The ACA's Medicaid Expansion: A Review of Ineligible Enrollees and Improper Payments

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ABSTRACT

Enrollment in state-optional Medicaid expansions has significantly exceeded even the most optimistic forecasts. The open-ended federal financing of new adult Medicaid enrollees at elevated match rates—in excess of 90 percent—creates incentives for states and healthcare providers to improperly enroll new beneficiaries and inadequately monitor costs and eligibility. Several sources find that many states have done a poor job ensuring Medicaid enrollment only of those who meet eligibility requirements. First, several federal audits find massive problems with both incomplete and incompetent reviews and large-scale improper eligibility determinations. We summarize recent work that estimates causal effects of Medicaid expansions on enrollment. Using the publicly available American Community Survey, we demonstrate large increases in potentially improper enrollment from 2012 to 2017 in many expansion states across the United States. The evidence points to egregious eligibility errors in many states, including Arkansas, California, Colorado, Kentucky, Louisiana, Montana, New Mexico, New York, Oregon, Rhode Island, Washington, and West Virginia. Other expansion states have had much lower rates of improper enrollment. We offer recommendations to Congress, the Centers for Medicare and Medicaid Services, and the Congressional Budget Office on ways to confront improper enrollment in Medicaid, including both fundamental reform of program financing and meaningful federal oversight.

JEL codes: I1, I3, H7, H3, H5

Keywords: Medicaid, Medicaid improper payments, Affordable Care Act, Medicaid Expansion, Medicaid eligibility

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Improper payments in Medicaid—the joint federal and state welfare program to cover healthcare and long-term care services—have been a significant concern for decades,[1] and the substantial changes brought about by the Affordable Care Act (ACA) have exacerbated the problem. The ACA has resulted in millions of new enrollees in the Medicaid program. Before the ACA took effect, states received payments from the federal government to cover eligible enrollees, generally low-income children, pregnant women, adult caretakers, disabled individuals, and seniors. The payments were open-ended and a function of state per capita income: the federal government reimbursed half of the cost in wealthier states and about three-quarters of the cost in poorer states. As a result of this financing structure, states had diminished incentives to be judicious with program expenditures. The financing structure also resulted in creative state financing techniques that often gave the appearance of expenditures but were just accounting tricks used in order to maximize federal reimbursement.[2]

The ACA created another category of enrollees—the newly eligible Medicaid expansion group. For this population, states received a much higher federal reimbursement rate—equal to 100 percent from 2014 to 2016, gradually declining to 90 percent in 2020, where it is scheduled to remain. States make most of the critical decisions about Medicaid. They oversee eligibility and set payment rates. The financing structure for the Medicaid expansion presents states with incentives to classify individuals—both those already eligible for Medicaid under previous criteria and those formerly ineligible for Medicaid—as newly

1. The Government Accountability Office (GAO) designated Medicaid as a high-risk program in 2003. According to GAO, "The size, growth, and diversity of the joint federal-state Medicaid program present oversight challenges. . . . Since [2003], we have made more than 270 recommendations related to the program." GAO, "High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas" (GAO-19-157SP, Report to Congressional Committees, March 2019), 250.
2. Teresa A. Coughlin, Stephen Zuckerman, and Joshua McFeeters, "Restoring Fiscal Integrity to Medicaid Financing?," *Health Affairs* 26, no. 5 (2007); Brian C. Blase, "Medicaid Provider Taxes: The Gimmick That Exposes Flaws with Medicaid's Financing" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, 2016).

eligible. Additionally, healthcare interest groups in the states, such as hospitals and insurers offering Medicaid managed care, generally benefit from maximizing Medicaid enrollment, particularly at the elevated rate. Insurers, in particular, have reaped large profits from the Medicaid expansion—profitability that may be driven by receiving large monthly payments from the government for people who use little, if any, healthcare services.[3]

Of the two potential Medicaid program integrity concerns related to enrollment, this paper addresses the issue of the enrollment of individuals who have income above Medicaid's eligibility threshold. We generally find robust evidence that many Medicaid enrollees have income that exceeds eligibility thresholds. Unsurprisingly, the high degree of improper enrollment is overwhelmingly concentrated in states that adopted the Medicaid expansion, although there is significant variation across states—evidence that different states have enforced income-related eligibility rules to much different degrees. Previous work by University of Pennsylvania economics doctoral student Molly Frean, MIT economist Jonathan Gruber, and Harvard economist Benjamin D. Sommers, using the Census Bureau's American Community Survey, found that most initial enrollees in the Medicaid expansion were previously eligible for Medicaid.[4] Some of these individuals were misclassified as newly eligible enrollees, although the extent of the misclassification is unclear.[5]

States that expanded Medicaid also experienced much more robust Medicaid enrollment than they expected. California, for example, enrolled nearly four times as many people as expected.[6]

Three separate pieces of evidence show that the magnitude of improper Medicaid enrollment in the aftermath of the ACA's Medicaid expansion is substantial. First, the Department of Health and Human Services (HHS) Office of the Inspector General (OIG) conducted seven audits in 2014 and 2015 within four states (California, Colorado, Kentucky, and New York) and has found large numbers of both ineligible and potentially ineligible Medicaid enrollees. To provide some context, one audit found that 65 of 125 sampled enrollees in California's Medicaid program were either improperly enrolled or potentially improperly

3. Council of Economic Advisers, *The Profitability of Health Insurance Companies*, March 2018.
4. Molly Frean, Jonathan Gruber, and Benjamin D. Sommers, "Disentangling the ACA's Coverage Effects—Lessons for Policymakers," *New England Journal of Medicine* 375 (October 2016).
5. Brian Blase, "New Gruber Study Raises Major Questions about Obamacare's Medicaid Expansion," *Forbes*, November 27, 2016.
6. Jonathan Ingram and Nicholas Horton, "ObamaCare Expansion Enrollment Is Shattering Projections: Taxpayers and the Truly Needy Will Pay the Price" (Foundation for Accountable Government, Naples, FL, November 16, 2016), 3.

enrolled.[7] The OIG classifies enrollees as potentially ineligible if the case file does not contain enough information to make an eligibility determination. Systemic errors include neglecting to obtain proper documentation; failing to properly verify income eligibility; misclassifying individuals, including into the newly eligible category; and failing to properly verify citizenship. State audits in Louisiana and Oregon also showed significant problems with how those states were conducting eligibility reviews for Medicaid.

Second, eligibility audits that restarted in 2019 by the Centers for Medicare and Medicaid Services (CMS), after being canceled from fiscal years 2014 through 2017 by the Obama administration, show significant problems in how states are conducting eligibility reviews.[8] On November 18, 2019, CMS released a report estimating a national improper payment rate for Medicaid in fiscal year (FY) 2019 of $57.36 billion, or 14.9 percent of federal expenditures.[9] These amounts jumped from $36.25 billion and 9.79 percent in FY 2018. In fact, since the improper payment rate reported is a three-year rolling average and the FY 2019 report contains two years of audits that did not assess eligibility, the true improper payment rate in FY 2019 was likely in excess of 20 percent of program spending, or more than $75 billion.[10] According to CMS, the increase in improper payments is "driven by high levels of observed eligibility errors."[11]

> Some of the most consistent findings included states maintaining insufficient documentation to substantiate that income and other information was appropriately verified, failures to conduct timely and appropriate annual redeterminations, and claiming beneficiaries under incorrect eligibility categories that provide a higher federal matching rate than was appropriate. Eligibility errors of this nature are particularly concerning as it can indicate that individuals are allowed to remain enrolled in the program

7. OIG, *California Made Medicaid Payments on Behalf of Non–Newly Eligible Beneficiaries Who Did Not Meet Federal and State Requirements*, December 2018.
8. Centers for Medicare and Medicaid Services, "2019 Estimated Improper Payment Rates for Centers for Medicare & Medicaid Services (CMS) Programs," CMS Fact Sheet, November 18, 2019, https://www.cms.gov/newsroom/fact-sheets/2019-estimated-improper-payment-rates-centers-medicare-medicaid-services-cms-programs.
9. Centers for Medicare and Medicaid Services, "2019 Estimated Improper Payment Rates for Centers for Medicare & Medicaid Services (CMS) Programs."
10. Aaron Yelowitz and Brian Blase, "Medicaid Improper Payments Are Much Worse Than Reported," *Cato at Liberty*, November 20, 2019.
11. Centers for Medicare and Medicaid Services, "Fiscal Year (FY) 2019 Medicare Fee-for-Service Improper Payment Rate Is Lowest since 2010 While Data Points to Concerns with Medicaid Eligibility" (press release, November 19, 2019).

during times in which they do not qualify, potentially diverting limited resources that could otherwise be invested in better serving vulnerable populations.[12]

Finally, population-level survey data matching health insurance coverage with income shows a sizable increase in Medicaid enrollment among people making more than 138 percent of the federal poverty level (FPL).[13] In nine expansion states, Medicaid enrollment by working-age adults with incomes above 138 percent of the FPL rose by 3.0 percentage points (from 2.7 percent to 5.7 percent, an increase of 111 percent of the base rate in 2012–2013, before the expansion). Medicaid enrollment by working-age adults with income above 138 percent of the FPL increased over time—it was more than twice as large in 2017 (3.7 percentage points) as in 2014 (1.5 percentage points).

The new data analysis in this paper shows that Medicaid enrollment of working-age adults who report having annual income above eligibility thresholds varied significantly across the country. The nine states with the largest percentage point change in Medicaid enrollment of adults with income above 138 percent of the FPL (New Mexico, California, Kentucky, Rhode Island, West Virginia, Oregon, Washington, Arkansas, and Colorado) all experienced a more than doubling of the percentage enrolled in Medicaid. There are some areas, such as New York City and Los Angeles, where the problem is so egregious that it may be a sign of purposeful abuse of the program rules and potentially of fraud. The analysis cuts the data in numerous ways to demonstrate the robustness of the conclusion that improper Medicaid enrollment in many states is large and has grown over time.

Congress and CMS should take steps to address the problem of improper Medicaid enrollment. Although the political bar is high, Congress should pass legislation to fundamentally reform the Medicaid program so that states have proper incentives to spend taxpayer money judiciously. The most responsibility for dealing with improper Medicaid enrollment falls on CMS—an agency that since the ACA was enacted has failed to prioritize program integrity. CMS needs to make appropriate recoveries on behalf of federal taxpayers; place additional requirements on how states conduct eligibility determinations and ensure that those requirements are followed; and require eligibility redeterminations in states, and in particular hot-spot areas within states, where the problem is espe-

12. Centers for Medicare and Medicaid Services, "Fiscal Year (FY) 2019 Medicare Fee-for-Service Improper Payment Rate Is Lowest since 2010."
13. Charles J. Courtemanche, James Marton, and Aaron Yelowitz, "Medicaid Coverage across the Income Distribution under the Affordable Care Act" (NBER Working Paper No. 26145, National Bureau of Economic Research, Cambridge, MA, August 2019), 5.

cially egregious. The Congressional Budget Office (CBO) can help Congress in its work by properly assessing the data and by learning from the numerous government audits in order to incorporate the extent of improper Medicaid enrollment into its baseline. Unfortunately, CBO failed to appreciate the powerful incentive that states face, owing to the elevated reimbursement rate, to bring as much under the expansion umbrella as possible.

This paper first lays out the background of the ACA's Medicaid expansion and explains the incentives that the elevated reimbursement rate creates for states regarding the expansion population. It then discusses evidence of improper enrollment—enrollment far in excess of expectations, government audits showing problems with states' eligibility processes, and population survey data demonstrating that many people with income above eligibility thresholds gained Medicaid enrollment by 2017. The paper then reviews the key contribution from our research—the variation of improper Medicaid enrollment across states and localities, with a focus on the "hot spots" where the growth in Medicaid enrollment among those with income above the eligibility thresholds has been most significant. The paper concludes with recommendations for Congress, CMS, and CBO on how to address the problem of improper Medicaid enrollment.

BACKGROUND ON THE EXPANSION

In a September 2016 paper for the Mercatus Center at George Mason University, one of us (Brian Blase) wrote about the problematic incentives created by Medicaid's financing structure, including the elevated reimbursement rate for the expansion population, as well as about evidence that both expansion enrollment and spending were far above expectations:[14]

> Before the ACA's expansion of the program, Medicaid was primarily used by seniors and the disabled to finance healthcare and long-term care expenses and also by lower-income children and their mothers as well as pregnant women to finance healthcare expenses. . . .[15]
>
> The ACA significantly expanded Medicaid eligibility to include nondisabled, working-age adults with income below 138 percent of the FPL. It also created a much higher federal

14. Brian C. Blase, "Evidence Is Mounting: The Affordable Care Act Has Worsened Medicaid's Structural Problems" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, September 2016), 17, 19.
15. Blase, "Evidence Is Mounting," 3.

> reimbursement rate for this expansion population relative to the rate for traditional Medicaid populations. If states adopted the expansion, the federal government would reimburse states for 100 percent of state spending on expansion enrollees—those enrollees with income between 138 percent of the FPL and the state's previous eligibility thresholds—from 2014 through 2016. The federal share phases down to 90 percent in 2020, where it is scheduled to remain in perpetuity.[16]

The Supreme Court made Medicaid expansion optional for states,[17] but the federal government's large financial inducements have led 36 states and the District of Columbia to adopt the expansion thus far.[18]

According to the ACA, states are only entitled to receive the elevated reimbursement rate for people with income below 138 percent of the FPL who do not meet the requirements to be eligible under another category.[19] States determine whether applicants are eligible.

INCENTIVES FROM THE EXPANSION'S ELEVATED REIMBURSEMENT RATE

In his 2016 Mercatus paper, Blase argued that the open-ended federal reimbursement of state Medicaid expenditures "produces substantial spending and lessens the incentive of both the states and the federal government to ensure that the spending provides adequate value":[20]

16. Blase, 5.
17. In a 7–2 decision in June 2012, the Supreme Court ruled that the ACA Medicaid expansion, which threatened all existing federal Medicaid funding if states did not expand, was unconstitutional. In the opinion, Chief Justice Roberts stated, "In this case, the financial 'inducement' Congress has chosen is much more than 'relatively mild encouragement'—it is a gun to the head." National Federation of Independent Business et al. v. Sebelius, 567 U.S. 519, 581 (2012).
18. The following states have not expanded their Medicaid programs: Alabama, Florida, Georgia, Kansas, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Wisconsin, and Wyoming.
19. Before the ACA's Medicaid expansion, some adults were "categorically eligible" if they met criteria such as pregnancy, disability, or having a child in addition to having low income. The ACA defines a "newly eligible" beneficiary as "an individual who is not under 19 years of age (or such higher age as the State may have elected) and who, on the date of enactment of the [ACA], is not eligible under the State plan or under a waiver of the plan for full benefits or for benchmark coverage." Patient Protection and Affordable Care Act, 42 U.S.C. § 13966 (2010); Social Security Act § 1905(y)(2)(A).
20. Blase, "Evidence Is Mounting," 7.

