



# Estimating Health Coverage in 2023

## An Update to the Health Insurance Policy Simulation Model Methodology

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### Introduction to HIPSM

The Health Insurance Policy Simulation Model (HIPSM) is a detailed microsimulation model of the health care system designed to estimate the cost and coverage effects of proposed health care policy options. The model simulates household and employer decisions and models the way changes in one insurance market interact with changes in other markets. HIPSM is designed for quick-turnaround analysis of policy proposals. It can be rapidly adapted to analyze a wide variety of new scenarios—from novel health insurance offerings and strategies for increasing affordability to state-specific proposals—and can describe the effects of a policy option over several years. The model is designed to incorporate timely, real-world data to the extent they are available. We regularly update the model to reflect published Medicaid and Marketplace enrollment and costs in each state. This report describes updates to the HIPSM methodology that incorporate data from 2022 to simulate policy alternatives in 2023 and later years.

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

### How HIPSM Has Been Used

The Health Policy Center at the Urban Institute has a long history of health insurance simulation work, including extensive experience working with state and national policymakers to examine the

coverage effects, costs, and financing of alternative strategies to cover the uninsured population. In a notable example of our early work, we simulated health reform policies that yielded a road map for the landmark 2006 health care reform legislation in Massachusetts that expanded coverage and created a subsidized private insurance market for residents with low incomes, among other policies (Blumberg et al. 2006). That research garnered the prestigious Health Services Research Impact Award in 2007, and the success of the Massachusetts programs influenced the design of the Affordable Care Act (ACA).

Since 2010, HIPSM has been used in analyses of the impact of the ACA and proposed alternatives. Below are some examples of influential research using HIPSM.

- **Medicaid enrollment after the COVID-19 public health emergency (PHE).** Under the Families First Coronavirus Response Act, state Medicaid programs cannot disenroll enrollees during the PHE. Consequently, Medicaid enrollment has reached unprecedented levels. In September 2021, we estimated that 15 million people could lose Medicaid coverage after the PHE expires and discussed what coverage options they would have and the importance of state actions in minimizing any resulting losses of health coverage (Buettgens and Green 2021). This paper has been widely cited, particularly as the issue becomes more widely known. At the time of writing, the PHE's duration is still uncertain, so we recently published an update of our analysis (Buettgens and Green 2022).
- **Changes in health coverage due to the COVID-19 pandemic.** In 2020, many were concerned about how the pandemic and pandemic-related job losses would affect people's health coverage. We incorporated what little data were available in the first months of the pandemic into HIPSM and forecasted health coverage transitions during 2020 (Banthin et al. 2020). Our estimates of coverage losses were much smaller than others using different methodologies and were generally consistent with later 2020 survey data that showed either modest or no statistically significant increases in uninsurance. Our estimates were intended for the summer of 2020; survey data for the entire year later showed somewhat lower numbers of uninsured people due to Medicaid policy during the PHE, as described in the previous bullet.
- **Medicaid expansion.** We regularly publish estimates of the impacts on health coverage and on state and federal costs if the remaining states that have not expanded Medicaid under the ACA do so. These estimates have played an important role in informing the policy debate about ACA Medicaid expansion in many states (Buettgens 2021; and Simpson 2021). We have also conducted more detailed analyses of Medicaid expansion in some states, such as Alaska and Ohio.
- **Single-payer and other approaches toward universal coverage.** In 2016, we published an often-cited estimate of the costs of Senator Sanders's single-payer health coverage proposal (Holahan et al. 2016). In 2019, we followed this up with a report presenting detailed cost and coverage estimates for health reforms ranging from modest expansions of the ACA to replacement of the ACA with a single-payer system (Blumberg, Holahan, et al. 2019).

- **ACA repeal and replace efforts.** Congress tried many times to repeal and replace the ACA in 2017. We published state-level analyses of the impact of these bills as they evolved (Blumberg, Buettgens, and Holahan 2016). Our research received tens of thousands of media citations in 2020 alone.
- **Supreme Court cases involving the ACA.** HIPSM has had an impact at the national level, most notably in a series of analyses about the impact of *King v. Burwell*; the chief justice in the Supreme Court’s 2015 opinion cited HIPSM results.<sup>1</sup> Our research was also cited in multiple amicus briefs in the later *California v. Texas* case.

