42.0 (1.02)	50.9 (1.11)
2012	8.0 (0.46)	43.9 (1.11)	49.4 (1.07)
2013	7.5 (0.40)	43.1 (1.12)	50.5 (1.23)
2014	6.7 (0.43)	43.5 (1.06)	51.0 (1.11)
2015	5.5 (0.42)	43.7 (1.27)	52.0 (1.26)
2016	6.7 (0.52)	44.4 (1.02)	50.3 (1.20)
2017	7.3 (0.79)	42.8 (1.19)	50.8 (1.04)
2018 (Jan–Mar)	6.5 (0.82)	41.4 (2.15)	52.9 (2.04)

See footnotes at end of table.

Table XIII. Percentages (and standard errors) of persons under age 65 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group, state Medicaid expansion status, and year: United States, 2010–March 2018—Con.

Age group, state Medicaid expansion status, and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
18–64 years			
Medicaid expansion states⁴			
2010	20.1 (0.47)	15.5 (0.40)	65.6 (0.62)
2011	18.9 (0.41)	16.6 (0.41)	65.8 (0.61)
2012	18.5 (0.39)	16.7 (0.38)	66.0 (0.53)
2013	18.4 (0.49)	17.7 (0.44)	65.2 (0.65)
2014	13.3 (0.34)	19.9 (0.46)	68.1 (0.56)
2015	9.8 (0.28)	21.5 (0.49)	70.0 (0.56)
2016	9.2 (0.25)	22.5 (0.41)	70.0 (0.49)
2017	9.1 (0.33)	21.9 (0.36)	70.4 (0.50)
2018 (Jan–Mar)	8.7 (0.64)	22.1 (0.61)	70.9 (0.84)
Non-Medicaid expansion states⁵			
2010	24.8 (0.58)	14.4 (0.45)	62.2 (0.70)
2011	24.1 (0.60)	15.1 (0.42)	62.3 (0.71)
2012	23.7 (0.54)	16.1 (0.44)	61.8 (0.69)
2013	22.7 (0.59)	15.6 (0.41)	63.2 (0.69)
2014	19.6 (0.54)	15.3 (0.41)	66.5 (0.69)
2015	17.5 (0.52)	14.9 (0.44)	69.4 (0.67)
2016	17.9 (0.69)	15.7 (0.50)	67.8 (0.78)
2017	19.0 (0.50)	15.0 (0.42)	67.3 (0.66)
2018 (Jan–Mar)	18.4 (0.90)	14.7 (0.83)	68.7 (1.13)

¹A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

²Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

³Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

⁴For 2010 through 2014, states moving forward with Medicaid expansion included: AZ, AR, CA, CO, CT, DE, DC, HI, IL, IA, KY, MD, MA, MI, MN, NV, NJ, NM, NY, ND, OH, OR, RI, VT, WA, and WV (as of October 31, 2013). Beginning with 2015, three additional states were included as expansion states: IN, NH, and PA. Beginning with 2016, three additional states were included as expansion states: AK, LA, and MT.

⁵For 2010 through 2014, states not moving forward with Medicaid expansion included: AL, AK, FL, GA, ID, IN, KS, LA, ME, MS, MO, MT, NE, NH, NC, OK, PA, SC, SD, TN, TX, UT, VA, WI, and WY (as of October 31, 2013). Beginning with 2015, three states have been removed from this grouping: IN, NH, and PA. Beginning with 2016, three additional states have been removed from this grouping: AK, LA, and MT.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Table XIV. Percentages (and standard errors) of persons under age 65 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group, state Health Insurance Marketplace type, and year: United States, 2010–March 2018