> The traditional federal financing structure makes Medicaid spending relatively cheaper than other areas of state spending, and it incentivizes states to spend additional amounts on Medicaid, as $1 of state funds brings between $1 and $3 of federal funds. The exact rate—dubbed the federal medical assistance percentage (FMAP)—varies inversely with state per capita income. The open-ended reimbursement also presents states with an incentive to artificially inflate Medicaid expenditures through schemes like provider taxes in order to increase federal funds received by the state. As an illustration, Oregon state representative Mitch Greenlick referred to provider taxes as a "dream tax" for states, declaring, "We collect the tax from the hospitals, we put it up as a match for federal money, and then we give it back to the hospitals."[21] . . .
>
> An additional unfortunate effect of Medicaid's open-ended matching grant structure is to discourage both states and the federal government from conducting effective program oversight. As an illustration of the disincentive for states, a state with a 60 percent federal match rate only receives $1 in savings for every $2.50 it identifies in wasteful spending.[22]

The ACA's Medicaid expansion exacerbated the incentives for careless spending because the elevated reimbursement rate provides states with little, if any, incentive to be cost conscious with respect to the expansion population or to ensure they are making lawful claims on the US Treasury for Medicaid expenditures:

> The elevated match rate presents states with incentives to (1) boost ACA Medicaid enrollment and to categorize Medicaid enrollees as ACA expansion enrollees and (2) create high fees for services commonly used by expansion enrollees as well as high capitated payment rates for the insurers participating in the state's Medicaid managed care program. The healthcare interest groups within the states, particularly hospitals and insurers,

21. Blase, "Evidence Is Mounting," 8; quoting Peter Wong, "Oregon House Extends Hospital Tax," *Portland Tribune*, March 11, 2015.
22. Blase, "Evidence Is Mounting," 10.

> benefit from the higher enrollment and the higher rates with the large costs overwhelmingly dispersed to federal taxpayers.[23] . . .
>
> Although the reimbursement rate declines after 2016, it is scheduled to remain at 90 percent or above indefinitely, and state financing gimmicks such as provider taxes or intergovernmental transfers mean that the effective federal reimbursement rate will be several percentage points higher than the statutory amount. States will likely be minimally more cost conscious when the rate declines only slightly.[24] . . .
>
> The enhanced reimbursement rate has also led to more calls from policymakers to view Medicaid as an engine for economic stimulus instead of as a welfare program. For example, the Obama administration has prioritized Medicaid expansion, aggressively promoting it as in states' financial interests.[25]

Blase quotes the White House Council of Economic Advisers: "By expanding Medicaid, States can pull billions in additional Federal funding into their economies every year, with no State contribution over the next three years and only a modest one thereafter for coverage of newly eligible people."[26]

ENROLLMENT MUCH HIGHER THAN EXPECTED

By the summer of 2015, expansion states had experienced significantly higher enrollment and spending than had been expected. Initial enrollment in Kentucky and Washington State was more than double what was projected. In California, initial enrollment was nearly three times what was projected. The Associated Press also reported that enrollment numbers in Michigan, New Mexico, Ohio, and Oregon were all well above expectations.[27]

In December 2016, the Foundation for Government Accountability released a study comparing the high-end enrollment projections of the 24 states

23. Blase, 20.
24. Blase, 21. The "intergovernmental transfers" referenced here are "payments from local government entities, often Medicaid providers such as county nursing homes or state university hospitals, to the state government." Blase, 4.
25. Blase, 23.
26. Blase, 23; quoting Council of Economic Advisers, *Missed Opportunities: The Consequences of State Decisions Not to Expand Medicaid*, July 2014.
27. Christina A. Cassidy, "Medicaid Enrollment Surges under Expanded Program; States Worry about Paying for Added Care," *U.S. News & World Report*, July 19, 2015.

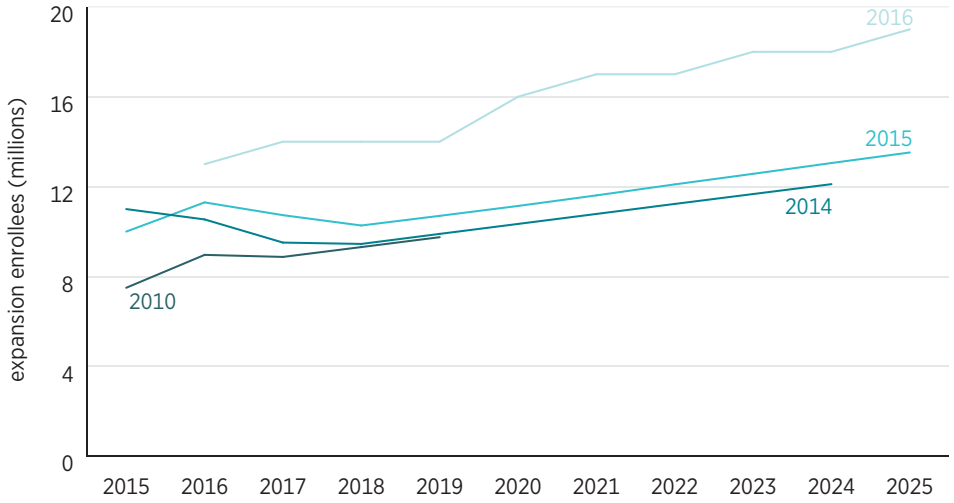
that expanded with actual enrollment figures.[28] Overall, these states enrolled more than twice as many people as projected, and *every single state* had enrollment in excess of its high-end projection.[29] By May 2016, California's enrollment of 3.8 million people in the Medicaid expansion was particularly excessive—more than four times as many people as projected.[30]

In March 2016, CBO reported that "the number of people estimated to have been enrolled in Medicaid in 2015 who were made eligible for the program by the ACA was significantly higher than . . . previously projected."[31] Although in this report CBO downgraded the speed with which it expected states would adopt the expansion, it increased its estimates of ACA expansion enrollees by about two million people in 2015 and about four million people in 2025 relative to the projections contained in its 2015 baseline.[32]

Figure 1 is taken from Brian Blase's 2016 paper and shows how CBO's estimates of Medicaid expansion enrollment increased over time.[33] The 2010, 2014, and 2015 estimates are adjusted for CBO's 2016 assumptions of state adoption of the expansion. This is important because figure 1 aims to show the change in estimates of Medicaid expansion enrollees in expansion states—not CBO's estimates of how many states would adopt the expansion. For example, in 2010, CBO assumed all states would adopt the expansion. In its 2014 and 2015 reports, CBO expected a faster rate of state adoption than in its 2016 report. Adjusting CBO's prior year estimates to account for its 2016 assumptions of state adoption of the

28. Jonathan Ingram and Nicholas Horton, "ObamaCare Expansion Enrollment Is Shattering Projections: Taxpayers and the Truly Needy Will Pay the Price" (Foundation for Government Accountability, Naples, FL, November 16, 2016).
29. Ingram and Horton, "ObamaCare Expansion Enrollment," 3.
30. Ingram and Horton, 13.
31. Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People under Age 65: 2016 to 2026*, March 2016. In 2016, CBO reported the number of people enrolled who were classified as newly eligible (states received the elevated reimbursement rate) and the number of people enrolled in Medicaid as a result of the ACA. The second group contains people who were eligible without the ACA but who chose to enroll as a result of the ACA—because of increased outreach efforts, for example. Before 2016, CBO had only reported the latter figure, and CBO decided to stop reporting this number after 2016, only reporting the enrollees who were made eligible for Medicaid by the ACA. On the basis of the 2016 estimate, CBO expected about 3 million people to enroll in Medicaid as a result of the expansion who were already eligible. In CBO's May 2019 estimate, it projected a total of 12 million newly eligible enrollees from 2019 through 2021, rising to 13 million in 2022 and then rising to 14 million in 2025. The increase, according to CBO, is mostly the result of additional states adopting the expansion. CBO's 2019 estimate accounts for the elimination of the individual mandate penalty, which it expects will reduce Medicaid enrollment by about one million people each year.
32. Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage*.
33. See Blase, "Evidence Is Mounting," 16.

FIGURE 1. CONGRESSIONAL BUDGET OFFICE PROJECTIONS OF MEDICAID ENROLLMENT



Note: The 2010, 2014, and 2015 estimates are adjusted for the Congressional Budget Office's 2016 assumptions of state adoption of the expansion.

Sources: Congressional Budget Office and Joint Committee on Taxation to Nancy Pelosi, Speaker of the US House of Representatives, March 20, 2010, https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/costestimate/amendreconprop.pdf; Congressional Budget Office, *Updated Estimates of the Effects of the Insurance Coverage Provisions of the Affordable Care Act*, April 2014; Congressional Budget Office, "Insurance Coverage Provisions of the Affordable Care Act—CBO's March 2015 Baseline," accessed November 15, 2019, https://www.cbo.gov/sites/default/files/recurringdata/51298-2015-03-aca.pdf; Congressional Budget Office, *Federal Subsidies for Health Insurance Coverage for People under Age 65: 2016 to 2026*, March 2016.

ACA Medicaid expansion[34] shows that Medicaid expansion enrollment in states that adopted the expansion is much higher than CBO expected when the ACA passed in 2010, as well as much higher than the estimates in CBO's 2014 and 2015 reports. In essence, figure 1 shows that far more people are enrolling in Medicaid in expansion states—upwards of 50 percent more—than was expected by CBO when the ACA became law.

GOVERNMENT AUDITS SHOW SEVERE PROBLEMS WITH MEDICAID ELIGIBILITY PROCESS

On November 18, 2019, CMS released its annual report on improper payments in federal healthcare programs.[35] The challenges with Medicaid are severe and

34. This is important since the degree to which states were projected to adopt the expansion significantly impacts CBO's estimates of expansion enrollment. In 2010, before the US Supreme Court made the expansion optional, CBO expected all states to adopt the expansion. Between 2014 and 2016, CBO expected that states would be slower to adopt the expansion.
35. Centers for Medicare and Medicaid Services, "2019 Estimated Improper Payment Rates for Centers for Medicare & Medicaid Services (CMS) Programs."

growing, and CMS flagged eligibility errors as the core reason.[36] We estimate that the true improper payment rate in Medicaid now exceeds 20 percent of total federal spending—an amount greater than $75 billion.[37]

As of September 2019, the HHS OIG has published results from a series of audits covering periods in 2014 and 2015 in four states (California, Colorado, Kentucky, and New York) for beneficiaries enrolled as newly eligible. The OIG has also released eligibility audits for non–newly eligible adults in California, Kentucky, and New York. The audits demonstrate that states are failing to properly assess eligibility for Medicaid.

Consistent errors include neglecting to obtain proper documentation, failing to properly verify income eligibility, misclassifying individuals mostly into the newly eligible category, and failing to properly verify citizenship. Some of these enrollment errors lead to incorrect and often higher federal reimbursement for individuals who would qualify for Medicaid under a category other than the newly eligible category, while others lead to enrolling individuals who are completely ineligible for Medicaid. There are also many "potentially ineligible" enrollees, described by the OIG as "beneficiaries for whom there was no documentation to support that [the state] redetermined eligibility as required."[38] The sheer number of potentially ineligible enrollees is evidence that states have not been following proper guidelines. Here are some specific findings:

- California's "eligibility determination systems lacked functionality or eligibility caseworkers made errors. . . . The State agency did not properly input application information and verify income or lawful presence."[39] The OIG "identified a weakness in the State agency's procedures related to determining eligibility for individuals who may not have intended to apply for Medicaid. . . . The State agency's procedures may pose a risk that individuals are determined eligible for Medicaid without their knowledge."[40] Of the 150-person sample enrolled as newly eligible individuals, the OIG found that the state incorrectly or potentially incorrectly enrolled 25 percent of

36. Centers for Medicare and Medicaid Services, "Fiscal Year (FY) 2019 Medicare Fee-for-Service Improper Payment Rate Is Lowest since 2010."
37. Yelowitz and Blase, "Medicaid Improper Payments Are Much Worse Than Reported."
38. OIG, *California Made Medicaid Payments on Behalf of Non–Newly Eligible Beneficiaries*.
39. OIG, *California Made Medicaid Payments on Behalf of Newly Eligible Beneficiaries Who Did Not Meet Federal and State Requirements*, February 2018, 17.
40. OIG, *California Made Medicaid Payments on Behalf of Newly Eligible Beneficiaries*, 9.

them.[41] The OIG estimated that there were more than 366,000 ineligible and 79,000 potentially ineligible Medicaid beneficiaries in California.[42]

- In Colorado, "contrary to the provisions of its own verification plan, [the state] relied on self-attestations rather than income verifications."[43] There were "system and procedural errors related to eligibility determinations, as well as human errors made by Colorado staff and caseworkers."[44] In addition, "lags in both the eligibility system and the State agency's reasonable compatibility process . . . delayed disenrollment."[45] Of the 60-person sample of newly eligible enrollees, the OIG found that the state incorrectly or potentially incorrectly enrolled 28 percent of them.[46] The OIG estimated that there were more than 85,000 ineligible and 13,000 potentially ineligible Medicaid beneficiaries in Colorado.[47]
- In New York, of the 130-person sample enrolled as newly eligible individuals, the OIG found that the state incorrectly or potentially incorrectly enrolled 31 percent of them.[48] The OIG estimated that there were more than 47,000 ineligible Medicaid beneficiaries in New York. The OIG's report points to one example in which a beneficiary was enrolled after attesting to an income of approximately $35,000 with a household size of one—the income threshold is $16,105 for a household size of one.[49] The state made "human or system errors related to new eligibility determination processes."[50] In addition, "the State agency did not always maintain applications or documentation to support eligibility determinations."[51] A

41. OIG, *California Made Medicaid Payments on Behalf of Newly Eligible Beneficiaries*, 9.
42. OIG, *California Made Medicaid Payments on Behalf of Newly Eligible Beneficiaries*, 9.
43. OIG, *Colorado Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, August 2019, 8.
44. OIG, *Colorado Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*.
45. OIG, *Colorado Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, 8.
46. OIG, *Colorado Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, 8.
47. OIG, *Colorado Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, 8.
48. OIG, *New York Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, January 2018.
49. OIG, *New York Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, 7.
50. OIG, *New York Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, 6.
51. OIG, *New York Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, 6.

separate OIG estimate concerning non–newly eligible beneficiaries found that the state incorrectly or potentially incorrectly enrolled 15 percent of applicants.[52] The OIG estimated that "New York made Federal Medicaid payments of $520.3 million on behalf of 383,893 ineligible beneficiaries and $1.3 billion on behalf of 618,057 potentially ineligible beneficiaries during our 6-month audit period."[53]

- Kentucky "did not always meet Federal and State requirements when making eligibility determinations because of human and system errors."[54] The OIG estimated that there were nearly 35,000 potentially ineligible Medicaid beneficiaries in Kentucky.[55]

A separate OIG California audit showed enormous problems with the state's eligibility procedures.[56] The OIG found that fewer than half of sampled enrollees in California's Medicaid program were correctly enrolled:

> For our sample of 125 beneficiaries, California made payments on behalf of 60 eligible beneficiaries. However, for the remaining 65 beneficiaries, California made payments on behalf of ineligible beneficiaries (e.g., a beneficiary who did not meet the income requirement for the medically needy coverage group) and potentially ineligible beneficiaries. On the basis of our sample results, we estimated that California made Medicaid payments of $959.3 million ($536 million Federal share) on behalf of 802,742 ineligible beneficiaries and $4.5 billion ($2.6 billion Federal share) on behalf of 3.1 million potentially ineligible beneficiaries.[57]

California agreed with these findings. According to California's Health and Human Services Agency, these deficiencies occurred because (1) the counties experienced a "massive influx of applications [for Medicaid] and vast changes in policy brought forth by the ACA," (2) caseworkers made errors, and (3) system

52. OIG, *New York Did Not Correctly Determine Medicaid Eligibility for Some Non–Newly Eligible Beneficiaries*, July 2019.
53. OIG, *New York Did Not Correctly Determine Medicaid Eligibility for Some Non–Newly Eligible Beneficiaries*.
54. OIG, *Kentucky Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*, May 2017.
55. OIG, *Kentucky Did Not Correctly Determine Medicaid Eligibility for Some Newly Enrolled Beneficiaries*.
56. OIG, *California Made Medicaid Payments on Behalf of Non–Newly Eligible Beneficiaries*.
57. OIG, *California Made Medicaid Payments on Behalf of Non–Newly Eligible Beneficiaries*.