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

- **New York (2009–present).** We have been providing microsimulation work and technical assistance to the New York State Department of Health since 2009 on issues related to Medicaid, the Children’s Health Insurance Program (CHIP), the private nongroup and small-group markets, and the Essential Plan (Basic Health Program).
- **Massachusetts (2010–present).** With funding from the Blue Cross Blue Shield of Massachusetts Foundation that was coordinated with state agencies, we have been providing technical assistance in analyzing ACA Marketplace and regulatory design choices since 2010. More recently, we presented an analysis of the impact on health coverage and costs should the latest legal challenge to the ACA, *California v. Texas*, have been found for the plaintiffs (Banthin, Buettgens, and Blumberg 2019).
- **Virginia (2021).** We analyzed various state health reform proposals for the legislature’s Joint Committee on Health Care, including programs to increase Marketplace tax credits and cost-sharing reductions, public options, an individual mandate, and ending premium rating for tobacco use.
- **New Mexico (2019–2020).** In 2019, we conducted a detailed analysis of the uninsured population in New Mexico for the state government (Banthin et al. 2019). In 2020, we estimated the impacts of 2020 enrollment changes and job changes related to the pandemic on New Mexico’s uninsured population. We also simulated a range of state policy options to make health coverage more affordable (Buettgens et al. 2020).
- **Alaska (2013 and 2019).** With funding from the Alaska Native Tribal Health Consortium, we analyzed the impact of Medicaid expansion in Alaska, estimating enrollment changes, the characteristics of people gaining coverage, and Medicaid spending by both the state and federal governments.
- **Oregon (2014, 2016, 2018).** In partnership with actuaries at Wakely Consulting and with funding from the state government, we prepared detailed analyses of the feasibility of the ACA’s Basic Health Program in Oregon in 2014 and 2016. In 2018, we completed a detailed analysis of the characteristics of the state’s uninsured population and the implications of a state individual mandate.
- **Texas (2018).** With funding from the Episcopal Health Foundation, we conducted an analysis of the uninsured population, providing estimates by county or group of counties

and by detailed demographic and economic characteristics (Buettgens, Blumberg, and Pan 2018).

## Overview of the Model

HIPSM is similar to some other microsimulation models of health coverage and costs in that individual and family decisions to enroll in health coverage are based on an expected utility framework.<sup>2</sup> Such models define an expected utility function that accounts for expected out-of-pocket spending, health needs, the risk of high health costs, and income. Each family unit chooses the option with the highest expected utility, which includes being uninsured. This approach allows us to incorporate the existing literature on insurance decisions and allows for the evaluation of novel policies in the same framework.

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

Below, we summarize the construction of HIPSM's baseline under current law. A more detailed description can be found in Buettgens and Banthin (2020).

- As the core data, we use the US Census Bureau's 2012 and 2013 American Community Surveys, which we combine to increase sample size (more than 6 million observations of individuals linked together by family and household relationships). The combined file is reweighted to reflect the distribution of the demographic, economic, and health coverage characteristics of the 2013 American Community Survey sample.
- Each year, the model is calibrated to reproduce the latest available Medicaid and Marketplace enrollment numbers in each state.
- Population weights for current and future years are based on more recent American Community Survey data. For future years, we use projections for the 2030 population from the Urban Institute's Mapping America's Futures program. These projections match Census Bureau national population projections but include greater detail and state-level projections.
- Using the Medical Expenditure Panel Survey Household Component and other data sources, we estimate health care expenditures for each individual in the dataset in each possible coverage status, including out-of-pocket spending, spending covered by private insurance, Medicaid and CHIP spending, and uncompensated care for the uninsured population.

- We impute offers of employer-sponsored insurance (ESI) to all workers. We also impute immigration status and eligibility for Medicaid, CHIP, and subsidized qualified health plan coverage to every individual.
- We group workers with the same employment characteristics, such as firm size and industry, into simulated firms. The distribution of these firms matches the characteristics of employers in each census division provided in the Statistics of US Businesses.

## Policies Affecting Coverage Changes in 2022 and 2023

In 2022 and 2023, historically high numbers of people will transition out of Medicaid to other sources of coverage or to uninsurance. The Medicaid continuous coverage requirement of the Families First Coronavirus Response Act bars state Medicaid programs from disenrolling people during the PHE. This has already led to record high Medicaid enrollment. At the time of writing, the PHE will likely last at least through the first half of 2022. We estimate that more than 14 million people will lose Medicaid coverage after the PHE expires (Buettgens and Green 2022).

Most people losing Medicaid would be eligible for Marketplace, CHIP, or ESI coverage. However, the number of people who would enroll rather than becoming uninsured is unknown for two reasons. First, many alternative coverage options are more expensive than Medicaid. Second, outreach and coordination between state Medicaid agencies and the Marketplaces is crucial to ensuring people losing coverage know about their alternatives. But because of the expected midyear PHE end date, millions of people will lose Medicaid coverage after the end of the 2023 open enrollment period (OEP) and will have to enroll in Marketplace coverage through a special enrollment period. Marketplace outreach is concentrated during OEPs, so this could potentially lower enrollment.

Finally, many people are concerned that the unprecedented volume of Medicaid redeterminations to be processed after the PHE ends could lead to more inappropriate disenrollment than has happened in the past, raising the number of people losing coverage.

States have 14 months after the end of the PHE to complete redeterminations of Medicaid eligibility, so coverage transitions out of Medicaid will likely continue throughout much of 2023.<sup>3</sup> During this time, major coverage changes will occur every month. However, the HIPSM baseline for 2023 represents average monthly enrollment in a more stable period after Medicaid eligibility determination returns to normal.