Age group, state Health Insurance Marketplace type, and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
Under 65 years			
State-based Marketplace states⁴			
2010	16.3 (0.46)	21.6 (0.66)	63.2 (0.80)
2011	15.9 (0.46)	23.6 (0.70)	61.8 (0.88)
2012	15.2 (0.43)	24.2 (0.66)	61.8 (0.83)
2013	15.2 (0.48)	25.0 (0.56)	61.0 (0.83)
2014	11.1 (0.38)	26.4 (0.63)	63.7 (0.78)
2015	7.7 (0.30)	28.1 (0.80)	65.4 (0.92)
2016	7.3 (0.27)	28.4 (0.70)	65.9 (0.72)
2017	7.2 (0.35)	28.0 (0.87)	66.2 (1.00)
2018 (Jan–Mar)	6.6 (0.62)	28.3 (1.18)	66.6 (1.41)
Partnership Marketplace states⁵			
2010	14.7 (0.87)	22.5 (1.15)	64.8 (1.73)
2011	14.3 (0.71)	22.7 (1.28)	64.5 (1.72)
2012	14.1 (0.70)	20.8 (1.12)	66.7 (1.53)
2013	14.2 (0.83)	21.8 (1.07)	65.6 (1.42)
2014	10.2 (0.57)	24.4 (1.06)	67.2 (1.28)
2015	8.0 (0.59)	26.1 (1.20)	67.7 (1.42)
2016	7.0 (0.48)	26.3 (1.27)	68.8 (1.66)
2017	7.0 (0.66)	25.3 (1.15)	69.8 (1.46)
2018 (Jan–Mar)	6.0 (0.72)	25.9 (1.98)	69.8 (2.11)
Federally Facilitated Marketplace states⁶			
2010	20.1 (0.48)	22.1 (0.50)	59.1 (0.70)
2011	18.8 (0.45)	22.6 (0.47)	60.0 (0.71)
2012	18.6 (0.41)	23.6 (0.50)	59.3 (0.67)
2013	17.9 (0.44)	23.3 (0.49)	60.2 (0.74)
2014	15.3 (0.40)	23.3 (0.50)	62.8 (0.69)
2015	12.8 (0.33)	23.4 (0.54)	65.3 (0.66)
2016	13.1 (0.45)	24.8 (0.51)	63.6 (0.69)
2017	13.6 (0.37)	23.7 (0.53)	64.1 (0.60)
2018 (Jan–Mar)	13.4 (0.61)	23.6 (0.95)	64.6 (1.04)
0–17 years			
State-based Marketplace states⁴			
2010	6.7 (0.50)	38.0 (1.32)	56.4 (1.31)
2011	6.4 (0.47)	40.9 (1.43)	54.2 (1.39)
2012	5.4 (0.43)	42.2 (1.37)	53.9 (1.46)
2013	5.7 (0.37)	42.8 (1.05)	52.6 (1.18)
2014	4.2 (0.40)	42.0 (1.11)	54.9 (1.13)
2015	3.1 (0.34)	42.4 (1.32)	55.8 (1.41)
2016	3.6 (0.38)	42.7 (1.19)	55.8 (1.26)
2017	2.9 (0.29)	41.2 (1.68)	57.0 (1.62)
2018 (Jan–Mar)	3.0 (0.80)	41.1 (2.59)	57.3 (2.59)
Partnership Marketplace states⁵			
2010	4.1 (0.78)	40.7 (2.21)	57.9 (2.31)
2011	4.2 (0.53)	39.6 (2.44)	58.0 (2.39)
2012	3.6 (0.69)	38.5 (2.20)	59.9 (2.26)
2013	4.2 (0.53)	38.4 (1.95)	59.2 (2.08)
2014	3.2 (0.51)	40.8 (1.88)	58.4 (1.99)
2015	4.3 (0.73)	40.3 (2.53)	57.5 (2.34)
2016	2.0 (0.40)	40.4 (2.54)	60.5 (2.49)
2017	2.0 (0.44)	40.6 (2.86)	60.3 (2.77)
2018 (Jan–Mar)	*	40.3 (4.87)	56.8 (4.65)

See footnotes at end of table.

Table XIV. Percentages (and standard errors) of persons under age 65 who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group, state Health Insurance Marketplace type, and year: United States, 2010–March 2018—Con.