delays occurred during a system conversion. The state agency could not explain why the counties did not always have sufficient documentation (e.g., notes in the case files) to support eligibility determinations and redeterminations. Finally, the state agency used the eligibility determination of a public assistance program other than Medicaid without CMS approval and misinterpreted a waiver that was granted by CMS when determining the Medicaid eligibility of beneficiaries.[58] Perhaps most strikingly, the state made payments on behalf of two sampled beneficiaries who had not applied for Medicaid.[59]

In addition to undergoing federal audits, several states have conducted their own audits, and these have also found problems with the way eligibility procedures were implemented. A Louisiana audit focused on only a portion of its Medicaid expansion enrollees: those whose incomes raise questions about potential ineligibility.[60] The audit found serious deficiencies in the eligibility determination process. These include Louisiana's decision to rely on the federally facilitated marketplace determination, egregious caseworker errors, and infrequent checks of wage data. An Oregon audit found that the state's Medicaid agency did not prioritize ensuring that the program was running efficiently, lacked tools to detect improper payments, and failed to act swiftly when trying to determine who was eligible for Medicaid:

> Once officials worked through a backlog of 115,200 Medicaid recipients, an approximate 41 percent of enrollees were found ineligible. "Failure to address this issue in a timely fashion resulted in approximately $88 million in avoidable expenditures (from March 1 to Aug. 31, 2017)," the audit states.
>
> While the audit was underway, The Oregonian/OregonLive reported an additional $74 million of improper payments were made. A recent change of leadership also prompted the

58. OIG, *California Made Medicaid Payments on Behalf of Non–Newly Eligible Beneficiaries*.
59. OIG, *California Made Medicaid Payments on Behalf of Non–Newly Eligible Beneficiaries*, 16: The State agency made payments on behalf of two sampled beneficiaries who did not apply for Medicaid. These beneficiaries had completed a SNAP application. The State agency was authorized to make Medicaid eligibility determinations on the basis of individuals' eligibility for SNAP. According to CMS guidance, SNAP applicants can indicate that they want to apply for Medicaid by, for example, checking a box on the SNAP application. However, in response to the application question, "Are you interested in applying for Medi-Cal?" the two sampled beneficiaries answered "no." In addition, the case files for these two beneficiaries did not have any documentation to support that they applied for Medicaid.
60. Louisiana Department of Health, *Medicaid Eligibility: Wage Verification Process of the Expansion Population*, Medicaid Audit Unit Report, November 8, 2018.

disclosure of another $112 million of wrongful payments, first reported by The Portland Tribune.[61]

APPROXIMATING IMPROPER ENROLLMENT

University of Kentucky economist Charles Courtemanche and his coauthors examined Medicaid enrollees who reported income above eligibility thresholds in an August 2019 working paper for the National Bureau of Economic Research, using the publicly available American Community Survey (ACS) from 2012 to 2017. This study used a difference-in-differences analysis, contrasting the trends in expansion states and nonexpansion states. The nine states selected as expansion states had not expanded Medicaid eligibility to any childless, working-age adults (age 19 to 64) before 2014.[62] The authors included several robustness checks. For instance, they looked at respondents who would have had no obvious alternative pathway to qualify for Medicaid.[63]

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61. Lauren Dake, "Oregon Health Authority Misspent Millions, State Audit Finds," *Oregon Public Broadcasting*, November 29, 2017.

62. See Charles J. Courtemanche et al., "Early Impacts of the Affordable Care Act on Health Insurance Coverage in Medicaid Expansion and Non-expansion States," *Journal of Policy Analysis and Management* 36, no. 1 (2017); Courtemanche, Marton, and Yelowitz, "Medicaid Coverage across the Income Distribution" (2019). In the 2017 paper, Courtemanche and his coauthors documented expansion status, and in the 2019 paper, Courtemanche, Yelowitz, and their coauthor discuss early expansions among 18 adopting states. They explain,

> The new expanders were 9 states that expanded Medicaid in 2014 and had not implemented earlier broad-based Medicaid expansions for adults. They include Arkansas, Kentucky, Michigan, Nevada, New Hampshire, New Mexico, North Dakota, Ohio, and West Virginia. None of these states implemented the expansions early, and none had subgroups (other than pregnant women) eligible for coverage above 138% of the FPL. The never expanders were 12 states that did not expand by 2019 (and had not implemented earlier expansions). They include Alabama, Florida, Georgia, Kansas, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, South Dakota, Texas, and Wyoming. In these states, the Medicaid income eligibility threshold was between 17 to 54% of the FPL for adult caretakers in families. For childless adults, none of these states extended eligibility for coverage.

Two states that are non-adopters (Tennessee and Wisconsin) are excluded because they had some previous partial expansion. See table 1 in Robert Kaestner et al., "Effects of ACA Medicaid Expansions on Health Insurance Coverage and Labor Supply," *Journal of Policy Analysis and Management* 36, no. 3 (2017).

63. Medicaid offers coverage to a number of low-income groups that are classified as "categorically needy." These include pregnant women, children, Supplemental Security Income recipients (elderly, blind, and disabled individuals), and parents or caretakers of dependent children. See "List of Medicaid Eligibility Groups: Mandatory Categorically Needy," accessed November 13, 2019, https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/1115/downloads/list-of-eligibility-groups.pdf.

Courtemanche and his coauthors found that nine expansion states had significantly higher Medicaid coverage after implementation compared to twelve nonexpansion states. The authors' most noteworthy finding was of significant increases in enrollment among people who report incomes above 138 percent of the FPL. In the nine expansion states, Medicaid enrollment by working-age adults with incomes above 138 percent of the FPL rose by 3.0 percentage points (from 2.7 percent to 5.7 percent, an increase of 111 percent of the base rate in 2012–2013, before the expansion). Such enrollment increased over time—it was more than twice as large in 2017 (3.7 percentage points) as in 2014 (1.5 percentage points).

There are several reasons why an adult with income above 138 percent of the FPL could qualify for Medicaid. These include having lower income during the month when he or she applied for coverage, being pregnant, or having a disability. However, people in households with income above 138 percent of the FPL generally should not be enrolled in Medicaid.

Given that approximately 17.4 million working-age adults had incomes exceeding the Medicaid threshold in the nine selected states, these findings translate into many improperly enrolled individuals. For example, if 3 percent of all people with incomes above 138 percent of the FPL were enrolled in Medicaid, that translates into more than 500,000 people in just the nine expansion states. In 2017, the nine selected states accounted for nearly one-fifth of the total population in the 32 expansion states,[64] meaning that if other expansion states had similar patterns of improper enrollment, the nationwide ineligible count would be scaled up by a factor of five.

This analysis has limitations, which Courtemanche and his coauthors acknowledged and largely addressed.[65] Nonetheless, several critics mischaracterized the study and results, apparently in an attempt to downplay the problem of improper enrollment. The criticisms largely focused on the quality of the ACS data, in particular the classification of respondents based on annual income (since Medicaid eligibility is determined monthly and income can be volatile),

64. For population totals, see "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2018 (NST-EST2018-01)," spreadsheet, accessed November 14, 2019, available at US Census Bureau, "State Population Totals and Components of Change: 2010–2018," https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-total.html. For expansion status, see Kaiser Family Foundation, "Status of State Action on the Medicaid Expansion Decision," accessed November 14, 2019, https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/.

65. Courtemanche, Marton, and Yelowitz, "Medicaid Coverage across the Income Distribution."

as well as on issues related to the complexity of family structure and measurement of health insurance coverage. The substance of the findings—that improper Medicaid enrollment has significantly increased in expansion states—is robust across a wide variety of specifications that address each concern.[66]

The essential insight of the study by Courtemanche and his coauthors is illustrated in figure 2, where the sample is restricted to ACS respondents with reported income at or above 250 percent of the FPL (approximately $65,000 for a family of four). Far fewer people who have income above 250 percent of the FPL for the year will have income in any month low enough that they qualify for Medicaid. Among people with income above 250 percent of the FPL, there was sizable growth in Medicaid enrollment in expansion states relative to nonexpansion states. The difference between the two lines in figure 2 is approximately the effect of states' decision to adopt the Medicaid expansion.

IMPROPER ENROLLMENT HOT SPOTS

State-Level Analysis

We use the 2012 and 2017 ACS to describe the likely magnitude of Medicaid enrollment of people who report annual income above the Medicaid eligibility

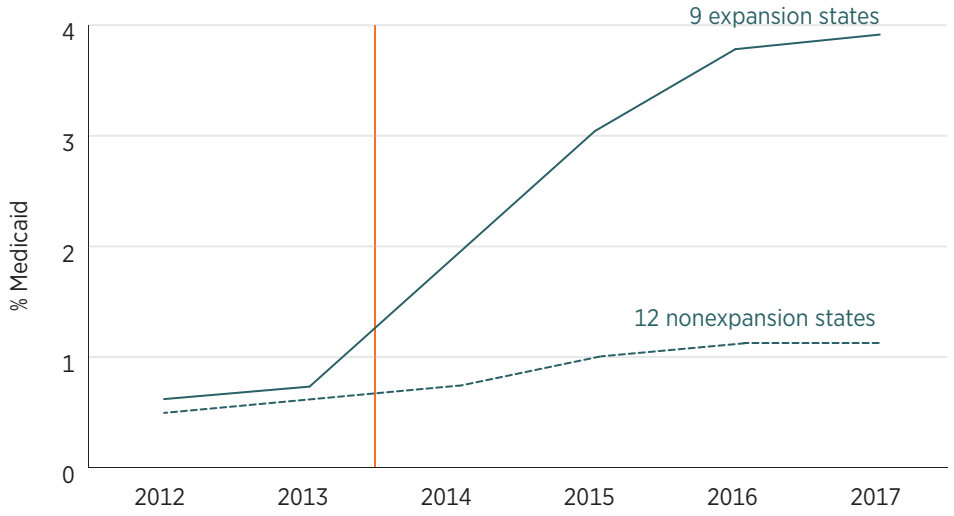
66. For these criticisms, see Judith Solomon and Matt Broaddus, "New Claims by Opponents of Medicaid Expansion Rest on Faulty Analysis," Center on Budget and Policy Priorities, September 18, 2019; Tricia Brooks, "What Some Researchers Get Wrong about Medicaid's Income Eligibility Requirements," *Health Affairs*, September 19, 2019. Aaron Yelowitz addresses these concerns in "Improper Medicaid Enrollment Following ACA Expansion," *Health Affairs*, November 15, 2019.

One criticism relates to income volatility in the ACS, since income is measured annually. People who had low income in the month they applied for Medicaid would likely have been properly enrolled even if it turns out that their annual income exceeds 138 percent of the FPL. To address this, we also conducted an analysis for individuals with annual incomes exceeding 250 percent of the FPL (approximately $65,000 for a family of four): see Courtemanche, Marton, and Yelowitz, "Medicaid Coverage across the Income Distribution." Our substantive conclusions scarcely change.

Another issue raised by the critics is the complexity of household size for calculating Medicaid eligibility. The household definition in the ACS includes unmarried partners, in-laws, roommates, and other individuals who should not be counted in determining the household size or income for Medicaid. We examined the results by restricting the sample to nuclear families, where all individuals in the household consist of a household head and his or her children or a couple and their children. Once again, we find significant effects of the expansion on potentially improper enrollment.

Finally, a meaningful share of ACS respondents appear to misreport their source of insurance coverage. However, public health insurance coverage tends to be underreported in such surveys, and recent research comparing ACS responses to administrative counts finds that "starting in 2014, there was a large undercount in expansion states that was absent in nonexpansion states," leading to "downwardly biased estimates of the effect of expansion on means-tested coverage in the ACS relative to administrative records." Michel Boudreaux et al., "Medicaid Expansion and the Medicaid Undercount in the American Community Survey," *Health Services Research*, October 10, 2019, 7.

FIGURE 2. AVERAGE ANNUAL MEDICAID ENROLLMENT AMONG ADULTS AGE 19–64 WITH INCOMES ABOVE 250 PERCENT OF THE FEDERAL POVERTY LEVEL



Note: Orange line indicates implementation of the ACA's Medicaid expansion.

Source: Charles J. Courtemanche, James Marton, and Aaron Yelowitz, "Medicaid Coverage across the Income Distribution under the Affordable Care Act" (NBER Working Paper No. 26145, National Bureau of Economic Research, Cambridge, MA, August 2019).

thresholds.[67] The year 2012 was likely the last year before the effects of the ACA expansion were observed, and the year 2017 was chosen because, as we write this

67. The ACS has been used in many peer-reviewed studies that examine the Affordable Care Act and Medicaid expansions, including studies that examine their effects on Medicaid coverage. See Molly Frean, Jonathan Gruber, and Benjamin D. Sommers, "Premium Subsidies, the Mandate, and the Medicaid Expansion: Coverage Effects of the Affordable Care Act," *Journal of Health Economics* 53 (2017); Courtemanche et al., "Early Impacts of the Affordable Care Act"; Julie L. Hudson and Asako S. Moriya, "Medicaid Expansion for Adults Had Measurable 'Welcome Mat' Effects on Their Children," *Health Affairs* 36, no. 9 (2017); Aparna Soni, Michael Hendryx, and Kosali Simon, "Medicaid Expansion under the Affordable Care Act and Insurance Coverage in Rural and Urban Areas," *Journal of Rural Health* 33, no. 2 (2017); Fredric Blavin et al., "Medicaid versus Marketplace Coverage for Near-Poor Adults: Effects on Out-of-Pocket Spending and Coverage," *Health Affairs* 37, no. 2 (2018); Pinar Karaca-Mandic et al., "The Volume of TV Advertisements during the ACA's First Enrollment Period Was Associated with Increased Insurance Coverage," *Health Affairs* 36, no. 4 (2017).

In addition, the ACS is one of the primary sources used by the federal government to evaluate health insurance coverage, including state-level estimates of the uninsured rate. The Census Bureau notes, "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 smaller geographies, such as for all 50 states and the District of Columbia." Edward R. Berchick, Jessica C. Barnett, and Rachel D. Upton, *Health Insurance Coverage in the United States: 2018*, Current Population Reports, P60-267(RV) (Washington, DC: US Government Printing Office, 2019). See also, for example, figure 8 in Berchick, Barnett, and Upton, *Health Insurance Coverage in the United States: 2018*.

study, it is the latest year for which the data are available.[68] We examine Medicaid enrollment at the state level, the metropolitan level (through the 378 CBSAs or core-based statistical areas), and the sub-state level (through the 2,351 PUMAs or public use microdata areas, the finest level of geography within the public version of the ACS, comprising sub-state areas of 100,000 or more people).[69] Our comprehensive data on states, CBSAs, and PUMAs for Medicaid coverage rates are available online in spreadsheet format.[70]

We assess two types of coverage outcomes—whether ACS respondents list Medicaid as their exclusive source of health insurance coverage and whether they list Medicaid as a source of coverage.[71] First, we show Medicaid enrollment for respondents with incomes at or above 138 percent of the FPL, 200 percent of the FPL, and 250 percent of the FPL. The results for 138 percent of the FPL provide a sense of the likely overall number people in households with income above eligibility thresholds. Some of the people with income above these thresholds, particularly those close to the 138 percent threshold, may have been eligible for Medicaid during the month in which they applied or because of another circumstance—this could lead to an overestimation of improper enrollment. However, public health insurance coverage tends to be underreported in the ACS, and this would lead to an underestimation of improper enrollment.[72]

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68. In addition, we begin our analysis in 2012 rather than in an earlier year because the geographical identifiers used in the ACS to identify local areas changed between 2011 and 2012.