The enhanced premium tax credits (PTCs) under the American Rescue Plan (ARP) Act led to historically high numbers of plan selections during the 2022 OEP. By the end of the OEP in January 2022, 2.5 million more people had made plan selections than at the end of the 2021 OEP. However, the Medicaid continuous coverage requirement affects how we interpret the plan selection data from the 2022 OEP. If people retain Medicaid during the PHE as they return to work and their incomes rise, fewer people would have enrolled in Marketplace coverage during the 2022 OEP than would have without the continuous coverage requirement. This implies that the number of Marketplace plan choices for the 2022 OEP is lower than it would have been without the Medicaid

continuous coverage requirement. To predict 2023 Marketplace enrollment, we need to estimate the increase in nongroup coverage without the continuous coverage requirement and add this to the 2022 OEP data.

To project 2023 Marketplace enrollment, we must also consider the impact of enhancements in Marketplace PTCs made by the ARP. Enrollment in the Marketplaces will likely be higher than 2022 levels for two reasons if the enhanced PTCs remain in place (Buettgens, Banthin, and Green 2022). First, program changes usually take several years to reach their full effects. Second, the ARP enhanced PTCs are set to expire after 2022. The temporary nature of the provision may have resulted in lower enrollment than a permanent enhancement would have.

Typically, the HIPSM baseline represents current law. However, under current law, enhanced PTCs will expire at the end of 2022. Because Congress will likely try to extend the enhanced PTCs this year, we produced coverage estimates for 2023 both with and without extension of the enhanced PTCs. The latest OEP enrollment data are consistent with a continuation of the enhanced PTCs. But we must adjust 2022 OEP enrollment to remove coverage gains due to the enhanced PTCs to estimate the current-law baseline without the ARP PTCs.

A final consideration is the continued uncertainty about the pandemic and its economic effects, particularly on the job market. This could also affect health coverage. For our baseline, we assume the economic impacts of the pandemic have largely dissipated by 2023. We do not account for any effects of inflation. We did not use the adjustments we made to the model for some estimates at the height of the pandemic for our 2023 baseline (Banthin et al. 2020).

## Aligning Health Program Enrollment for the HIPSM Baseline

Estimating how people would respond to a change in premiums and/or cost-sharing subsidies is one of the most important considerations in scoring the impact of proposed policies affecting the affordability of private nongroup health insurance. Before the ACA, modelers could only draw upon the experience of the Massachusetts health reform of 2006 and a small number of studies that had limited relevance. A microsimulation analysis using HIPSM's predecessor predicted an increase in coverage in Massachusetts similar to what eventually happened (Blumberg et al. 2006). However, when it came time to project the impact of the ACA, modelers noted major differences between the ACA Marketplaces and the Massachusetts program and between conditions in other states and those in Massachusetts. Nearly all of the early work simulating the impact of the ACA using various microsimulation models projected a major increase in nongroup enrollment, but the enrollment increase's magnitude and impacts on health insurance premiums and the nongroup risk pool were uncertain (Buettgens, Garrett, and Holahan 2010).

After a few years of Marketplace enrollment data were made available, modelers had fairly good information on how take-up varied by factors such as income level, age, and state. However, information on how take-up would vary by the size of the subsidy was still lacking, even while many proposals were put forward that would either enhance subsidies further or structure them in

different ways (Blumberg, Buettgens, et al. 2019; Blumberg, Buettgens, and Holahan 2016). Being limited to enrollment data for only a single level of subsidies led to greater uncertainty in estimating the impacts of such proposals.

With the 2022 OEP, however, state-level data on take-up at two different levels of PTCs are now available: the ACA subsidy schedule and the ARP enhanced PTCs. The temporary change in the subsidy schedule under the ARP provides better data for predicting enrollment at other levels than did previously available data. Some complicating circumstances affect health coverage in 2022 and 2023, which we discuss below. Still, the availability of these data is an important development for our work.

## Marketplace Enrollment with Enhanced PTCs

To set Marketplace enrollment targets for 2023 if the enhanced PTCs are extended, we begin with Centers for Medicare & Medicaid Services (CMS) data on 2022 OEP plan selections.<sup>4</sup> These plan selections do not take effect until the first month's premiums are paid, so effectuated enrollment is always lower than the number of plan selections. Our coverage estimates represent average monthly enrollment over the course of the year, so we must include this reduction. Because CMS data revealed a substantially larger number of returning customers in 2022 than in previous years, we assume the effectuation rate will be higher than in the past.

We expect 2023 Marketplace enrollment to be modestly higher than 2022 enrollment even if everything else were held constant for two reasons. First, major program expansions usually take several years to achieve full enrollment. Second, the expiration of the enhanced PTCs after 2022 may have discouraged some enrollment. Thus, we assume that the difference between plan choices and effectuated enrollment in 2022 will be offset by enrollment increases from 2022 to 2023. We therefore start with an estimate of average monthly 2023 effectuated enrollment that is nearly the same as 2022 OEP plan selections.

Our starting point of 2022 OEP plan selections does not account for a major change that will increase nongroup coverage further in 2023: the PHE's likely expiration in mid-2022. Over the next 14 months after the PHE expires, millions of Medicaid beneficiaries will lose coverage. Many will be eligible for Marketplace coverage with PTCs, and others can enroll in full-pay nongroup coverage.