Age group, state Health Insurance Marketplace type, and year	Uninsured ¹ at time of interview	Public health plan coverage ²	Private health insurance coverage ³
0–17 years—Con.			
Federally Facilitated Marketplace states⁶			
2010	9.2 (0.48)	40.7 (0.91)	51.3 (0.97)
2011	8.0 (0.40)	41.4 (0.93)	51.8 (1.01)
2012	7.9 (0.41)	42.7 (1.00)	50.8 (0.98)
2013	7.5 (0.39)	42.6 (1.02)	51.3 (1.11)
2014	6.6 (0.41)	42.6 (0.94)	52.0 (1.00)
2015	5.3 (0.35)	42.4 (1.06)	53.6 (1.04)
2016	6.6 (0.45)	43.6 (0.87)	51.5 (0.97)
2017	6.8 (0.66)	41.5 (0.96)	52.9 (0.81)
2018 (Jan–Mar)	5.7 (0.70)	42.7 (1.88)	52.6 (1.75)
18–64 years			
State-based Marketplace states⁴			
2010	19.9 (0.52)	15.3 (0.48)	65.9 (0.68)
2011	19.5 (0.53)	17.1 (0.52)	64.7 (0.75)
2012	18.8 (0.50)	17.7 (0.49)	64.7 (0.69)
2013	18.7 (0.60)	18.4 (0.52)	64.1 (0.80)
2014	13.6 (0.45)	20.6 (0.57)	67.0 (0.75)
2015	9.4 (0.37)	22.9 (0.69)	68.9 (0.81)
2016	8.6 (0.30)	23.4 (0.58)	69.5 (0.58)
2017	8.7 (0.45)	23.2 (0.58)	69.5 (0.79)
2018 (Jan–Mar)	7.9 (0.76)	23.6 (0.91)	70.0 (1.14)
Partnership Marketplace states⁵			
2010	18.9 (1.12)	15.3 (0.90)	67.6 (1.59)
2011	18.4 (0.92)	15.9 (0.87)	67.1 (1.52)
2012	18.1 (0.85)	13.9 (0.79)	69.3 (1.36)
2013	17.9 (0.98)	15.7 (0.91)	68.0 (1.29)
2014	12.8 (0.68)	18.2 (0.98)	70.5 (1.22)
2015	9.4 (0.74)	20.8 (0.95)	71.5 (1.26)
2016	8.8 (0.59)	21.3 (0.88)	71.8 (1.41)
2017	8.9 (0.81)	19.6 (0.84)	73.3 (1.20)
2018 (Jan–Mar)	6.9 (0.81)	20.6 (1.40)	74.6 (1.67)
Federally Facilitated Marketplace states⁶			
2010	24.5 (0.56)	14.7 (0.43)	62.2 (0.66)
2011	23.0 (0.54)	15.1 (0.39)	63.3 (0.64)
2012	22.8 (0.48)	16.1 (0.41)	62.7 (0.61)
2013	22.0 (0.54)	15.9 (0.41)	63.6 (0.64)
2014	18.6 (0.49)	15.8 (0.41)	66.9 (0.63)
2015	15.7 (0.42)	16.0 (0.43)	69.9 (0.57)
2016	15.7 (0.54)	17.4 (0.46)	68.5 (0.63)
2017	16.2 (0.38)	16.7 (0.42)	68.4 (0.55)
2018 (Jan–Mar)	16.3 (0.70)	16.3 (0.69)	69.2 (0.90)

¹Estimate is not shown, as it does not meet standards of reliability or precision.

²A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children’s Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

³Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

⁴Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

⁵State-based Marketplace states include: CA, CO, CT, DC, HI, ID, KY, MD, MA, MN, NV, NM, NY, OR, RI, VT, and WA (as of October 31, 2013).

⁶Partnership Marketplace states include: AR, DE, IL, IA, MI, NH, and WV (as of October 31, 2013).

⁷Federally Facilitated Marketplace states include: AL, AK, AZ, FL, GA, IN, KS, LA, ME, MS, MO, MT, NE, NJ, NC, ND, OH, OK, PA, SC, SD, TN, TX, UT, VA, WI, and WY (as of October 31, 2013).

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2010–2018, Family Core component.

Table XV. Percentages (and standard errors) of persons who lacked health insurance coverage, had public health plan coverage, and had private health insurance coverage at the time of interview, by age group and expanded region: United States, January–March 2018