69. In assigning CBSAs to respondents in the ACS, we follow the procedure used in Courtemanche et al., "Early Impacts of the Affordable Care Act." For the 378 CBSAs presented in the tables and figures, sample sizes range from 270 to 91,973 respondents when we examine adults age 19 to 64 ("Group 1") with income at or above 138 percent of the FPL. Our maps do not display Alaska or Hawaii (or associated CBSAs or PUMAs), but they are included in our analysis.

70. These data are available at https://www.mercatus.org/publications/healthcare/aca-medicaid-expansion.

71. The ACS questionnaire asks, "Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans?" One possible answer is "Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability." See US Census Bureau, "The American Community Survey Questionnaire," 2017.

72. Ithai Z. Lurie and James Pearce compared health insurance sources from the IRS tax form 1095 to measures from various surveys. For individuals younger than age 65, administrative tax data revealed 75.6 million covered life-years from all public insurance sources, while the point-of-interview measure in the ACS revealed 66.6 million individuals. Lurie and Pearce, "Health Insurance Coverage from Administrative Tax Data" (Working Paper 117, Department of the Treasury, Office of Tax Analysis, Washington, DC, 2019). Michel Boudreaux and his coauthors found that "starting in 2014, there was a large undercount in expansion states that was absent in nonexpansion states," leading to "downwardly biased estimates of expansion on means-tested coverage in the ACS relative to administrative records." The undercount exceeded 10 percent in expansion states for every year between 2014 and 2016, with ACS data missing approximately 3.9 million Medicaid enrollees. In contrast, nonexpansion states had Medicaid enrollment counts far closer to those of administrative sources. See Boudreaux et al., "Medicaid Expansion and the Medicaid Undercount," 1, 5.

A key reason we look at higher income thresholds is that, at higher income thresholds, income volatility is a much less significant concern. Benjamin D. Sommers and health policy professor Sara Rosenbaum note that income volatility could be important for Medicaid enrollment in the case of adults with incomes under 200 percent of the FPL. Looking at the population of adults who were initially ineligible for Medicaid based on monthly income (meaning they started in the analysis with a monthly income that exceeded the Medicaid threshold but was under 200 percent of the FPL), Sommers and Rosenbaum estimate that nearly 30 percent of this population would have experienced a decline in income within six months that would make them eligible for Medicaid. Sommers and Rosenbaum's analysis examined Medicaid eligibility, not Medicaid enrollment; respondents who experience an income decline may still have coverage from another source, such as employer-sponsored health insurance. Importantly, the authors suggest that people with income above 200 percent of the FPL for the year are unlikely to qualify for Medicaid during that year: "Most people with incomes of 200–400 percent of poverty receive insurance through their employers and are unlikely to participate in Medicaid or exchange plans in large numbers; therefore, they were not included in the sample."[73]

In the ACS, respondents report current health insurance coverage and annual income, yet Medicaid eligibility is determined in the month of application. The biggest potential measurement concern is for individuals who had recent declines in income (meaning their current monthly income is low even though their annual income is high). Such respondents would properly qualify for Medicaid based on their low current monthly income, yet the annual measure could suggest they are ineligible. Consequently, we examine Medicaid enrollment at two higher thresholds—200 and 250 percent of the FPL—in addition to examining enrollment at 138 percent of the FPL. Our choice of the 200 percent threshold is consistent with studies on income volatility that dismiss volatility as a substantive issue above 200 percent of the FPL.[74] Our choice of the 250 percent threshold follows earlier work one of us (Aaron Yelowitz) participated in.[75] A threshold of 250 percent of the FPL translates into examining respondents that

73. Benjamin D. Sommers and Sara Rosenbaum, "Issues in Health Reform: How Changes in Eligibility May Move Millions Back and Forth between Medicaid and Insurance Exchanges," *Health Affairs* 30, no. 2 (February 2011): 229.

74. Sommers and Rosenbaum, "Issues in Health Reform," 229.

75. Aaron Yelowitz, "How Did the ACA Affect Health Insurance Coverage in Kentucky?" (Schnatter Institute Working Paper, John H. Schnatter Institute for the Study of Free Enterprise, Lexington, KY, September 2016); Courtemanche, Marton, and Yelowitz, "Medicaid Coverage across the Income Distribution."

are reporting income of nearly $30,000 above the Medicaid eligibility threshold for a family of four.

In addition to examining Medicaid enrollment for several income thresholds, we also explore different groupings of adults with increasingly stringent screens. Our core sample includes all adults age 19 to 64 ("Group 1"). We then narrow the sample to exclude adults who might be categorically eligible for Medicaid because of pregnancy, disability, Supplemental Security Income or Social Security income, or public assistance income ("Group 2"). We narrow further by excluding individuals with imputations on age, insurance sources, pathways to categorical eligibility, labor market outcomes, or income sources ("Group 3").[76] Next, we narrow to respondents who also reported full-time, full-year work, to help control for income volatility ("Group 4").[77] Finally, we narrow to respondents who also report living in nuclear families ("Group 5"). The narrowest grouping based on both income and other characteristics—respondents with high incomes (e.g., 250 percent of the FPL or higher) and without obvious pathways to Medicaid other than the ACA expansions (e.g., excluding those who are categorically eligible), and higher-quality survey responses (e.g., excluding imputations), who additionally work full-time, full-year and live in nuclear families—should be extremely unlikely to have Medicaid coverage.

Table 1 shows the overall magnitude of Medicaid enrollment of 19–64-year-old adults with incomes at or above 138 percent of the FPL in all 50 states and Washington, DC. We present results for all states in descending order based on *changes* in overall Medicaid enrollment. We largely account for eligibility through other means by looking at the change over time. The table also shows the change over time for people who report having only Medicaid coverage.[78]

By looking at the change from 2012 to 2017, we largely account for people who had coverage through an alternative eligibility grouping, as well as accounting for inherent problems with the survey approach. Not surprisingly, the states with the largest increases are all expansion states, although not all of

76. When survey respondents do not provide a self-reported answer to a question, the ACS provides an answer for the respondent using a "hot-deck" procedure. This is known as "imputation." The procedure uses actual answers from other respondents with similar characteristics, and it could create measurement error that looks like improper enrollment. See US Census Bureau, "2015 American Community Survey Research and Evaluation Report Memorandum Series #ACS15-RER-07," July 10, 2015.
77. For a respondent to be classified as having full-time, full-year work, he or she must report working 50 or more weeks per year and 40 or more hours per week.
78. Appendix table 1 shows population counts for adults ages 19–64 with income at or above 138 percent of the FPL in 2012 and 2017. One can multiply the populations with the percentages in table 1 to estimate counts of Medicaid coverage. Population counts for all groups—Groups 1 through 5—are shown.

TABLE 1. STATE-LEVEL ANALYSIS: MEDICAID COVERAGE FOR ADULTS AGE 19–64 ("GROUP 1") WITH INCOMES AT OR ABOVE 138 PERCENT OF THE FEDERAL POVERTY LEVEL

	Medicaid only			Medicaid		
State	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)
New Mexico	4.9	13.3	8.4	7.3	17.3	10.0
California	4.2	11.9	7.6	6.1	14.4	8.3
Kentucky	2.4	8.5	6.1	4.9	11.9	7.1
Rhode Island	3.7	10.3	6.7	6.1	13.2	7.1
West Virginia	3.1	8.2	5.2	5.3	11.6	6.4
Oregon	2.7	7.9	5.3	4.9	11.0	6.0
Washington	2.3	7.4	5.2	4.1	10.2	6.0
Arkansas	2.3	7.1	4.8	5.0	10.7	5.7
Colorado	2.9	7.8	4.9	4.4	10.1	5.6
Louisiana	3.5	7.8	4.3	5.9	11.2	5.3
Montana	2.0	5.8	3.9	3.4	8.7	5.3
New York	6.8	11.2	4.4	8.9	14.1	5.2
Alaska	2.5	6.6	4.2	4.9	10.0	5.1
Nevada	1.7	6.4	4.7	3.3	8.4	5.1
Arizona	4.3	8.2	3.9	6.3	10.9	4.7
Ohio	2.8	7.0	4.2	4.3	9.1	4.7
Connecticut	5.1	8.5	3.4	6.7	10.8	4.1
Michigan	3.4	6.9	3.5	6.0	10.0	4.0
Minnesota	3.5	6.9	3.4	4.9	8.9	4.0
Illinois	3.5	6.9	3.3	4.9	8.4	3.5
Maryland	3.8	6.7	2.9	5.6	9.1	3.5
New Jersey	3.2	6.4	3.2	4.9	8.3	3.4
Vermont	8.9	11.6	2.6	12.7	16.0	3.3
Pennsylvania	3.2	5.8	2.6	5.3	8.5	3.2
Massachusetts	8.5	11.1	2.6	11.5	14.7	3.1
Indiana	2.2	4.7	2.5	3.8	6.7	2.9
New Hampshire	1.5	4.0	2.5	3.2	6.1	2.8
Iowa	2.7	4.9	2.2	5.1	7.6	2.5
Tennessee	3.2	4.8	1.5	5.4	7.6	2.2
North Dakota	1.3	3.1	1.8	2.0	4.1	2.1
District of Columbia	9.3	11.0	1.7	11.9	13.9	2.0
North Carolina	2.5	3.5	1.0	4.3	6.0	1.7
South Carolina	2.8	4.0	1.2	5.1	6.8	1.7
Idaho	1.9	2.8	0.9	4.4	5.8	1.4
Alabama	2.3	3.1	0.8	5.0	6.3	1.3
Florida	3.3	4.1	0.9	5.2	6.5	1.3

	Medicaid only			Medicaid		
State	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)
Hawaii	5.4	6.0	0.6	7.0	8.3	1.2
Georgia	2.1	2.8	0.7	4.0	5.1	1.1
Virginia	1.5	2.2	0.7	2.5	3.5	1.0
Nebraska	1.0	2.1	1.1	2.7	3.5	0.8
Wyoming	1.8	2.4	0.6	3.9	4.7	0.8
Wisconsin	3.8	4.1	0.3	6.0	6.7	0.7
Missouri	2.2	2.7	0.6	3.9	4.5	0.6
Oklahoma	2.1	2.4	0.4	3.7	4.2	0.6
Kansas	1.4	1.9	0.4	3.0	3.5	0.5
South Dakota	0.8	1.5	0.6	2.6	3.1	0.5
Texas	2.5	2.7	0.2	4.1	4.6	0.5
Mississippi	3.3	3.4	0.0	6.4	6.8	0.4
Utah	2.0	2.2	0.2	3.8	4.1	0.3
Delaware	6.6	5.6	−1.0	9.7	8.5	−1.2
Maine	5.8	4.0	−1.8	8.8	7.4	−1.4
United States	**3.5**	**6.5**	**3.0**	**5.4**	**9.0**	**3.6**
Expansion by 2017	**4.0**	**8.5**	**4.5**	**6.0**	**11.1**	**5.2**
No expansion by 2017	**2.6**	**3.2**	**0.6**	**4.4**	**5.4**	**1.0**

Note: The abbreviation "pp" means percentage points. "Medicaid only" means the respondent reported Medicaid as his or her only source of current health insurance coverage, and "Medicaid" means the respondent reported Medicaid as a source of current coverage. All numbers are rounded to the tenths place. The final three rows report population-weighted coverage rates across the United States, as well as Medicaid expansion status by 2017.

Source: Authors' tabulation of the 2012 and 2017 American Community Survey and Kaiser Family Foundation, "Status of State Action on the Medicaid Expansion Decision as of November 15, 2019," accessed November 19, 2019, https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

them implemented the Medicaid expansion in 2014.[79] As noted earlier, the nine states with the largest percentage point change (New Mexico, California, Kentucky, Rhode Island, West Virginia, Oregon, Washington, Arkansas, and Colorado) all experienced a more than doubling of the percentage of adults with income above 138 percent of the FPL enrolled in Medicaid. In New Mexico, for example, 17.3 percent of all adults with incomes exceeding 138 percent of the FPL reported being enrolled in Medicaid in 2017, up from 7.3 percent in 2012. The bottom of the table breaks out states by their expansion status in 2017. For states that expanded, the change in enrollment for adults with incomes at or

79. Of the top 12 states listed in table 1, California, Rhode Island, Oregon, Washington, Colorado, and New York had some form of early Medicaid expansion. Courtemanche et al., "Early Impacts of the Affordable Care Act." Montana and Louisiana implemented the ACA expansions in 2016.

above 138 percent of the FPL was 5.2 percentage points, while the change for nonexpansion states was 1.0 percentage points.

Table 2 illustrates the top 12 states (from table 1) in terms of changes in coverage rates for people with income above the thresholds of 138 percent, 200 percent, and 250 percent of the FPL. We also include, for each income threshold, the overall ranking across the 50 states and Washington, DC (e.g., Kentucky has the third-highest ranking of Medicaid enrollment by people with income exceeding 138 percent of the FPL, the fourth-highest by people with income exceeding 200 percent of the FPL, and the fifth-highest by people with income exceeding 250 percent of the FPL). The ordering of states is quite consistent across the income thresholds. For example, four states—New Mexico, California, Kentucky, and Rhode Island—appear in the top five states overall with respect to percentage point changes. For adults with incomes at or above 250 percent of the FPL, Medicaid coverage increased from 4.1 percent to 10.7 percent in New Mexico, from 3.7 percent to 9.3 percent in California, and from 3.6 percent to 8.5 percent in Rhode Island.

In table 3, we focus on Medicaid expansion states that exhibited very small changes in enrollment among working-age adults with income above 138 percent of the FPL. As in table 2, we include for each threshold the overall ranking. While table 2 shows that seven expansion states saw enrollment increase among this group by at least 6.0 percentage points, table 3 shows that such enrollment increased by less than 3.0 percentage points in seven jurisdictions. In Delaware, enrollment among this group *fell* from 9.7 percent to 8.5 percent from 2012 to 2017, a decline of 1.2 percentage points. Other expansion jurisdictions with relatively small increases include Hawaii; Washington, DC; North Dakota; Iowa; New Hampshire; and Indiana. North Dakota is particularly noteworthy for having both very low enrollment and a small change over time (growing from 2.0 percent to 4.1 percent). Importantly, tables 2 and 3 suggest that some states are doing a much better job assessing eligibility for Medicaid than other states.