To estimate the increase in 2023 nongroup coverage after Medicaid enrollment processing fully resumes, we begin with our recent estimates of Medicaid enrollment in the first quarter of 2022, when the OEP ended (Buettgens and Green 2022). This allows us to estimate the number of people losing Medicaid who would be eligible for PTCs by age (adult or child), income level, and whether the family has an offer of employer coverage. Next, using past experience, we compute Marketplace take-up rates from our 2020 model by state and income level. These two factors lead to considerable variation. People with employer offers are far less likely to take up Marketplace coverage instead, so we excluded them from the computation.

Marketplace take-up rates among people losing Medicaid may differ from those in the past. For 2023, an important factor is whether a state runs its own Marketplace or uses the federally

facilitated Marketplace for eligibility determinations and enrollment. State-based Marketplaces can directly coordinate Medicaid and Marketplace enrollment more easily than states with federally facilitated Marketplaces can. We increased take-up rates for states with their own Marketplaces above historical levels and decreased them for states using the federally facilitated Marketplace. Applying the resulting rates to the estimated number of people gaining Marketplace eligibility, we estimate that about 600,000 people will newly enroll in Marketplace coverage after the PHE's expiration.

New CMS guidance encourages states to coordinate with the Marketplaces by sharing contact and income information for people losing Medicaid coverage and to collaborate with community-based organizations and others to provide assistance with enrolling in coverage.<sup>5</sup> We have no information on the extent to which individual states plan to follow this guidance, so we base states' Marketplace take-up rates on past experience and whether states run their own Marketplaces. The number of new nongroup enrollees after the PHE ends is uncertain and may be lower or higher than our estimates.

The federal poverty level (FPL) is the lower limit of PTC eligibility in states that have not expanded Medicaid, with an exception for certain lawfully present immigrants whose residency in the US is too short to make them eligible for Medicaid. However, we allow enrollment below that level in certain circumstances. Income captured in the American Community Survey reflects a single point in time and may reflect some measurement error. In addition, workers with low incomes often experience income volatility during the year, making it difficult for them to predict their taxable incomes for the following year. People with annual incomes below the FPL are not required to reconcile their PTCs at tax time, so they are protected from owing money to repay tax credits if their incomes for the year are not high enough to qualify. Evidence also shows some Marketplace PTC enrollment among people with incomes below the FPL even before the ARP (Lurie and Pearce 2019). Under the ARP, people with incomes in the lowest range for Marketplace eligibility do not have to pay premiums to enroll in silver plans,<sup>6</sup> so this enrollment pattern would likely be more common if the ARP PTCs were extended. Take-up rates based on 2022 OEP data were notably higher than average in five nonexpansion states: Florida, Georgia, North Carolina, South Carolina, and Texas. When we gave provisional PTC eligibility to people with incomes close to the FPL and people imputed to have had income above the FPL at some time during the past year, take-up rates for all states but Florida ended up close to the average.<sup>7</sup> This suggests that income volatility is indeed an important factor in those states' Marketplace enrollment with enhanced PTCs.

## Marketplace Enrollment without Enhanced PTCs

Under current law, the ARP enhanced PTCs will expire in 2023, so we need nongroup enrollment targets without the enhanced PTCs to compare with enrollment with the PTCs estimated above. We started with nongroup enrollment in our 2020 model (Buettgens and Banthin 2020). We allowed differences in enrollment due to more recent premium changes and adjusted for the recent Medicaid expansion in Oklahoma and Missouri. Under Medicaid expansion, people with incomes below 138 percent of FPL who were previously eligible for Marketplace PTCs become eligible for Medicaid, so nongroup coverage declines.



A few states showed major changes in enrollment in the 2022 OEP that did not seem to be directly related to the enhanced PTCs. Thus, those states should be incorporated into our new model both with and without the enhanced PTCs. Idaho, Kentucky, Louisiana, and West Virginia showed declines in 2022 OEP enrollment even as PTCs were more generous. Utah experienced a disproportionate increase in enrollment in 2022. Because Utah is an expansion state, the adjustments to enrollment in nonexpansion states that showed particularly large enrollment gains did not apply. We assumed that the enhanced PTCs caused a relative enrollment increase similar to what was seen in other states, and that the remaining increase in enrollment was due to other factors that would apply both with and without the enhanced PTCs.

## Medicaid and CHIP Enrollment

As we have noted, our Medicaid and CHIP enrollment estimates assume that coverage transitions caused by the return to normal eligibility processing after the PHE's expiration have settled. We base these enrollment estimates on prepandemic enrollment targets in each state in our 2020 model aged to 2023 (Buettgens and Banthin 2020). To age enrollment, we computed the long-term growth rate, based on CMS monthly enrollment reports, in each state in the five years before 2020.<sup>8</sup> For recent Medicaid expansion states, such as Nebraska, Missouri, and Oklahoma, the increase in enrollment due to Medicaid expansion should not be counted as part of normal enrollment growth, so we used only pre-expansion years for those states.

## Health Care Costs

We updated health care costs for the nongroup market on the basis of published 2022 premiums. We collected the second-lowest silver, lowest bronze, and lowest gold premiums in every state premium rating region. Enrollment in nongroup platinum plans is minimal.