Age group and expanded region ¹	Uninsured ² at time of interview	Public health plan coverage ³	Private health insurance coverage ⁴
All ages			
All regions	8.8 (0.36)	36.6 (0.59)	63.1 (0.73)
New England	3.0 (0.63)	38.3 (3.33)	69.3 (3.09)
Middle Atlantic	5.7 (0.84)	37.4 (2.18)	66.3 (2.21)
East North Central	7.0 (0.76)	35.8 (1.24)	67.8 (2.18)
West North Central	8.5 (1.88)	32.9 (1.51)	68.7 (2.25)
South Atlantic	10.9 (0.71)	36.4 (1.54)	61.8 (1.51)
East South Central	11.2 (1.47)	43.3 (2.08)	53.8 (2.81)
West South Central	16.4 (1.42)	33.7 (1.32)	56.0 (2.09)
Mountain	9.6 (0.85)	34.3 (2.35)	62.7 (2.64)
Pacific	5.7 (0.97)	38.8 (1.44)	62.1 (1.70)
Under 65 years			
All regions	10.3 (0.42)	25.4 (0.69)	65.8 (0.80)
New England	3.6 (0.83)	26.2 (3.52)	73.1 (3.49)
Middle Atlantic	6.8 (1.05)	26.3 (2.87)	68.3 (2.54)
East North Central	8.2 (0.82)	24.0 (1.18)	69.0 (1.84)
West North Central	10.1 (2.19)	20.9 (1.36)	70.6 (2.93)
South Atlantic	12.8 (0.90)	23.9 (1.72)	65.3 (1.79)
East South Central	13.9 (1.85)	29.7 (1.71)	57.7 (2.57)
West South Central	18.8 (1.65)	24.3 (1.52)	58.1 (2.02)
Mountain	11.0 (0.98)	24.3 (2.75)	66.5 (2.87)
Pacific	6.7 (1.06)	29.2 (1.50)	65.6 (2.18)
0–17 years			
All regions	4.6 (0.44)	41.9 (1.36)	54.6 (1.34)
New England	0.4 (0.38)	34.3 (7.25)	68.8 (5.87)
Middle Atlantic	*	43.7 (5.16)	53.8 (4.71)
East North Central	3.5 (0.73)	38.4 (2.95)	59.3 (2.22)
West North Central	*	37.4 (2.75)	59.2 (3.06)
South Atlantic	4.4 (0.95)	42.0 (3.50)	53.8 (3.19)
East South Central	*	53.1 (3.76)	41.3 (5.05)
West South Central	8.4 (1.29)	47.7 (2.89)	44.6 (2.95)
Mountain	7.6 (1.64)	34.0 (2.55)	60.5 (3.29)
Pacific	2.4 (0.74)	43.2 (4.10)	55.6 (4.33)
18–64 years			
All regions	12.5 (0.52)	19.2 (0.52)	70.0 (0.69)
New England	4.9 (1.02)	23.1 (2.47)	74.7 (2.72)
Middle Atlantic	8.1 (1.36)	19.8 (1.43)	73.7 (1.73)
East North Central	9.9 (1.29)	18.9 (0.89)	72.5 (1.97)
West North Central	12.0 (2.41)	15.0 (1.40)	74.8 (3.38)
South Atlantic	16.0 (1.04)	17.0 (1.12)	69.6 (1.36)
East South Central	16.1 (2.17)	21.9 (1.81)	63.3 (1.95)
West South Central	23.0 (1.78)	14.7 (1.48)	63.6 (2.11)
Mountain	12.4 (1.15)	20.2 (3.05)	68.9 (2.90)
Pacific	8.2 (1.37)	24.1 (1.09)	69.2 (1.53)

*Estimate is not shown, as it does not meet standards of reliability or precision.

¹The New England region includes: CT, ME, MA, NH, RI, and VT. The Middle Atlantic region includes: DE, DC, MD, NJ, NY, and PA. The East North Central region includes: IL, IN, MI, OH, and WI. The West North Central region includes: IA, KS, MN, MO, NE, ND, and SD. The South Atlantic region includes: FL, GA, NC, SC, VA, and WV. The East South Central region includes: AL, KY, MS, and TN. The West South Central region includes: AR, LA, OK, and TX. The Mountain region includes: AZ, CO, ID, MT, NV, NM, UT, and WY. The Pacific region includes: AK, CA, HI, OR, and WA.

²A person was defined as uninsured if he or she did not have any private health insurance, Medicare, Medicaid, Children's Health Insurance Program (CHIP), state-sponsored or other government-sponsored health plan, or military plan. A person was also defined as uninsured if he or she had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

³Includes Medicaid, CHIP, state-sponsored or other government-sponsored health plan, Medicare, and military plans. A small number of persons were covered by both public and private plans and were included in both categories.

⁴Includes any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care. A small number of persons were covered by both public and private plans and were included in both categories.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

SOURCE: NCHS, National Health Interview Survey, 2018, Family Core component.

High-deductible Health Plan Enrollment Among Adults Aged 18–64 With Employment-based Insurance Coverage

Robin A. Cohen, Ph.D., and Emily P. Zammitti, M.P.H.

Key findings

Data from the National Health Interview Survey

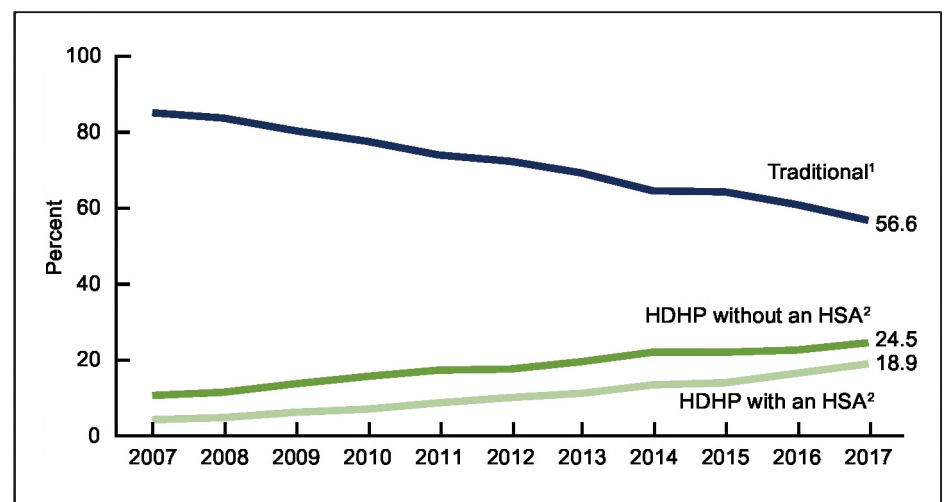
- From 2007 through 2017, enrollment in high-deductible health plans (HDHPs) with a health savings account (HSA) (4.2% to 18.9%) and without an HSA (10.6% to 24.5%) increased among adults aged 18–64 with employment-based coverage, while enrollment in traditional plans decreased.
- In 2017, among adults aged 18–64 with employment-based coverage, there were no differences in the types of health insurance plan by sex.
- Enrollment in an HDHP with an HSA was higher among adults aged 30–44 (21.0%) than among those aged 18–29 (16.8%) and 45–64 (18.4%).
- Enrollment in HDHPs with an HSA increased with increasing family income level and educational attainment, whereas the percentage enrolled in traditional plans and HDHPs without an HSA decreased.