Table 4 presents the change over time for respondents least likely to qualify for Medicaid. These respondents (whom we have called Group 5) work full-time (40-plus hours per week) and full-year (50-plus weeks per year), live in nuclear families, do not meet criteria for categorical eligibility, do not have imputed values, and have income in excess of 250 percent of the FPL. Although Group 5's Medicaid participation rates are lower, there was a significant increase in respondents reporting Medicaid coverage. Three states—California, New York, and West Virginia—experienced coverage rises of 1.1 percentage points or more. To put that in perspective, the number of people with Medicaid coverage who are extremely unlikely to meet the legal requirements of the program increased

TABLE 2. STATE-LEVEL ANALYSIS, VARY INCOME THRESHOLD, GROUP 1 ONLY: MEDICAID EXPANSION STATES WITH LARGEST CHANGES IN MEDICAID COVERAGE FOR ADULTS AGE 19–64

	Income at or above 138% of the federal poverty level						
	Medicaid only			Medicaid			
State	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)	Rank
New Mexico	4.9	13.3	8.4	7.3	17.3	10.0	1
California	4.2	11.9	7.6	6.1	14.4	8.3	2
Kentucky	2.4	8.5	6.1	4.9	11.9	7.1	3
Rhode Island	3.7	10.3	6.7	6.1	13.2	7.1	4
West Virginia	3.1	8.2	5.2	5.3	11.6	6.4	5
Oregon	2.7	7.9	5.3	4.9	11.0	6.0	6
Washington	2.3	7.4	5.2	4.1	10.2	6.0	7
Arkansas	2.3	7.1	4.8	5.0	10.7	5.7	8
Colorado	2.9	7.8	4.9	4.4	10.1	5.6	9
Louisiana	3.5	7.8	4.3	5.9	11.2	5.3	10
Montana	2.0	5.8	3.9	3.4	8.7	5.3	11
New York	6.8	11.2	4.4	8.9	14.1	5.2	12
	Income at or above 200% of the federal poverty level						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
New Mexico	3.5	9.7	6.1	5.4	13.3	7.9	1
California	3.0	9.0	6.1	4.6	11.3	6.7	2
Rhode Island	2.4	7.7	5.3	4.3	10.1	5.7	3
Kentucky	1.6	6.1	4.5	3.5	8.8	5.3	4
Washington	1.5	5.6	4.1	3.0	7.9	4.9	5
Colorado	2.0	6.0	4.0	3.2	7.9	4.8	6
Oregon	1.7	5.8	4.0	3.5	8.3	4.8	7
West Virginia	2.1	5.8	3.7	3.9	8.6	4.7	8
New York	4.8	8.7	3.9	6.5	11.1	4.6	9
Arkansas	1.4	4.9	3.5	3.8	8.0	4.2	11
Louisiana	2.4	5.6	3.2	4.3	8.3	4.0	12
Montana	1.4	3.8	2.4	2.4	5.9	3.4	17
	Income at or above 250% of the federal poverty level						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
New Mexico	2.6	7.5	4.9	4.1	10.7	6.6	1
California	2.2	7.4	5.1	3.7	9.3	5.6	2
Rhode Island	1.9	6.3	4.4	3.6	8.5	4.9	3
Oregon	1.3	4.8	3.5	2.8	7.1	4.3	4
Kentucky	1.0	4.7	3.6	2.8	6.9	4.2	5

(continued)

TABLE 2. STATE-LEVEL ANALYSIS, VARY INCOME THRESHOLD, GROUP 1 ONLY: MEDICAID EXPANSION STATES WITH LARGEST CHANGES IN MEDICAID COVERAGE FOR ADULTS AGE 19–64 (*CONTINUED*)

	Income at or above 250% of the federal poverty level						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
Washington	1.2	4.7	3.5	2.5	6.7	4.2	6
West Virginia	1.4	4.7	3.4	3.0	7.2	4.2	7
Colorado	1.5	4.9	3.4	2.5	6.4	3.9	8
New York	3.8	7.2	3.3	5.4	9.3	3.9	9
Louisiana	1.8	4.5	2.7	3.4	6.9	3.5	11
Arkansas	1.1	4.0	2.9	3.2	6.5	3.3	14
Montana	0.7	2.7	2.0	1.4	4.4	3.0	17

Note: The abbreviation "pp" means percentage points. The top 12 states (all expansion states) for 138 percent of the federal poverty level are included in the first panel and subsequently presented in the next two panels. Their ranks (out of 51 jurisdictions) are presented in the final column (e.g., Arkansas ranked 8 out 51 for the 138 percent threshold and 11 out of 51 for the 200 percent threshold). The state must have expanded Medicaid by 2016 to be included in the table. "Medicaid only" means the respondent reported Medicaid as his or her only source of current health insurance coverage, and "Medicaid" means the respondent reported Medicaid as a source of current coverage. All numbers are rounded to the tenths place.

Source: Authors' tabulation of the 2012 and 2017 American Community Survey.

TABLE 3. STATE-LEVEL ANALYSIS, VARY INCOME THRESHOLD, GROUP 1 ONLY: EXPANSION STATES WITH SMALLEST CHANGES IN MEDICAID COVERAGE FOR ADULTS AGE 19–64

	Income at or above 138% of the federal poverty level						
	Medicaid only			Medicaid			
State	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)	Rank
Delaware	6.6	5.6	−1.0	9.7	8.5	−1.2	50
Hawaii	5.4	6.0	0.6	7.0	8.3	1.2	37
District of Columbia	9.3	11.0	1.7	11.9	13.9	2.0	31
North Dakota	1.3	3.1	1.8	2.0	4.1	2.1	30
Iowa	2.7	4.9	2.2	5.1	7.6	2.5	28
New Hampshire	1.5	4.0	2.5	3.2	6.1	2.8	27
Indiana	2.2	4.7	2.5	3.8	6.7	2.9	26
Massachusetts	8.5	11.1	2.6	11.5	14.7	3.1	25
Pennsylvania	3.2	5.8	2.6	5.3	8.5	3.2	24
Vermont	8.9	11.6	2.6	12.7	16.0	3.3	23
New Jersey	3.2	6.4	3.2	4.9	8.3	3.4	22
Illinois	3.5	6.9	3.3	4.9	8.4	3.5	20

	Income at or above 200% of the federal poverty level						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
Delaware	5.0	4.2	−0.9	7.7	7.1	−0.6	51
District of Columbia	7.2	8.1	0.8	9.4	10.4	1.0	36
Hawaii	3.9	4.8	0.9	5.2	6.8	1.5	31
Iowa	1.9	3.2	1.3	3.6	5.2	1.6	30
Indiana	1.3	3.0	1.8	2.4	4.5	2.1	28
North Dakota	0.6	2.5	2.0	1.1	3.3	2.2	27
New Hampshire	1.1	3.1	2.0	2.4	4.8	2.4	26
Pennsylvania	2.1	4.2	2.1	3.8	6.3	2.5	24
Vermont	6.0	8.4	2.4	9.1	11.6	2.5	25
Illinois	2.3	4.9	2.6	3.4	6.2	2.8	21
New Jersey	2.2	4.8	2.6	3.7	6.5	2.8	23
Massachusetts	6.4	9.0	2.6	8.9	12.0	3.1	19
	Income at or above 250% of the federal poverty level						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
Delaware	4.6	3.7	−0.9	7.0	6.2	−0.8	51
Iowa	1.4	2.5	1.1	3.0	4.0	1.0	35
District of Columbia	5.2	6.2	1.0	7.1	8.3	1.1	33
North Dakota	0.4	1.5	1.1	1.0	2.3	1.3	31
Hawaii	3.6	4.2	0.6	4.6	6.0	1.4	29
Indiana	1.1	2.3	1.3	2.0	3.6	1.6	26
New Hampshire	1.0	2.3	1.3	2.1	3.7	1.6	27
Pennsylvania	1.7	3.3	1.7	3.2	5.2	2.0	25
Illinois	1.8	3.9	2.1	2.7	5.0	2.3	23
New Jersey	1.7	4.0	2.3	3.2	5.6	2.4	22
Vermont	4.0	5.9	1.9	6.2	8.6	2.5	21
Massachusetts	4.9	7.6	2.7	7.0	10.2	3.2	16

Note: The abbreviation "pp" means percentage points. The bottom 12 expansion states for 138 percent of the federal poverty level are included in the first panel and subsequently presented in the next two panels. Their ranks (out of 51 jurisdictions) are presented in the final column. States must have expanded Medicaid by 2016 to be included in the table. "Medicaid only" means the respondent reported Medicaid as his or her only source of current health insurance coverage, and "Medicaid" means the respondent reported Medicaid as a source of current coverage. All numbers are rounded to the tenths place.

Source: Authors' tabulation of the 2012 and 2017 American Community Survey.

TABLE 4. STATE-LEVEL ANALYSIS: MEDICAID COVERAGE FOR ADULTS AGE 19–64; NOT CATEGORICALLY ELIGIBLE; NO IMPUTED VALUES; FULL-TIME, FULL-YEAR WORKERS; NUCLEAR FAMILIES ("GROUP 5") WITH INCOMES AT OR ABOVE 250 PERCENT OF THE FEDERAL POVERTY LEVEL

	Medicaid only			Medicaid		
State	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)
California	0.2	1.6	1.4	0.2	1.7	1.5
New York	0.4	1.4	1.0	0.5	1.5	1.1
West Virginia	0.1	0.8	0.7	0.1	1.2	1.1
Arkansas	0.0	0.8	0.8	0.1	0.9	0.8
Colorado	0.3	1.0	0.7	0.4	1.1	0.8
Hawaii	0.1	0.7	0.6	0.1	0.8	0.8
Kentucky	0.0	0.8	0.8	0.1	0.8	0.8
Massachusetts	0.9	1.6	0.7	1.0	1.7	0.7
New Jersey	0.2	0.8	0.7	0.2	0.9	0.7
Vermont	1.1	1.4	0.3	1.1	1.8	0.7
Washington	0.2	0.8	0.7	0.2	0.9	0.7
Maryland	0.1	0.7	0.5	0.2	0.8	0.6
Nevada	0.0	0.6	0.6	0.1	0.7	0.6
Louisiana	0.1	0.5	0.5	0.1	0.6	0.5
Michigan	0.1	0.5	0.4	0.1	0.6	0.5
Minnesota	0.4	0.8	0.4	0.5	0.9	0.5
Oregon	0.1	0.5	0.4	0.1	0.6	0.5
Rhode Island	0.4	0.8	0.4	0.4	0.8	0.5
Connecticut	0.5	0.8	0.3	0.5	0.9	0.4
Delaware	0.0	0.3	0.3	0.0	0.5	0.4
Florida	0.1	0.4	0.3	0.1	0.6	0.4
Idaho	0.0	0.1	0.1	0.0	0.4	0.4
Illinois	0.2	0.6	0.4	0.3	0.6	0.4
Montana	0.0	0.3	0.3	0.0	0.4	0.4
Ohio	0.0	0.4	0.3	0.1	0.4	0.4
Arizona	0.2	0.4	0.2	0.2	0.5	0.3
New Hampshire	0.0	0.3	0.2	0.0	0.3	0.3
New Mexico	0.5	0.5	0.1	0.6	0.9	0.3
South Carolina	0.1	0.3	0.3	0.1	0.4	0.3
Tennessee	0.1	0.3	0.3	0.1	0.4	0.3
Indiana	0.1	0.2	0.2	0.1	0.3	0.2
Texas	0.1	0.2	0.2	0.1	0.3	0.2
Utah	0.0	0.1	0.1	0.0	0.2	0.2
Wisconsin	0.1	0.4	0.2	0.2	0.4	0.2
Alabama	0.0	0.1	0.1	0.0	0.1	0.1
Alaska	0.0	0.7	0.7	0.7	0.8	0.1

	Medicaid only			Medicaid		
State	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)
Missouri	0.1	0.1	0.0	0.1	0.1	0.1
North Carolina	0.0	0.1	0.1	0.1	0.2	0.1
North Dakota	0.0	0.1	0.1	0.0	0.1	0.1
Pennsylvania	0.2	0.2	0.1	0.2	0.3	0.1
Virginia	0.0	0.1	0.1	0.0	0.1	0.1
Georgia	0.0	0.1	0.0	0.1	0.1	0.0
Iowa	0.1	0.1	0.0	0.2	0.2	0.0
Nebraska	0.0	0.1	0.1	0.1	0.1	0.0
Oklahoma	0.0	0.1	0.0	0.1	0.1	0.0
District of Columbia	0.9	1.1	0.2	1.5	1.4	−0.1
Kansas	0.0	0.0	0.0	0.1	0.1	−0.1
Mississippi	0.1	0.1	0.0	0.3	0.2	−0.1
South Dakota	0.1	0.0	−0.1	0.1	0.0	−0.1
Wyoming	0.0	0.0	0.0	0.1	0.0	−0.1
Maine	0.3	0.2	−0.2	0.4	0.2	−0.2

Note: The abbreviation "pp" means percentage points. "Medicaid only" means the respondent reported Medicaid as his or her only source of current health insurance coverage, and "Medicaid" means the respondent reported Medicaid as a source of current coverage. All numbers are rounded to the tenths place.

Source: Authors' tabulation of the 2012 and 2017 American Community Survey.

by 750 percent in California (from 0.2 percent to 1.7 percent), by 200 percent in New York (from 0.5 percent to 1.5 percent), and by 1,100 percent in West Virginia (from 0.1 percent to 1.2 percent). Four of the states with OIG audits that showed problematic Medicaid expansion eligibility—California, New York, Colorado, and Kentucky—all appear in the top seven states with respect to gains in coverage among those who are extremely unlikely to be eligible. (The other states are West Virginia, Arkansas, and Hawaii.)[80]

In table 5, we illustrate the effect of narrowing the sample but holding the threshold constant at 138 percent of the FPL. In other words, we move from Group 1 to Group 5 for households that report income above 138 percent of the FPL. For each grouping, we again include the overall ranking across the 50 states and Washington, DC. For Group 1, there is a large growth in Medicaid enrollment, rising by between 5.2 and 10.0 percentage points between 2012 and 2017 among the top 12 states.

80. Note that Hawaii appears on a list with small changes in improper enrollment (table 3) as well as on one with large changes in improper enrollment (table 4).

TABLE 5. STATE-LEVEL ANALYSIS, VARYING GROUP, INCOME AT OR ABOVE 138 PERCENT OF THE FEDERAL POVERTY LEVEL: MEDICAID EXPANSION STATES WITH LARGEST CHANGES IN MEDICAID COVERAGE FOR ADULTS AGE 19–64

	Group 1: All Adults Age 19–64						
	Medicaid only			Medicaid			
State	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)	Rank
New Mexico	4.9	13.3	8.4	7.3	17.3	10.0	1
California	4.2	11.9	7.6	6.1	14.4	8.3	2
Kentucky	2.4	8.5	6.1	4.9	11.9	7.1	3
Rhode Island	3.7	10.3	6.7	6.1	13.2	7.1	4
West Virginia	3.1	8.2	5.2	5.3	11.6	6.4	5
Oregon	2.7	7.9	5.3	4.9	11.0	6.0	6
Washington	2.3	7.4	5.2	4.1	10.2	6.0	7
Arkansas	2.3	7.1	4.8	5.0	10.7	5.7	8
Colorado	2.9	7.8	4.9	4.4	10.1	5.6	9
Louisiana	3.5	7.8	4.3	5.9	11.2	5.3	10
Montana	2.0	5.8	3.9	3.4	8.7	5.3	11
New York	6.8	11.2	4.4	8.9	14.1	5.2	12
	Group 2: Same as Group 1, Except Excluding Categorically Eligible						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
California	2.7	10.3	7.6	3.2	11.5	8.3	1
New Mexico	3.3	10.5	7.2	4.0	12.3	8.3	2
Kentucky	0.8	6.7	5.9	1.3	8.0	6.7	3
Rhode Island	2.2	7.9	5.7	2.6	9.0	6.4	4
Oregon	1.4	6.4	5.0	1.9	7.9	6.0	6
West Virginia	1.2	6.1	4.8	1.5	7.2	5.7	7
Washington	1.1	5.9	4.7	1.7	7.1	5.4	8
Colorado	2.0	6.4	4.4	2.6	7.7	5.1	9
New York	5.5	9.9	4.4	6.3	11.3	5.0	10
Arkansas	1.0	5.1	4.1	1.7	6.6	4.9	11
Montana	0.6	4.5	3.9	0.7	5.4	4.7	12
Louisiana	1.7	5.9	4.1	2.5	7.1	4.6	13
	Group 3: Same as Group 2, Except Excluding Imputed Values						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
California	2.3	9.2	7.0	2.4	9.7	7.3	1
New Mexico	2.9	8.4	5.4	3.3	9.5	6.2	2
Kentucky	0.4	5.9	5.4	0.5	6.3	5.8	3
West Virginia	0.8	5.3	4.4	0.9	5.8	5.0	4
Oregon	1.0	5.4	4.4	1.2	5.9	4.8	5