HIPSM computes out-of-pocket and insured costs for each simulated family at every actuarial value level. These were adjusted to be compatible with actual 2022 premiums. To do this, we started with state risk pools similar to what insurers expected when they submitted their premium bids. Normally, this is similar to enrollment in the previous year, but 2022 was complicated by the enhanced PTCs, which took effect in a special enrollment period several months into 2021. The only data insurers would have had on the effect of the enhanced PTCs on enrollment would have been initial data from this special enrollment period. To replicate this, we simulated nongroup enrollment in each state matching the 2021 special enrollment period increases reported by CMS.<sup>9</sup> We then adjusted the costs for all families so that the insured cost of the simulated enrollees matched our target premiums in each rating region (plus an administrative load). The increases in enrollment during the 2022 OEP ended up similar to those in the 2021 special enrollment period. However, as we have noted, health coverage in 2023 will differ from that in 2022. HIPSM premiums for 2023 account for the resulting differences in the risk pool.

We updated health care costs and premiums for ESI coverage to be consistent with average premium targets drawn from 2020 Medical Expenditure Panel Survey Insurance/Employer Component summary tables by firm size and plan type. ESI premium growth from 2019 to 2020 was

unusually small because of facility closures and restrictions on nonessential procedures due to the pandemic. We then aged the premiums to 2023 using recent prepandemic trends. The result was a small reduction in ESI premiums from the previous model due to low 2020 cost growth.

After computing our target premiums by firm size and type, we adjusted costs for ESI plans offered to all families so that the insured costs for current-law ESI enrollees matched those targets after adding an appropriate administrative load. Premiums are computed differently for different markets and insurer types. Under the ACA, the fully insured small-group market is a single risk pool for each state with modified community rating. The fully insured large-group market has a risk pool for each firm's workers, with a small amount of risk pooling between groups by insurers. In the self-insured market, each firm is responsible for its workers' claims. However, self-insured firms generally purchase reinsurance to reduce their risks. For more details, see Buettgens and Banthin (2020).

We did not have any new administrative Medicaid cost data that warranted a major update, so we aged Medicaid and CHIP costs from the 2020 model to 2023. Evidence shows abnormally low cost growth and even contraction in 2020, so we did not inflate costs for that year. For subsequent years, we grew costs by a historical growth rate.

## Results

In table 1, we summarize the estimated distribution of health coverage for 2023 with and without the ARP enhanced PTCs. If the enhanced PTCs are extended, we estimate that 13.4 million people will be enrolled in Marketplace coverage with PTCs, 4.9 million more people than without the enhanced PTCs. That represents a 58 percent increase. Enhanced PTCs are more generous at all income levels currently eligible for PTCs, resulting in increased enrollment. PTC recipients with incomes below 150 percent of FPL are estimated to increase by 38.5 percent. See the discussion above on PTC recipients with low incomes in states that have not expanded Medicaid. PTC take-up rates for people with incomes between 150 and 200 percent of FPL are already high, so enrollment will increase by only 27.3 percent. We estimate that the largest enrollment increase (66.2 percent) will be among people with incomes between 200 and 250 percent of FPL. The remaining income groups up to 400 percent of FPL will see increases of about 30 to 40 percent.

If the enhanced PTCs are not extended, California residents will be the only people with incomes above 400 percent FPL who will remain eligible for PTCs. With extension of the enhanced PTCs, 1.8 million people with incomes above 400 percent of FPL will get PTCs. This extension of PTC eligibility reduces the number of unsubsidized nongroup enrollees by nearly 1 million.

The Basic Health Programs in New York and Minnesota would not see changes in enrollment due to extending the enhanced PTCs, because their premiums are already lower than those under the enhanced PTCs. A total of 18.9 million people would have nongroup coverage if the enhanced PTCs were extended, an increase of 3.9 million (26.2 percent) relative to not extending the PTCs.

If the enhanced PTCs were extended, 3.1 million fewer people would be uninsured, a decline of 10.7 percent. Not all people who newly enrolled in Marketplace coverage under the ARP were

previously uninsured; some previously had ESI coverage, and the number of people with such coverage would decline by nearly 700,000 if the PTCs were extended. This is a reduction of only 0.4 percent. We estimate that Medicaid and CHIP enrollment will increase slightly, particularly among children. As more parents enroll in the Marketplaces, more family members eligible for Medicaid and CHIP will enroll in those programs.

In table 2, we estimate the number of people with nongroup coverage in 2023 both with and without extending the enhanced PTCs. The Basic Health Program only exists in New York and Minnesota. We have discussed Marketplace enrollment with PTCs above. People ineligible for PTCs would be divided between those with Marketplace plans and those with plans not offered in the Marketplace (other nongroup coverage).

In table 3, we estimate Medicaid and CHIP enrollment among the nonelderly population for each state in 2023. As we saw in table 1, the enhanced PTCs have little effect on Medicaid and CHIP enrollment. Currently, HIPSM explicitly models state-funded programs for people ineligible for the federal Medicaid program in New York and Washington, DC (Buettgens and Banthin 2020).