High-deductible health plans (HDHPs) are health insurance policies with higher deductibles than traditional insurance plans. Individuals with HDHPs pay lower monthly insurance premiums but pay more out of pocket for medical expenses until their deductible is met. An HDHP may be used with or without a health savings account (HSA). An HSA allows pretax income to be saved to help pay for the higher costs associated with an HDHP (1). This report examines enrollment among adults aged 18–64 with employment-based private health insurance coverage by plan type and demographic characteristics. Approximately 60% of adults aged 18–64 have employment-based coverage (2). All estimates in this report are based on data from the National Health Interview Survey (NHIS).

Keywords: health insurance • private plan • National Health Interview Survey

Among adults aged 18–64 with employment-based coverage, the type of coverage has changed over the past decade.

Figure 1. Percentage of adults aged 18–64 with employment-based coverage, by type of private coverage and year: United States, 2007–2017



¹Significant linear decrease from 2007 through 2017 ($p < 0.05$).

²Significant linear increase from 2007 through 2017 ($p < 0.05$).

NOTES: HDHP is a high-deductible health plan. HSA is a health savings account. Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Due to rounding, percentages may not add up to 100 within each year. Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db317_table.pdf#1.

SOURCE: NCHS, National Health Interview Survey, 2007–2017.

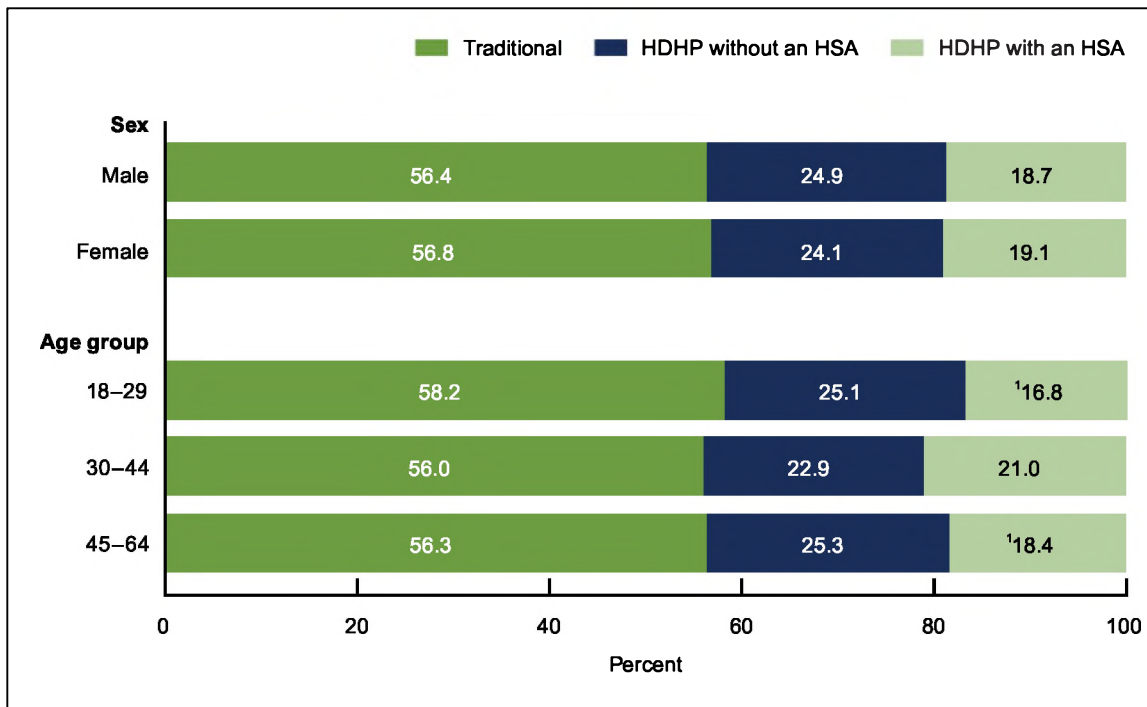


- Among adults aged 18–64 with employment-based coverage, the percentage enrolled in a traditional plan decreased from 85.1% in 2007 to 56.6% in 2017 (Figure 1).
- The percentage enrolled in an HDHP without an HSA increased from 10.6% in 2007 to 24.5% in 2017 among adults aged 18–64 with employment-based coverage.