Washington	0.9	5.3	4.4	1.1	5.7	4.6	6
New York	4.6	8.6	4.0	5.0	9.2	4.3	8
Arkansas	0.8	4.5	3.8	0.9	5.1	4.2	9
Montana	0.3	4.2	3.9	0.4	4.5	4.2	10
Rhode Island	2.0	6.0	4.0	2.1	6.3	4.2	11
Colorado	1.7	5.2	3.6	1.8	5.7	3.8	12
Louisiana	1.4	5.2	3.8	1.7	5.6	3.8	13

	Group 4: Same as Group 3, Except Excluding Non–Full-Time, Full-Year Workers						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
California	0.9	4.7	3.8	1.0	5.1	4.0	1
New Mexico	1.3	4.1	2.8	1.6	4.7	3.1	3
Kentucky	0.0	2.7	2.6	0.1	2.9	2.8	4
New York	1.8	4.3	2.5	2.0	4.7	2.7	5
Oregon	0.2	2.4	2.1	0.3	2.6	2.4	6
Arkansas	0.2	2.3	2.1	0.3	2.6	2.3	7
West Virginia	0.4	2.1	1.7	0.5	2.6	2.1	8
Colorado	0.8	2.5	1.7	0.8	2.9	2.0	9
Louisiana	0.4	2.5	2.1	0.7	2.7	2.0	10
Rhode Island	0.9	2.9	2.0	1.1	3.0	1.9	11
Washington	0.3	2.1	1.8	0.4	2.3	1.9	12
Montana	0.1	1.8	1.7	0.1	1.9	1.8	13

	Group 5: Same as Group 4, Except Excluding Non-nuclear Families						
	Medicaid only			Medicaid			
State	2012	2017	Change	2012	2017	Change	Rank
California	0.6	3.5	2.9	0.7	3.8	3.1	1
New Mexico	1.4	3.5	2.1	1.7	4.3	2.6	2
Oregon	0.2	2.1	2.0	0.2	2.5	2.3	3
New York	1.4	3.4	1.9	1.5	3.6	2.1	5
Arkansas	0.1	1.9	1.8	0.3	2.2	1.9	6
Kentucky	0.0	1.8	1.8	0.1	2.0	1.9	7
West Virginia	0.2	1.6	1.3	0.2	2.0	1.7	8
Colorado	0.7	2.0	1.3	0.8	2.3	1.5	10
Montana	0.0	1.3	1.3	0.0	1.5	1.4	11
Rhode Island	1.0	2.5	1.5	1.2	2.6	1.4	13
Washington	0.3	1.5	1.3	0.4	1.8	1.4	14
Louisiana	0.2	1.5	1.3	0.4	1.7	1.3	15

Note: The abbreviation "pp" means percentage points. The top 12 states (all expansion states) for Group 1 are included in the first panel and subsequently presented in the next four panels. Their ranks (out of 51 jurisdictions) are presented in the final column (e.g., Arkansas ranked 8 out 51 for Group 1, ranked 11 out of 51 for Group 2, etc.). The state must have expanded Medicaid by 2016 to be included in the table. "Medicaid only" means the respondent reported Medicaid as his or her only source of current health insurance coverage, and "Medicaid" means the respondent reported Medicaid as a source of current coverage. All numbers are rounded to the tenths place.

Source: Authors' tabulation of the 2012 and 2017 American Community Survey.

Group 2 excludes respondents who could likely qualify for Medicaid through categorically eligible pathways, including those who reported (1) having a baby in the past year, (2) having a disability, (3) having Supplemental Security Income or Social Security income, or (4) having income from public assistance. Medicaid enrollment significantly declines for people with income above 138 percent of the FPL who do not satisfy one of these four criteria. For example, the percentage of people who report Medicaid as their source of coverage in California falls from 6.1 percent to 3.2 percent in 2012. Nonetheless, the *change* in Medicaid enrollment in California between 2012 and 2017 is 8.3 percentage points for Group 2—similar to the change in the full sample. Since this trend excluded those with likely alternative pathways to Medicaid, the change over time is likely a measure of growth in improper enrollment. Similar patterns emerge in other states. After excluding people who would likely be eligible for Medicaid through categorically eligible pathways, coverage still soared between 2012 and 2017. For example, in California, Colorado, and Kentucky—three states examined in recent OIG audits—the change in participation is similar in percentage point terms between the full sample and narrowed sample, suggesting that the growth in improper enrollment occurred among non–categorically eligible groups.

Progressing from the second to third panel of table 5, we next exclude individuals whose data include imputed values. Imputation—which uses actual answers from other respondents with similar characteristics to the respondent—could create measurement error. In all cases, Medicaid coverage is lower for Group 3. In most cases, the percentage point change in coverage between 2012 and 2017 is smaller for Group 3. (For instance, there is a 7.3 percentage point increase in Medicaid enrollment in California for Group 3, versus an 8.3 percentage point increase for Group 2). In all cases, the magnitude of the change over time remains large, and the state rankings are very similar to those of earlier groupings. For example, California, New Mexico, and Kentucky all rank in the top three states in both Group 2 and Group 3.

Next, moving to Group 4, the sample is restricted to full-time, full-year (FTFY) workers. This exclusion leads to lower Medicaid coverage rates for several reasons. First, focusing on FTFY workers removes from the sample people with a great deal of income volatility. Among the group of respondents with incomes at or above 138 percent of the FPL, average income is higher for FTFY workers, which will also reduce Medicaid participation rates. Second, the availability of employer-sponsored health insurance is higher among FTFY workers than in the complete sample, as is take-up. Finally, the employer mandate may

modestly increase employer-sponsored health insurance coverage, thus lowering Medicaid coverage. As can be seen by comparing states in Group 3 and Group 4, Medicaid participation in 2012 is much lower after these exclusions. For example, in California, Medicaid participation falls from 2.4 percent to 1.0 percent among FTFY workers in 2012. However, there is still substantial (but smaller) growth between 2012 and 2017 (a 4.0 percentage point increase in Medicaid coverage among FTFY workers versus a 7.3 percentage point increase without this restriction). Similar patterns emerge in other states, such as Alaska, Arkansas, Kentucky, New Mexico, New York, Oregon, and West Virginia.

The fifth panel imposes the final restriction, focusing on respondents living in nuclear families (i.e., the household consists of the head, spouse if present, and related children). Such a restriction does not materially change the conclusions. Baseline participation rates in 2012 are quite similar for Group 4 and Group 5, while the growth from 2012 to 2017 modestly decreases.

Taken as a whole, the analysis reveals a number of states where improper Medicaid enrollment is likely significant, and the conclusions are robust to different data specifications. California, Kentucky, New Mexico, Oregon, and West Virginia appeared near the top for all five groupings. Alaska, Arkansas, Colorado, and New York appeared near the top in four of the five groupings. Of these nine states, the OIG audits have investigated four and have found serious problems with the way those states are conducting eligibility reviews.

In addition, the analysis has examined Medicaid participation far from the eligibility threshold of 138 percent of the FPL. For thresholds of 138 percent, 200 percent, and 250 percent of the FPL, eight states consistently appear at the top in terms of a sizable share of the state population enrolled in Medicaid. These states include California, Colorado, Kentucky, New Mexico, Oregon, Rhode Island, Washington, and West Virginia.

Metropolitan-Level and PUMA-Level Analysis

We next turn to examining sub-state geographies: CBSAs and PUMAs. Following methods used by Courtemanche and his coauthors, we identify 378 metropolitan CBSAs in the ACS.[81] Figure 3 illustrates the broadest potentially improper enrollment measure: Medicaid coverage in 2017 for adults age 19 to 64 at or above 138 percent of the FPL. Table 6 provides estimates for the 44 cities within the

81. Courtemanche et al., "Early Impacts of the Affordable Care Act."

FIGURE 3. MEDICAID ENROLLMENT RATE (PERCENT) BY CORE-BASED STATISTICAL AREA, 2017

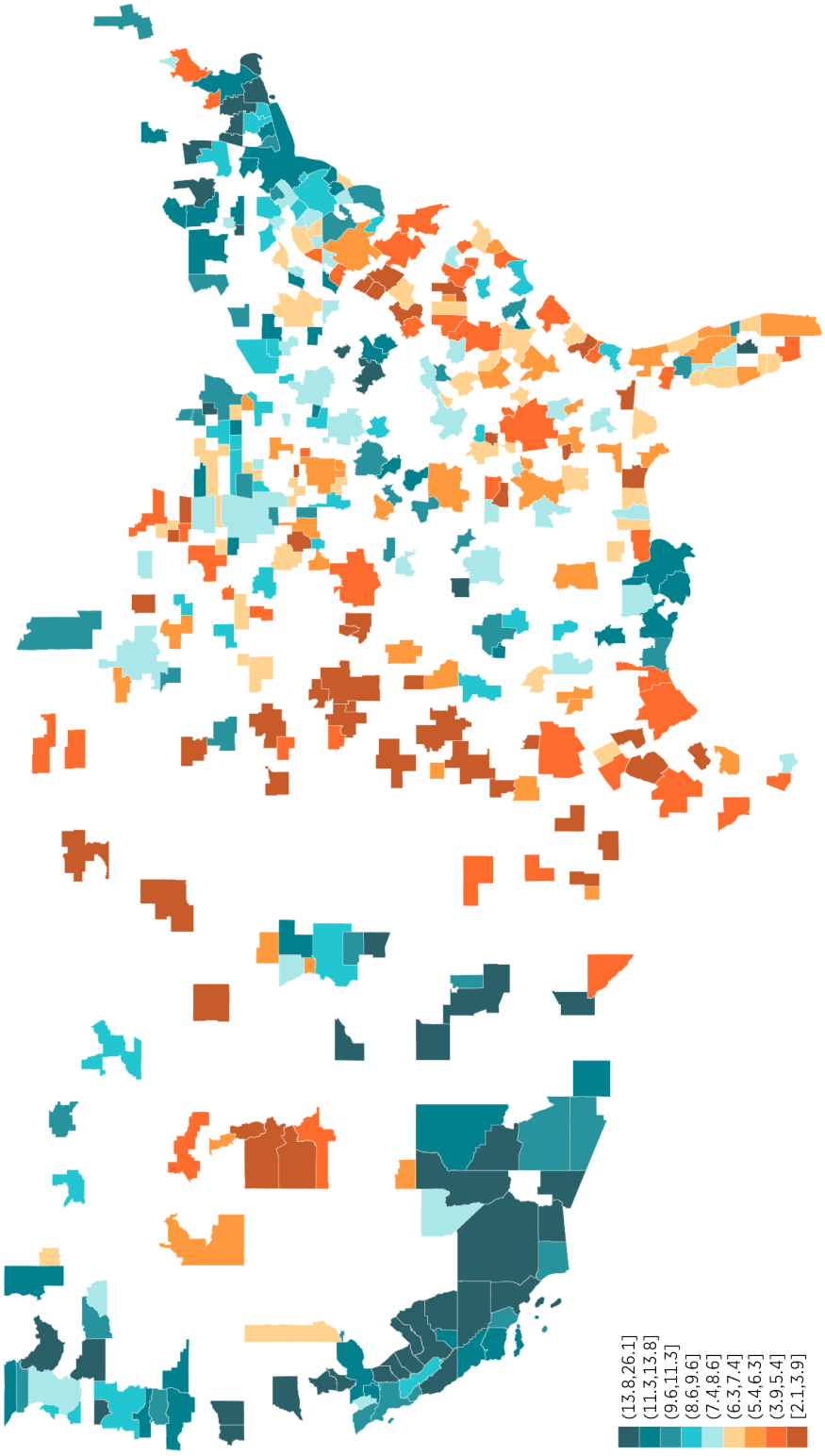


TABLE 6. ANALYSIS AT THE CORE-BASED STATISTICAL AREA (CBSA) LEVEL: MEDICAID COVERAGE FOR ADULTS AGE 19–64 ("GROUP 1") WITH INCOMES AT OR ABOVE 138 PERCENT OF THE FEDERAL POVERTY LEVEL

	Medicaid only			Medicaid comprehensive		
CBSA	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)
Merced, CA	9.3	20.8	11.5	11.3	26.1	14.8
El Centro, CA	8.2	21.1	12.9	11.1	25.7	14.6
Pueblo, CO	5.3	17.8	12.5	8.0	22.8	14.8
Farmington, NM	4.6	17.2	12.6	4.8	22.7	17.9
Chico, CA	5.6	15.1	9.4	9.9	21.5	11.5
Madera, CA	14.1	19.3	5.2	16.8	21.5	4.7
Yuba City, CA	5.8	16.3	10.6	9.3	21.2	11.9
Bakersfield, CA	5.5	17.2	11.8	8.0	21.0	13.0
Modesto, CA	7.0	17.7	10.7	10.4	21.0	10.6
Yakima, WA	2.3	15.7	13.3	4.6	20.9	16.3
Fresno, CA	6.6	17.0	10.4	9.3	20.8	11.5
Pittsfield, MA	11.4	13.0	1.6	15.7	20.8	5.1
Visalia–Porterville, CA	7.5	16.6	9.2	9.3	20.4	11.1
Grants Pass, OR	6.4	13.4	7.0	11.2	20.1	8.9
Stockton–Lodi, CA	6.6	16.8	10.2	9.3	19.5	10.2
Longview, WA	1.8	14.0	12.2	4.2	19.2	15.1
Wenatchee, WA	5.5	14.2	8.8	8.1	19.2	11.1
Yuma, AZ	2.9	14.7	11.8	5.3	19.1	13.8
Riverside–San Bernardino–Ontario, CA	4.7	15.9	11.2	6.7	19.0	12.3
Springfield, MA	9.9	14.4	4.5	13.6	19.0	5.4
Lake Havasu City–Kingman, AZ	7.0	14.7	7.7	10.1	18.4	8.3
Sebring, FL	6.2	12.7	6.6	12.0	17.9	5.9
Redding, CA	7.4	12.5	5.2	10.6	17.0	6.4
Barnstable Town, MA	10.4	13.1	2.7	13.9	16.9	3.0
Albuquerque, NM	5.5	12.3	6.9	7.9	16.4	8.5
Las Cruces, NM	3.6	12.8	9.2	5.6	15.8	10.2
Grand Junction, CO	3.5	12.8	9.3	4.7	15.7	11.0
Glens Falls, NY	2.1	12.1	10.0	5.1	15.6	10.5
Worcester, MA–CT	7.7	11.0	3.3	11.2	15.5	4.3
Jonesboro, AR	1.8	11.4	9.5	5.5	15.2	9.7
Los Angeles–Long Beach–Anaheim, CA	4.2	12.5	8.3	5.8	14.9	9.0
Elmira, NY	5.0	11.8	6.8	7.9	14.4	6.5
Parkersburg–Vienna, WV	2.6	11.8	9.2	5.2	14.3	9.1
Providence–Warwick, RI–MA	6.1	10.7	4.6	9.3	14.3	5.0
Salinas, CA	3.3	12.5	9.1	5.3	14.2	8.9
Utica–Rome, NY	7.1	11.0	4.0	9.4	14.1	4.7

TABLE 6. ANALYSIS AT THE CORE-BASED STATISTICAL AREA (CBSA) LEVEL: MEDICAID COVERAGE FOR ADULTS AGE 19–64 ("GROUP 1") WITH INCOMES AT OR ABOVE 138 PERCENT OF THE FEDERAL POVERTY LEVEL (*CONTINUED*)

	Medicaid only			Medicaid comprehensive		
CBSA	2012 (%)	2017 (%)	Change (pp)	2012 (%)	2017 (%)	Change (pp)
Huntington–Ashland, WV–KY–OH	2.5	10.3	7.8	4.4	14.0	9.6
Medford, OR	2.4	10.2	7.8	6.0	14.0	8.0
Flint, MI	4.6	10.2	5.6	8.2	13.9	5.7
Prescott, AZ	6.4	10.0	3.6	9.3	13.9	4.6
Alexandria, LA	3.3	9.2	5.9	5.2	13.8	8.5
Muskegon, MI	4.5	9.2	4.7	6.0	13.8	7.8
Rockford, IL	4.6	11.0	6.4	6.6	13.8	7.2
Sacramento–Roseville–Arden–Arcade, CA	3.8	10.7	6.9	6.2	13.8	7.6

Note: The abbreviation "pp" means percentage points. "Medicaid only" means the respondent reported Medicaid as his or her only source of current health insurance coverage, and "Medicaid" means the respondent reported Medicaid as a source of current coverage. All numbers are rounded to the tenths place.