In table 4, we estimate federal government spending in 2023 with and without the enhanced PTCs. As expected, if the enhanced PTCs are extended, the biggest increase in federal spending will be in PTC costs. If the enhanced PTCs are extended, spending on reinsurance waivers, counted in the “other federal spending” columns, will decline slightly, and Medicaid and CHIP spending will be largely unchanged. The result is a \$27.9 billion, or 6.2 percent, increase in spending. For an estimate of the resulting impact on the federal deficit, see Buettgens, Banthin, and Green (2022).

In table 5, we estimate state government spending in 2023 with and without the enhanced PTCs. States that previously offered state-funded enhanced PTCs would spend less if the enhanced PTCs were extended. Other than that, changes in state spending would be very small.

## Conclusion

Estimating health coverage in 2023 presented many challenges, the largest being the coming changes in health insurance following the end of the PHE. However, having enrollment data by state at two different levels of PTCs also provides us valuable information that should allow us to more accurately estimate the impact of policies that change subsidies for Marketplace coverage. These estimates will form the basis of comparison for many analyses over the coming year, beginning with the impact of extending the enhanced PTCs (Buettgens, Banthin, and Green 2022).

TABLE 1

**The Health Insurance Coverage Distribution of the Nonelderly Population If the Enhanced PTCs Expire and If the Enhanced PTCs Are Extended, 2023**

	Enhanced PTCs Expire		Enhanced PTCs Are Extended		Change		
	1,000s of people	Percent	1,000s of people	Percent	1,000s of people	Percentage point	Percent
<b>Insured (MEC)</b>	<b>246,717</b>	<b>88.6</b>	<b>249,982</b>	<b>89.8</b>	<b>3,265</b>	<b>1.2</b>	<b>1.3</b>
<i>Employer</i>	152,520	54.8	151,839	54.5	-681	-0.2	-0.4
<i>Private nongroup</i>	14,973	5.4	18,895	6.8	3,922	1.4	26.2
Basic Health Program							
< 138% of FPL	400	0.1	400	0.1	0	0.0	0.0
>= 138% of FPL	613	0.2	613	0.2	0	0.0	0.0
Marketplace with PTCs							
< 150% of FPL	2,419	0.9	3,350	1.2	931	0.3	38.5
150–200% of FPL	2,621	0.9	3,337	1.2	716	0.3	27.3
200–250% of FPL	1,080	0.4	1,795	0.6	715	0.3	66.2
250–300% of FPL	939	0.3	1,334	0.5	394	0.1	42.0
300–400% of FPL	1,371	0.5	1,790	0.6	419	0.2	30.6
> 400% of FPL	61	0.0	1,814	0.7	1,753	0.6	2878.9
Full-pay Marketplace	1,243	0.4	926	0.3	-318	-0.1	-25.6
Other nongroup	4,225	1.5	3,536	1.3	-689	-0.2	-16.3
<i>Medicaid/CHIP</i>	70,536	25.3	70,560	25.3	24	0.0	0.0
Disabled	9,556	3.4	9,548	3.4	-8	0.0	-0.1
Medicaid expansion	14,127	5.1	14,127	5.1	0	0.0	0.0
Traditional nondisabled adults	11,395	4.1	11,391	4.1	-4	0.0	0.0
Nondisabled Medicaid children	29,879	10.7	29,897	10.7	18	0.0	0.1
Separate CHIP	5,502	2.0	5,520	2.0	18	0.0	0.3
State-funded program	77	0.0	77	0.0	0	0.0	0.0
<i>Other public</i>	8,688	3.1	8,688	3.1	0	0.0	0.0
<b>Uninsured (no MEC)</b>	<b>31,716</b>	<b>11.4</b>	<b>28,451</b>	<b>10.2</b>	<b>-3,265</b>	<b>-1.2</b>	<b>-10.3</b>
Uninsured	29,086	10.4	25,960	9.3	-3,126	-1.1	-10.7
Noncompliant nongroup	2,630	0.9	2,490	0.9	-139	-0.1	-5.3
<b>Total</b>	<b>278,432</b>	<b>100.0</b>	<b>278,432</b>	<b>100.0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: Urban Institute Health Insurance Policy Simulation Model, 2022.

Notes: PTC is premium tax credit. MEC is minimum essential coverage. FPL is federal poverty level. CHIP is Children's Health Insurance Program.