- Among adults aged 18–64 with employment-based coverage, the percentage enrolled in an HDHP with an HSA increased from 4.2% in 2007 to 18.9% in 2017.

Among adults aged 18–64 with employment-based coverage, enrollment in plan type varied by age but not by sex.

- Among adults aged 18–64 with employment-based coverage, there was no difference in the type of health insurance plan by sex (Figure 2).
- Among adults aged 18–64 with employment-based coverage, those aged 18–29 (16.8%) and 45–64 (18.4%) were less likely to be enrolled in an HDHP with an HSA than those aged 30–44 (21.0%). There were no differences by age in the percentages enrolled in an HDHP without an HSA or in a traditional plan.

Figure 2. Percent distribution of adults aged 18–64 with employment-based coverage, by sex, age group, and type of private coverage: United States, 2017

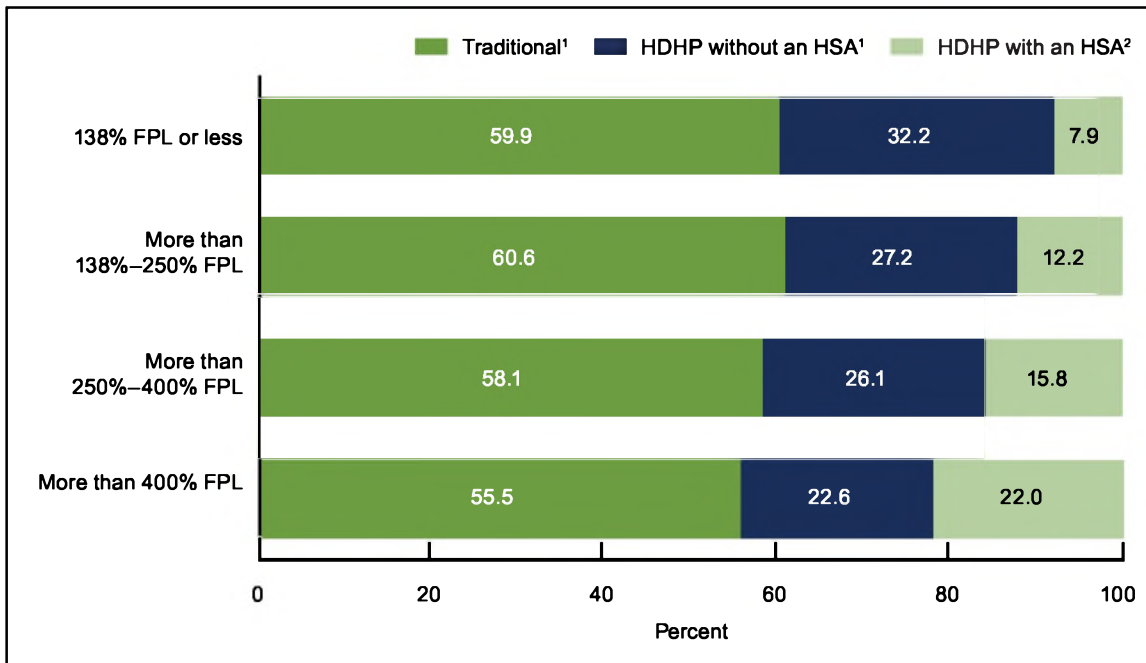


¹Significantly different from those aged 30–44 ($p < 0.05$)
 NOTES: HDHP is a high-deductible health plan. HSA is a health savings account. Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Due to rounding, percentages may not add up to 100 within each sex and age group category. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db317_table.pdf#2
 SOURCE: NCHS, National Health Interview Survey, 2017.

As family income level increased, enrollment in HDHPs with an HSA increased, while enrollment in HDHPs without an HSA decreased.

- In 2017, among adults aged 18–64 with employment-based coverage, enrollment in traditional plans decreased with increasing family income, from 59.9% among those with incomes of 138% of the federal poverty level (FPL) or less to 55.5% among those with incomes greater than 400% FPL (Figure 3).
- Enrollment in HDHPs without an HSA decreased from 32.2% among those with incomes of 138% FPL or less to 22.6% among those with incomes greater than 400% FPL.
- Enrollment in HDHPs with an HSA increased from 7.9% among those with incomes of 138% FPL or less to 22.0% among those with incomes greater than 400% FPL.