Source: Authors' tabulation of the 2012 and 2017 American Community Survey.

top grouping (Medicaid enrollment rates exceeding 13.8 percent).[82] The cities are overwhelmingly in states with a high percentage of Medicaid enrollees with income above 138 percent of the FPL. Most striking is the extent of the problem in California cities. In Merced, California, 26.1 percent of adults with incomes exceeding 138 percent of the FPL reported Medicaid enrollment in 2017. Metro areas in California represent approximately 7 percent of all CBSAs analyzed (26 out of 378), but they represent 34 percent of cities in the top tier of Medicaid enrollees with income above 138 percent of the FPL (15 out of 44).

Figure 4 uses the most granular geographical unit contained in the ACS: 2,351 PUMAs. The map clearly shows that certain states—highlighted in the state-level analysis above—have systemic issues with potentially improper enrollment that affect a broad range of localities. In 2017, in eight PUMAs, more than 33 percent of adults age 19–64 with income above 138 percent of the FPL reported being enrolled in Medicaid. Five of the eight PUMAs are in either New York City or Los Angeles. Figures 5 and 6 show participation rates in these two areas, respectively. In New York City, the highest potentially improper enrollment rates were in the Bronx (with five PUMAs exceeding 30 percent). In Los Angeles, Medicaid enrollment of people with income above 138 percent of the FPL was highest in central and south-central Los Angeles, with the rate exceeding 40 percent in one PUMA.

82. The CBSA map divides the 378 CBSA locations into nine bins. This is the highest bin.

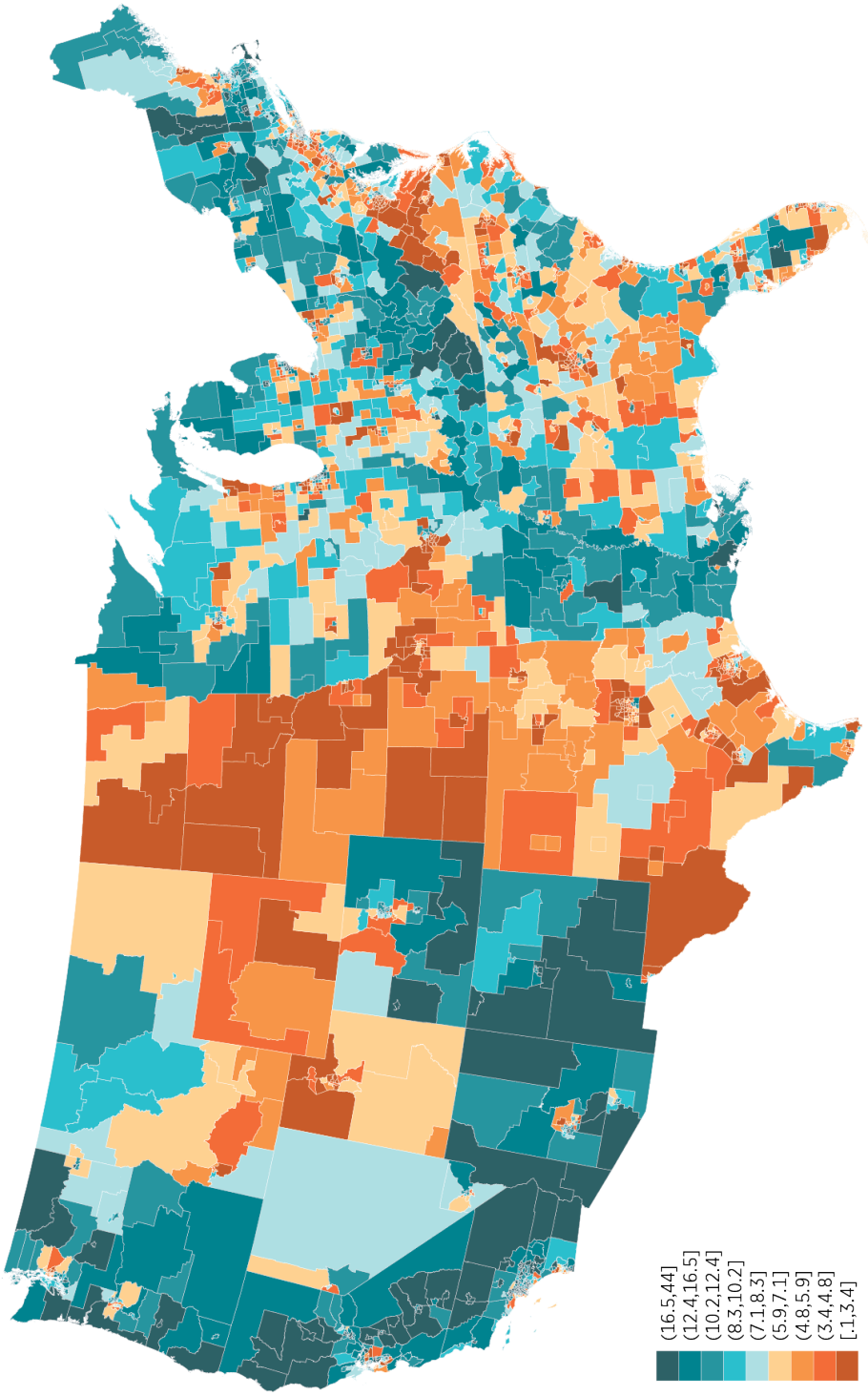
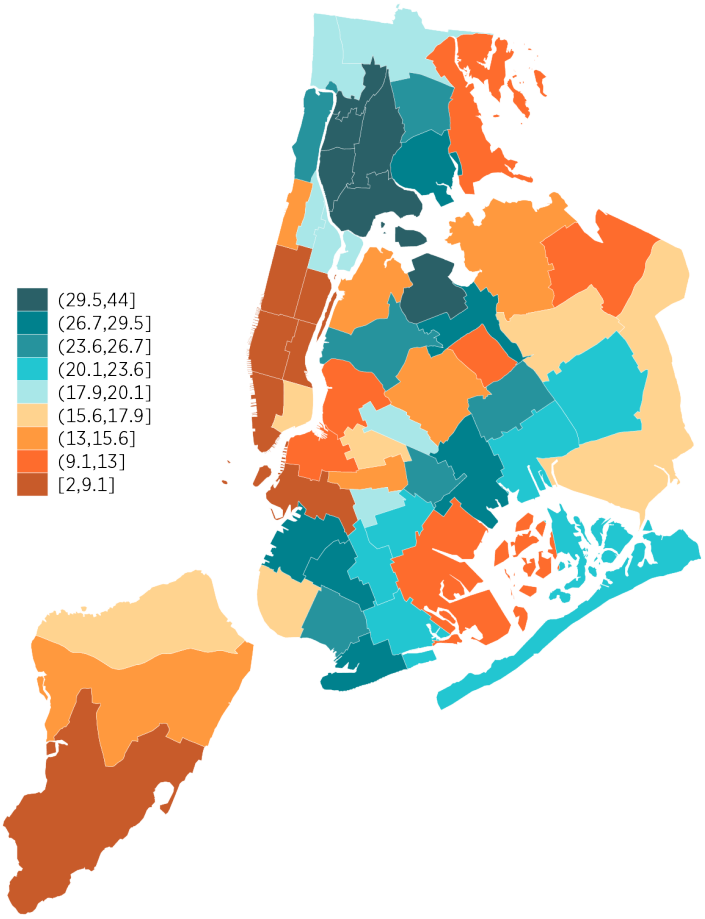


FIGURE 4. MEDICAID ENROLLMENT (PERCENT) BY PUBLIC USE MICRODATA AREA, 2017

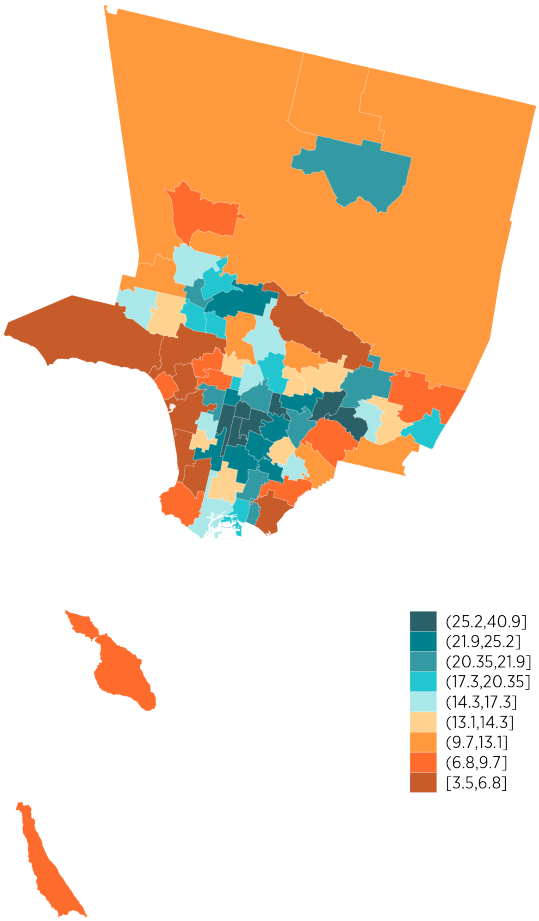
FIGURE 5. MEDICAID ENROLLMENT (PERCENT) BY PUBLIC USE MICRODATA AREA IN NEW YORK CITY, 2017



ADDRESSING IMPROPER MEDICAID ENROLLMENT

From 2014 through 2016, states lacked any incentive to ensure proper enrollment for the newly eligible Medicaid expansion group. There was no incentive to exclude either individuals who would have been entitled to Medicaid through a pre-ACA eligibility group or individuals who were not eligible for Medicaid for any reason. For people enrolled as newly eligible who would have qualified for Medicaid under previous eligibility criteria, states received a 100 percent reimbursement—much higher than the normal reimbursement rate, which averages to 60 percent. Ensuring proper eligibility would have meant higher state taxes or reduced state spending on other items and would have lowered federal spending flowing to the states. For people enrolled as newly eligible who were ineli-

FIGURE 6. MEDICAID ENROLLMENT (PERCENT) BY PUBLIC USE MICRODATA AREA IN LOS ANGELES, 2017



gible for Medicaid through any pathway, states received an economic benefit. The states did not need to put up any state money, and their healthcare industry benefited from additional revenue. Thus, not only do state governments have an incentive to classify ineligible individuals as newly eligible Medicaid enrollees—the healthcare industry in these states shares that preference. It is worth noting that as a result of state financing gimmicks, states probably generate more than $1 in federal revenue for every $1 spent on the Medicaid expansion.

In 2017, states began absorbing 5 percent of the cost of the expansion population. This does not meaningfully change states' incentives to classify previously eligible Medicaid enrollees as newly eligible. However, it does mean that states have a marginally greater incentive to ensure that people with income above

the eligibility thresholds are not enrolled in Medicaid. Over time, this should probably lead to fewer enrollees with income above eligibility thresholds. Two significant factors mean that this effect may be quite limited, however. First, since some share of the individuals being improperly enrolled in Medicaid would otherwise go uninsured, there could be a small rise in uncompensated care if they were excluded—something that the state and the healthcare industry in the state would be eager to avoid. Second, the financing gimmicks employed by states mean that they face a smaller "real" share of the financing burden for the Medicaid expansion group than the amount the formula stipulated by the ACA shows. Indiana, for example, instituted a hospital tax to produce revenue for the entire state share of its Medicaid expansion population. The hospital tax is used for the state share of spending, triggering the federal reimbursement. The state then uses the federal reimbursement to pay back the hospitals' tax contribution and make the hospitals better off through all the additional federal money that is generated, given the economics of the Medicaid expansion.

Given the incentives states face to enroll as many people as possible as newly eligible Medicaid recipients, CMS has an important responsibility to conduct robust and meaningful oversight and to penalize states that fail to implement proper eligibility reviews and where audits show a large number of ineligible or potentially ineligible enrollees. In addition, Congress could take steps to change the incentives states face. Finally, CBO needs to ensure that its baseline accounts for the evidence of improper Medicaid enrollment in order to provide the best advice possible for legislators moving forward.

RECOMMENDATIONS TO CMS

CMS must prioritize program integrity efforts. In both the Obama administration and the Trump administration, Medicaid program integrity efforts were neglected. The Obama administration prioritized enrollment into the two main programs created by the ACA—the exchanges and the Medicaid expansion—to build early political support behind the ACA.[83] The administration issued a Medicaid eligibility rule in 2013 and issued guidance to ease Medicaid enrollment.[84] It

83. The Obama administration put out information to states in the spring of 2013 in the hopes of ensuring an efficient enrollment process. See CMS, *Facilitating Medicaid and CHIP Enrollment and Renewal in 2014*, May 17, 2013.
84. CMS, *Facilitating Medicaid and CHIP Enrollment*; Medicaid and Children's Health Insurance Programs: Essential Health Benefits in Alternative Benefit Plans, Eligibility Notices, Fair Hearing and Appeal Processes, and Premiums and Cost Sharing; Exchanges: Eligibility and Enrollment, 78 Fed. Reg. 42160 (July 15, 2013).

also canceled CMS eligibility audits starting in fiscal year 2015, when the audits would have been most useful because of the changes made by the ACA. The eligibility audits have resumed in 2019 and cover one-third of states; they are widely expected to show a severe amount of improper enrollment in the expansion. Under the Trump administration, CMS has prioritized certain aspects of the Medicaid program—such as community engagement requirements—neglecting program integrity efforts to date.

The combined evidence from OIG audits, CMS's restarted payment error rate measurement audits, and data analysis from the Census Bureau's ACS is overwhelming and clear—millions of individuals have been classified as newly eligible enrollees even though they almost certainly do not meet eligibility criteria, and potentially millions of others who do not meet eligibility criteria have been classified as previously eligible enrollees.

In order to estimate improper federal spending on individuals enrolled in Medicaid who have income above the eligibility threshold, we took the differential between the change in Medicaid coverage from 2012 to 2017 for adults age 19–64 in expansion states and the change in Medicaid coverage from 2012 to 2017 for adults age 19–64 in nonexpansion states. All states that expanded by 2017 are classified as expansion states. This percentage point change provides an estimate of the impact of the Medicaid expansion on enrollment of people with income above eligibility thresholds. In order to be conservative with our estimates, we exclude individuals who reported a situation that represented a reasonable alternative pathway to Medicaid—pregnancy in the past year, being disabled, enrollment in Supplemental Security Income or Social Security, or receiving public assistance income. We also base the estimates on people who reported exclusively being enrolled in Medicaid coverage, again in order to be conservative with the estimates.