TABLE 2

## Nongroup Market Enrollment, by State, If the Enhanced PTCs Expire and If the Enhanced PTCs Are Extended, 2023

Thousands of people

State	Enhanced PTCs Expire					Enhanced PTCs Are Extended				
	Basic Health Program	Marketplace with tax credits	Full-pay Marketplace	Other nongroup	Total	Basic Health Program	Marketplace with tax credits	Full-pay Marketplace	Other nongroup	Total
AL	0	131	8	50	188	0	203	4	42	249
AK	0	13	2	5	20	0	20	1	4	24
AZ	0	110	23	126	259	0	189	17	98	304
AR	0	49	6	37	92	0	84	4	31	119
CA	0	1,215	158	830	2,203	0	1,634	181	649	2,465
CO	0	112	28	145	286	0	189	19	114	321
CT	0	67	30	41	138	0	103	18	28	149
DE	0	18	2	11	32	0	31	1	10	42
DC	0	1	18	0	19	0	5	15	0	21
FL	0	1,598	72	328	1,998	0	2,442	57	366	2,864
GA	0	353	33	126	512	0	661	26	110	797
HI	0	15	3	16	34	0	25	2	12	39
ID	0	41	8	21	71	0	70	5	14	89
IL	0	216	34	201	452	0	304	23	159	487
IN	0	82	40	71	193	0	135	29	57	220
IA	0	44	4	56	104	0	72	3	40	115
KS	0	66	8	37	111	0	100	6	30	136
KY	0	11	12	45	69	0	74	9	40	123
LA	0	14	7	74	95	0	96	5	58	160
ME	0	47	7	7	62	0	63	3	5	71
MD	0	119	19	94	231	0	174	10	78	262
MA	0	244	60	60	364	0	271	48	55	374
MI	0	190	29	129	349	0	290	20	112	422
MN	99	59	38	91	288	99	107	28	78	312
MS	0	82	1	33	116	0	139	2	28	169
MO	0	148	22	43	213	0	237	14	36	288
MT	0	33	5	20	58	0	49	3	14	66
NE	0	57	3	32	92	0	89	2	25	116
NV	0	56	8	52	117	0	102	6	39	146
NH	0	29	10	15	54	0	45	7	12	64
NJ	0	160	45	70	274	0	272	33	59	364
NM	0	34	7	23	64	0	47	5	19	71

State	Enhanced PTCs Expire					Enhanced PTCs Are Extended				
	Basic Health Program	Marketplace with tax credits	Full-pay Marketplace	Other nongroup	Total	Basic Health Program	Marketplace with tax credits	Full-pay Marketplace	Other nongroup	Total
NY	914	134	100	28	1,176	914	219	48	23	1,205
NC	0	411	24	133	569	0	647	15	109	771
ND	0	18	1	22	41	0	30	1	16	48
OH	0	124	38	122	284	0	234	26	102	362
OK	0	88	6	34	128	0	167	3	35	205
OR	0	94	32	48	174	0	137	21	34	192
PA	0	248	35	170	453	0	358	24	131	513
RI	0	27	4	10	42	0	32	2	8	43
SC	0	171	12	49	233	0	288	9	44	342
SD	0	25	2	17	43	0	41	1	12	54
TN	0	145	18	79	242	0	259	13	64	336
TX	0	860	76	332	1,269	0	1,675	61	300	2,036
UT	0	187	15	44	246	0	224	10	42	276
VT	0	21	4	8	33	0	27	3	7	37
VA	0	216	29	86	330	0	297	19	71	387
WA	0	123	72	83	278	0	197	51	61	309
WV	0	8	2	12	22	0	25	1	8	33
WI	0	153	18	48	219	0	207	11	38	257
WY	0	22	1	12	35	0	33	1	8	42
<b>Total</b>	<b>1,013</b>	<b>8,491</b>	<b>1,243</b>	<b>4,225</b>	<b>14,973</b>	<b>1,014</b>	<b>13,419</b>	<b>926</b>	<b>3,536</b>	<b>18,895</b>

Source: Urban Institute Health Insurance Policy Simulation Model, 2022.

Note: PTC is premium tax credit.

**TABLE 3**

**Medicaid/CHIP Enrollment among the Nonelderly Population, by State, If the Enhanced PTCs Expire and If the Enhanced PTCs Are Extended, 2023**

*Thousands of people*

State	Enhanced PTCs Expire						Enhanced PTCs Are Extended					
	Disabled	Medicaid expansion	Other adults	Medicaid/CHIP children	State program	Total	Disabled	Medicaid expansion	Other adults	Medicaid/CHIP children	State program	Total
AL	194	0	167	610	0	971	194	0	167	611	0	972
AK	17	30	57	102	0	206	17	30	57	103	0	206
AZ	205	492	307	783	0	1,788	205	492	307	783	0	1,787
AR	125	268	67	424	0	885	125	268	67	425	0	885
CA	1,071	3,179	1,599	5,326	0	11,175	1,070	3,177	1,599	5,326	0	11,172
CO	103	374	140	606	0	1,223	103	374	140	606	0	1,223
CT	80	197	183	338	0	797	80	196	183	338	0	796
DE	28	41	39	85	0	193	28	41	39	85	0	193
DC	30	32	32	52	17	164	29	32	32	52	17	163
FL	581	0	820	2,030	0	3,431	582	0	820	2,036	0	3,438
GA	307	0	335	1,328	0	1,970	307	0	335	1,330	0	1,972
HI	30	69	49	114	0	262	30	69	49	114	0	262
ID	48	94	52	186	0	381	48	94	52	186	0	381
IL	313	501	484	1,190	0	2,488	311	501	483	1,189	0	2,485
IN	191	422	133	634	0	1,380	191	422	132	635	0	1,381
IA	77	159	78	370	0	684	77	159	78	370	0	684
KS	63	0	65	248	0	375	63	0	65	248	0	376
KY	213	474	96	548	0	1,332	213	475	96	549	0	1,333
LA	196	451	119	651	0	1,417	196	451	119	651	0	1,417
ME	56	42	90	116	0	304	56	42	90	116	0	304
MD	147	281	232	653	0	1,314	147	281	232	652	0	1,312
MA	289	239	432	662	0	1,622	288	239	432	662	0	1,621
MI	366	596	265	929	0	2,157	366	597	265	930	0	2,157
MN	141	194	203	413	0	950	141	194	202	413	0	949
MS	126	0	124	369	0	619	126	0	124	371	0	621
MO	212	232	186	687	0	1,316	212	233	186	687	0	1,318
MT	27	88	17	133	0	264	27	88	17	133	0	264
NE	39	74	44	162	0	318	39	74	44	162	0	318
NV	74	207	58	318	0	658	74	207	58	319	0	658
NH	32	61	18	93	0	204	32	61	18	93	0	204