Figure 3. Percent distribution of adults aged 18–64 with employment-based coverage, by family income and type of private coverage: United States, 2017



¹Significant linear decrease with increasing family income level ($p < 0.05$).

²Significant linear increase with increasing family income level ($p < 0.05$).

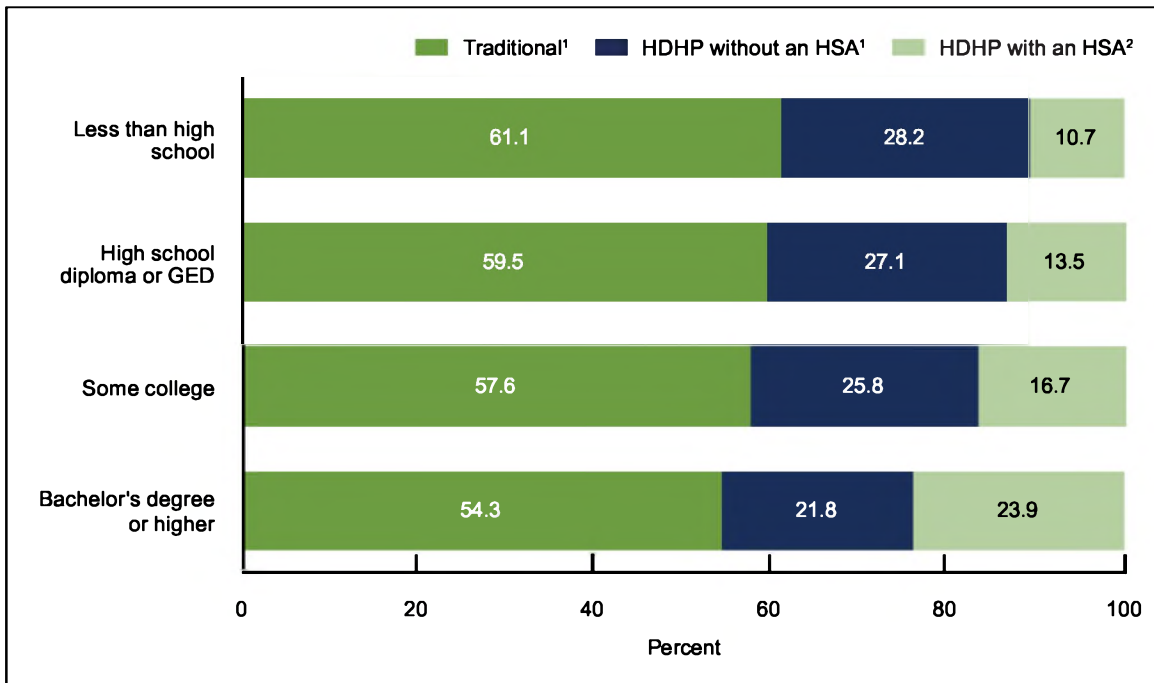
NOTES: HDHP is a high-deductible health plan. HSA is a health savings account. FPL is federal poverty level, which is based on the ratio of the family's income in the previous calendar year to the appropriate poverty threshold as defined by the U.S. Census Bureau. Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Due to rounding, percentages may not add up to 100 within each family income level. Access data table for Figure 3 at: https://www.cdc.gov/nchs/data/databriefs/db317_table.pdf#3

SOURCE: NCHS, National Health Interview Survey, 2017.

As educational attainment increased, enrollment in HDHPs with an HSA increased, while enrollment in traditional plans and HDHPs without an HSA decreased.

- In 2017, among adults aged 18–64 with employment-based coverage, enrollment in traditional plans decreased from 61.1% among those with less than a high school education to 54.3% among those with a bachelor’s degree or higher (Figure 4).
- Enrollment in HDHPs without an HSA decreased with increasing educational attainment, from 28.2% among those with less than a high school education to 21.8% among those with a bachelor’s degree or higher.
- Enrollment in HDHPs with an HSA increased with increasing educational attainment, from 10.7% among those with less than a high school education to 23.9% among those with a bachelor’s degree or higher.

Figure 4. Percent distribution of adults aged 18–64 with employment-based coverage, by educational attainment and type of private coverage: United States, 2017



¹Significant linear decrease with increasing educational attainment ($p < 0.05$).

²Significant linear increase with increasing educational attainment ($p < 0.05$).