We provide a range by reporting on people enrolled in Medicaid who report income above 138 percent of the FPL (an upper bound) and people enrolled in Medicaid who report income above 200 percent of the FPL (a lower bound). We took the differential from above—which represents the percentage of people enrolled in Medicaid as a result of the ACA Medicaid expansion in the states that expanded by 2017 who have annual income above eligibility thresholds—and then multiplied it by the number of people in Medicaid expansion states who have income above these thresholds and do not have one of the four characteristics that could represent another reasonable path to Medicaid.

In total, we estimate between 2.23 million and 3.25 million ineligible Medicaid enrollees in Medicaid expansion states who have income above the eligibility

threshold. Using CMS Office of the Actuary estimates of the FY 2017 per enrollee federal cost of the expansion—$5,522—we estimate total improper federal spending of between $12.3 billion and $17.9 billion in 2017 alone. Importantly, these estimates account only for individuals who were improperly enrolled because their income was above eligibility thresholds; they do not include individuals who were misclassified by the state.

CMS needs to take action to address this problem. There are four main actions that the agency must take. First, the agency needs to recover the amounts that states have improperly claimed. Using statistically valid methods with both audit findings and analyses like that contained in this paper, CMS needs to make recoveries on behalf of federal taxpayers. This action would not only provide federal taxpayers with some justice, but it would also create an incentive for states to do proper eligibility reviews and to address the many flaws and problems that have been flagged by the OIG in how states are determining eligibility. Second, CMS needs to review all of its policies that could have exacerbated improper enrollment, including permitting hospitals to deem people eligible,[85] using eligibility for the Supplemental Nutrition Assistance Program as a proxy for Medicaid eligibility,[86] and facilitating 12-month continuous eligibility.[87]

Third, CMS needs to require that states conduct eligibility determinations every six months; that states use all applicable databases, including the new-hire database and all income databases; and that states do not rely on self-attestation. Fourth, the agency should require redeterminations immediately in the hot-spot areas identified in this paper.

This paper provides information about where CMS and the OIG should prioritize their limited resources. The evidence points to egregious eligibility errors in many states, including Alaska, Arkansas, California, Colorado, Kentucky, Louisiana, Montana, Nevada, New Mexico, New York, Oregon, Rhode Island, Washington, and West Virginia. In some of these states, there are local areas where the improper eligibility rate is so excessive that it appears there may have been organized efforts to enroll people, regardless of their income or other characteristics, into the Medicaid program. In these areas, the amount of improper spending is so excessive that CMS should require immediate eligibility reviews and should send trained staff to localities in order to monitor the eligibility and enrollment process.

85. Tricia Brooks, "Health Presumptive Eligibility," *Health Affairs*, January 9, 2014.
86. CMS, *Facilitating Medicaid and CHIP Enrollment*.
87. CMS, *Facilitating Medicaid and CHIP Enrollment*.

CMS should also look at the attributes of states' Medicaid eligibility processes that have experienced comparatively low rates of growth of potentially improper Medicaid enrollment between 2012 and 2017. Among expansion states, Delaware and Hawaii appear to be the best at limiting improper enrollment.

RECOMMENDATIONS TO CONGRESS

Policy outcomes are largely the result of the incentives faced by key actors. The fiscal relationship between the federal government and states is mainly driven now by the open-ended federal financing of state Medicaid expenditures. The regular match rate acted as a disincentive to run an efficient program, because 60 cents (on average) of each dollar of program savings that states could generate would need to be returned to the federal government. In other words, even before the ACA, the structure of the program suggested that improper enrollment would occur.

The elevated reimbursement rate presents states with large fiscal incentives to incorrectly classify previously eligible Medicaid enrollees as newly eligible. Given the relatively small state share of Medicaid spending on people enrolled as newly eligible, which is even smaller in effect after accounting for various state financing gimmicks such as provider taxes and intergovernmental transfers, states also lack an incentive to ensure that people who do not meet any qualification for Medicaid are not classified as newly eligible enrollees. The powerful healthcare interest groups in the states have an interest in securing as many Medicaid enrollees as possible, a phenomenon particularly true of insurance companies that receive capitation payments for every enrollee regardless of the individual's use of medical services.

One way to remove the state incentive to misclassify applicants as Medicaid enrollees would be to replace the open-ended federal reimbursement structure with fixed payments to states for the care of lower-income and vulnerable populations. States would have an incentive to spend the money judiciously since the federal government's contribution would be capped and additional money would need to be financed from the state's tax base. Advocates of this policy reform argue that it would realign state's incentives so that the public's tax money is better spent and more likely to be used for the intended purposes of the program. However, such a reform is a heavy political lift, as demonstrated by the failure in 2017 of congressional efforts to reform Medicaid's financing structure.

Short of fundamental financing reform, Congress could take two actions to improve the incentives facing states and increase Medicaid program integrity.

First, Congress could equalize the reimbursement rates between the expansion population and the previously eligible populations.[88] Second, Congress could eliminate states' abilities to use provider taxes, intergovernmental transfers, and other creative financing gimmicks, so that states would bear at least some financial cost from newly eligible enrollees.

RECOMMENDATIONS TO CBO

CBO has made several large errors in its estimation of the ACA. Some mistakes were understandable, but CBO was slow to correct others even in the face of mounting evidence indicative of a program working differently than it had expected.[89] CBO's main mistake with the Medicaid expansion was its failure to anticipate how states would behave as a result of the elevated reimbursement rate. In fact, CBO's model did not account for states behaving any differently with the elevated reimbursement rate than with the reimbursement rate for the traditional eligibility populations. As discussed above, both Medicaid expansion enrollment and spending were far greater than CBO had projected.

CBO needs to take stock of the evidence that a substantial number of Medicaid enrollees added to the program over the past several years do not meet eligibility requirements, and CBO should update its modeling and assumptions to account for the fact that states have large incentives to classify enrollees as newly eligible to receive the enhanced reimbursement rate. CBO should explicitly lay out assumptions about take-up among both people who meet the eligibility requirements of the program and people who do not. It is possible that some members of Congress will propose legislation with the intent of better ensuring that people are properly enrolled, potentially by including penalties for states with large eligibility errors. And CBO has a responsibility to ensure that its projections of these legislative proposals are as accurate as possible.

CONCLUSION

Understanding incentives is the key to projecting what will happen when government policy changes. The ACA's Medicaid expansion presented states with an opportunity to substantially increase federal dollars flowing into their juris-

88. Brian Blase argues for this reform in Blase, *Health Reform Progress: Beyond Repeal and Replace* (Paeonian Springs, VA: Galen Institute, September 2019).
89. Brian Blase, "Learning from CBO's History of Incorrect ObamaCare Projections," *Forbes*, January 2, 2017.

diction without meaningfully increasing the state's share of the spending obligations. The results are clear: states that expanded Medicaid have enrolled far more people than expected at a much greater cost than expected. The findings of numerous audits—both federal and state—show that states have largely failed to conduct proper eligibility reviews. The November 18, 2019, improper payment report from CMS shows a surge in improper Medicaid payments, which we estimate exceed 20 percent of federal expenditures—an amount above $75 billion in 2019.[90] With limited federal oversight and little, if any, effective federal action to penalize states for improper eligibility reviews and determinations, states had even less incentive to conduct proper reviews. While some states have done an admirable job minimizing the Medicaid enrollment of people with income above eligibility thresholds, the evidence suggests that other states have allowed a significant number of people with income above eligibility thresholds to join the program. If federal policymakers wish to address this problem, CMS will need to initiate corrective action processes, and Congress will need to address the incentives that states face as a result of the ACA Medicaid expansion.

90. Yelowitz and Blase, "Medicaid Improper Payments Are Much Worse Than Reported."

APPENDIX

TABLE 1. AMERICAN COMMUNITY SURVEY POPULATION ESTIMATES, BY STATE, FOR ADULTS AGE 19–64 WITH INCOMES AT OR ABOVE 138% OF THE FEDERAL POVERTY LEVEL

	2012					2017				
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 1	Group 2	Group 3	Group 4	Group 5
AL	2,142,411	1,748,571	1,266,024	787,563	653,443	2,181,026	1,797,186	1,206,706	786,612	627,878
AK	392,662	341,342	254,098	136,021	98,640	375,647	322,584	223,699	125,629	86,842
AZ	2,821,520	2,425,426	1,758,657	1,054,275	781,078	3,181,751	2,737,294	1,760,365	1,120,159	795,803
AR	1,265,917	1,028,785	774,897	510,349	416,168	1,310,217	1,071,017	737,118	497,499	390,894
CA	17,921,937	15,884,698	11,529,634	6,406,736	4,364,231	19,757,078	17,549,974	11,413,991	6,765,773	4,488,617
CO	2,600,074	2,305,505	1,750,099	1,076,195	833,105	2,921,827	2,590,797	1,767,431	1,148,760	854,010
CT	1,837,074	1,629,242	1,179,957	680,068	533,034	1,860,106	1,646,448	1,121,747	679,630	516,471
DE	445,662	378,734	274,972	168,512	126,103	458,146	399,119	269,555	166,572	124,580
DC	326,491	291,264	204,444	147,195	97,064	369,550	323,623	217,208	166,500	103,687
FL	8,595,758	7,426,347	5,053,405	2,982,647	2,178,348	9,690,684	8,392,267	5,318,704	3,328,060	2,302,723
GA	4,478,085	3,881,431	2,701,383	1,656,246	1,315,524	4,935,047	4,278,649	2,863,695	1,900,684	1,444,272
HI	699,545	614,157	408,825	255,907	161,869	721,180	644,860	387,986	252,145	160,515
ID	711,542	599,816	456,424	264,834	213,793	779,568	656,333	481,035	294,855	230,465
IL	6,263,257	5,539,162	4,038,096	2,405,283	1,882,731	6,317,110	5,590,967	3,812,935	2,401,143	1,841,479
IN	3,019,439	2,606,439	2,006,646	1,232,345	992,355	3,133,866	2,678,759	1,942,485	1,296,609	1,022,132
IA	1,476,008	1,279,477	973,773	663,281	558,429	1,513,749	1,337,040	954,825	675,829	547,558
KS	1,356,947	1,171,570	923,631	603,144	495,287	1,381,932	1,191,662	875,764	602,302	488,150
KY	1,949,234	1,609,676	1,231,936	761,028	614,481	1,972,683	1,621,884	1,152,077	751,576	584,366
LA	2,021,393	1,708,129	1,162,968	732,371	571,853	2,032,041	1,713,580	1,125,021	723,605	558,170
ME	626,003	526,484	418,862	251,326	196,987	644,523	536,905	397,040	259,062	196,910
MD	3,131,349	2,771,723	2,042,859	1,326,015	972,307	3,203,897	2,820,589	1,885,598	1,247,052	927,353
MA	3,409,159	3,023,334	2,154,540	1,287,627	963,783	3,555,800	3,154,069	2,016,522	1,271,498	942,016
MI	4,554,310	3,843,372	2,905,859	1,655,908	1,349,151	4,710,672	4,004,264	2,836,140	1,798,306	1,407,767
MN	2,724,184	2,423,765	1,945,260	1,261,592	1,021,305	2,852,210	2,519,756	1,849,087	1,237,015	984,363
MS	1,194,051	987,004	696,299	448,938	354,214	1,247,961	1,034,115	674,087	442,790	347,655
MO	2,756,213	2,333,791	1,766,286	1,143,877	914,922	2,864,178	2,428,942	1,691,409	1,151,207	909,887
MT	463,838	400,621	292,617	173,353	143,205	491,500	420,906	287,320	182,717	142,677
NE	886,758	790,263	632,397	436,568	357,323	930,196	805,547	589,949	419,017	338,298

	2012					2017				
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 1	Group 2	Group 3	Group 4	Group 5
NV	1,312,396	1,141,847	812,433	475,085	324,935	1,469,141	1,273,445	846,596	527,262	360,371
NH	702,485	616,816	470,568	296,418	231,064	721,157	627,093	462,272	298,370	218,132
NJ	4,603,797	4,094,045	2,872,419	1,613,655	1,235,513	4,715,475	4,211,800	2,783,846	1,662,046	1,259,414
NM	879,307	736,778	507,091	302,397	229,249	886,555	731,398	499,010	310,379	228,698
NY	9,561,554	8,453,093	5,730,921	3,164,010	2,307,936	9,816,612	8,691,009	5,304,269	3,092,029	2,215,879
NC	4,406,333	3,766,055	2,801,259	1,716,618	1,382,353	4,822,779	4,157,053	2,885,625	1,910,496	1,496,451
ND	364,106	321,301	239,945	160,670	134,569	385,012	341,144	240,344	169,332	136,936
OH	5,370,202	4,617,445	3,542,832	2,198,567	1,782,933	5,520,776	4,732,066	3,403,753	2,243,592	1,756,288
OK	1,693,222	1,417,249	1,033,133	705,424	558,891	1,743,740	1,437,294	968,357	641,683	503,137
OR	1,791,469	1,518,746	1,179,612	662,077	497,703	1,998,144	1,725,434	1,219,088	736,258	533,598
PA	6,169,729	5,303,460	3,955,978	2,402,288	1,931,405	6,208,947	5,319,768	3,666,926	2,381,169	1,855,909
RI	516,963	453,714	328,104	191,603	142,321	537,095	462,610	298,789	185,471	144,099
SC	2,087,136	1,750,849	1,239,310	757,112	600,296	2,270,723	1,900,901	1,236,232	801,395	624,631
SD	387,808	337,031	260,827	182,922	152,777	401,196	352,777	264,843	194,856	157,527
TN	2,918,197	2,455,401	1,823,095	1,138,229	912,487	3,130,596	2,649,783	1,813,466	1,200,206	922,349
TX	11,874,134	10,381,225	7,558,171	4,831,382	3,671,417	13,453,391	11,812,808	7,956,252	5,145,212	3,834,827
UT	1,323,358	1,150,701	893,473	523,413	403,364	1,509,952	1,323,169	988,373	603,160	452,090
VT	315,113	270,587	216,031	136,579	101,174	306,437	259,751	182,916	116,672	89,471
VA	4,180,022	3,691,219	2,768,436	1,776,729	1,363,621	4,319,646	3,782,287	2,601,079	1,721,818	1,296,136
WA	3,466,174	3,010,024	2,306,700	1,346,461	1,033,385	3,815,807	3,312,799	2,420,992	1,497,743	1,086,813
WV	824,391	669,335	489,416	297,158	243,979	763,879	615,112	436,190	272,666	217,801
WI	2,801,071	2,446,965	1,927,798	1,228,810	1,002,746	2,870,641	2,505,264	1,849,554	1,256,463	1,012,741
WY	288,272	251,145	190,309	124,714	98,907	279,729	238,616	165,805	108,438	86,157

Note: Estimates use population weights from American Community Survey files. Group 1 includes all adults age 19–64 with income at or above 138 percent of the federal poverty level. Group 2 then excludes individuals who may qualify for Medicaid based on categorical eligibility. Group 3 then excludes respondents with imputed values. Group 4 then restricts the sample to individuals who worked full-time, full-year. Group 5 then restricts the sample to individuals in nuclear families.

Source: Authors' tabulation of the 2012 and 2017 American Community Survey.

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Between his congressional and White House tenures, Blase was a senior research fellow with the Spending and Budget Initiative at the Mercatus Center. There he authored or coauthored six research papers, wrote nearly fifty commentaries, regularly briefed federal and state policymakers, and frequently appeared in media.

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