NOTES: HDHP is a high-deductible health plan. HSA is a health savings account. Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. Due to rounding, percentages may not add up to 100 in each educational attainment category. Access data table for Figure 4 at: https://www.cdc.gov/nchs/data/databriefs/db317_table.pdf#4

SOURCE: NCHS, National Health Interview Survey, 2017.

Summary

Enrollment in HDHPs with and without HSAs among adults aged 18–64 with employment-based coverage increased from 2007 through 2017. Sociodemographic and socioeconomic factors were associated with enrollment in HDHPs with and without HSAs among adults aged 18–64 with employment-based coverage. In 2017, adults aged 30–44 were more likely to be enrolled in an HDHP with an HSA than those aged 18–29 and 45–64. However, no differences by age were observed for enrollment in HDHPs without an HSA or traditional plans. More highly educated and affluent adults were more likely to be enrolled in an HDHP with an HSA and less likely to be enrolled in a traditional plan or an HDHP without an HSA than their less educated and less affluent counterparts.

More than 60% of adults aged 18–64 in the United States obtain their private health insurance coverage through the workplace (2). The change in HDHP enrollment has been faster among those with employment-based coverage than among those with directly purchased coverage (3). NHIS will continue to monitor the different types of private health insurance, and NHIS data can be used to examine further differences according to plan type.

Definitions

Employment-based coverage: Private insurance originally obtained through a present or former employer, union, or professional association.

Family income level: Categories are based on the ratio of the family's income in the previous calendar year to the appropriate poverty threshold (given the family's size and number of children), as defined by the U.S. Census Bureau.

Health savings account (HSA): A tax-advantaged account or fund that can be used to pay medical expenses. HSAs may only be used by those with an HDHP. These plans are also referred to as consumer-directed health plans. The funds contributed to the account are not subject to federal income tax at the time of deposit. HSA funds roll over and accumulate from year to year if not spent. HSAs are owned by the individual. Funds may be used to pay qualified medical expenses at any time without federal tax liability. HSAs may also be referred to as health reimbursement accounts, personal care accounts, personal medical funds, or choice funds. The term "HSA" in this report includes accounts that use these alternative names. These accounts differ from flexible spending accounts (FSAs). FSAs are accounts offered by some employers to allow employees to set aside pretax dollars of their own money for their use throughout the year to reimburse themselves for their out-of-pocket expenses for health care. With this type of account, any money remaining in the account at the end of the year, following a short grace period, is lost to the employee. Some FSAs allow a small amount of the money to roll over into the next calendar year.

High-deductible health plan (HDHP): For persons with private health insurance, a question was asked regarding the annual deductible of each private health insurance plan. HDHP was defined in 2015 through 2017 as a private health plan with a deductible of at least \$1,300 for self-only coverage and \$2,600 for family coverage. The deductible is adjusted annually for inflation. For 2013 and 2014, the annual deductible was \$1,250 for self-only coverage and \$2,500 for family coverage. For 2010 through 2012, the annual deductible was \$1,200 for self-only coverage and \$2,400 for family coverage. For 2009, the annual deductible was \$1,150 for self-only coverage

and \$2,300 for family coverage. For 2007 and 2008, the annual deductible was \$1,100 for self-only coverage and \$2,200 for family coverage.

Private health insurance: Includes persons who had any comprehensive private insurance plan (including health maintenance and preferred provider organizations). These plans include those obtained through an employer, purchased directly, purchased through local or community programs, or purchased through the Health Insurance Marketplace or a state-based exchange. Private coverage excludes plans that pay for only one type of service, such as accidents or dental care.

Traditional health plan: For persons with private health insurance, a question was asked regarding the annual deductible of each private health insurance plan. A traditional plan was defined as a private health plan with an annual deductible less than the HDHP threshold for the given year.

Data source and methods

NHIS is a nationally representative survey of the civilian noninstitutionalized U.S. population that is conducted continuously throughout the year by the National Center for Health Statistics (NCHS). NHIS is an in-person interview conducted in the respondent's home. In some instances, follow-up to complete the interview is conducted via telephone.

NHIS is designed to yield a nationally representative sample, and these analyses used weights to produce national estimates that are representative of the civilian noninstitutionalized population of the United States. Point estimates and the corresponding variances were calculated using SUDAAN software (4) to account for the complex sample design of NHIS. All estimates in this report meet NCHS standards of reliability as specified in "National Center for Health Statistics Data Presentation Standards for Proportions" (5). Linear trends by year, family income level, and educational attainment were evaluated using logistic regression. Differences between percentages were evaluated using two-sided significance tests at the 0.05 level.

Data analysis for 2017 was based on information collected on 46,688 adults aged 18–64 in the NHIS Family Core component. Visit the NHIS website at: <https://www.cdc.gov/nchs/nhis.htm> for more information about the design, content, and use of NHIS.

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