State	Enhanced PTCs Expire						Enhanced PTCs Are Extended					
	Disabled	Medicaid expansion	Other adults	Medicaid/CHIP children	State program	Total	Disabled	Medicaid expansion	Other adults	Medicaid/CHIP children	State program	Total
NJ	194	435	208	737	0	1,574	193	435	208	738	0	1,574
NM	73	263	65	320	0	722	73	263	65	321	0	722
NY	593	1,641	1,062	2,373	60	5,730	593	1,641	1,062	2,374	60	5,731
NC	388	0	424	1,302	0	2,114	388	0	424	1,302	0	2,114
ND	9	24	12	31	0	76	9	24	12	30	0	75
OH	357	590	412	1,050	0	2,410	357	591	412	1,051	0	2,411
OK	144	200	139	458	0	941	144	200	139	458	0	941
OR	112	295	89	506	0	1,002	111	295	89	506	0	1,002
PA	464	682	271	1,084	0	2,501	463	682	271	1,085	0	2,502
RI	39	74	41	106	0	261	39	74	41	106	0	261
SC	180	0	212	554	0	947	180	0	212	555	0	948
SD	19	0	21	74	0	114	19	0	21	74	0	114
TN	238	0	360	774	0	1,371	237	0	360	775	0	1,372
TX	708	0	780	3,308	0	4,795	707	0	780	3,322	0	4,809
UT	54	103	79	240	0	476	54	103	79	240	0	476
VT	21	18	35	50	0	124	21	18	35	50	0	124
VA	159	425	123	682	0	1,388	159	425	123	682	0	1,389
WA	181	426	147	868	0	1,623	180	427	147	868	0	1,622
WV	93	150	40	207	0	489	93	150	40	207	0	489
WI	139	0	373	464	0	975	139	0	373	464	0	976
WY	10	0	11	34	0	54	10	0	11	34	0	55
<b>Total</b>	<b>9,556</b>	<b>14,127</b>	<b>11,395</b>	<b>35,381</b>	<b>77</b>	<b>70,536</b>	<b>9,548</b>	<b>14,127</b>	<b>11,391</b>	<b>35,417</b>	<b>77</b>	<b>70,560</b>

Source: Urban Institute Health Insurance Policy Simulation Model, 2022.

Notes: PTC is premium tax credit. CHIP is Children's Health Insurance Program. "Other adults" and "Medicaid/CHIP children" are nondisabled.



TABLE 4

## Federal Spending on Health Care Services If the Enhanced PTCs Expire and If the Enhanced PTCs Are Extended, 2023

State	Enhanced PTCs Expire (\$millions)				Enhanced PTCs Are Extended (\$millions)				Difference	
	Medicaid and CHIP	Tax credits and subsidies	Other federal costs	Total federal spending	Medicaid and CHIP	Tax credits	Other federal	Total federal spending	Total federal spending (\$millions)	% change
AL	4,703	1,456	0	6,159	4,703	1,900	0	6,603	444	7.2
AK	1,342	137	81	1,560	1,342	204	81	1,627	67	4.3
AZ	12,220	774	0	12,994	12,219	1,210	0	13,429	435	3.4
AR	5,566	319	0	5,885	5,570	516	0	6,087	201	3.4
CA	48,674	6,674	0	55,348	48,664	9,279	0	57,943	2,595	4.7
CO	5,698	532	180	6,410	5,699	884	180	6,762	353	5.5
CT	4,858	556	0	5,415	4,852	785	0	5,637	223	4.1
DE	1,426	140	23	1,589	1,426	216	23	1,665	76	4.8
DC	1,520	6	0	1,525	1,511	16	0	1,527	1	0.1
FL	16,294	10,910	0	27,204	16,310	15,983	0	32,293	5,089	18.7
GA	9,504	2,817	0	12,321	9,508	4,589	0	14,098	1,777	14.4
HI	1,144	103	0	1,247	1,143	159	0	1,301	55	4.4
ID	2,367	341	0	2,708	2,367	506	0	2,873	165	6.1
IL	8,578	1,390	0	9,968	8,563	1,936	0	10,498	531	5.3
IN	8,859	535	0	9,394	8,864	804	0	9,668	274	2.9
IA	3,707	331	0	4,038	3,703	505	0	4,208	170	4.2
KS	1,774	562	0	2,336	1,775	733	0	2,508	172	7.3
KY	9,340	60	0	9,400	9,345	378	0	9,723	323	3.4
LA	8,416	86	0	8,502	8,415	579	0	8,994	493	5.8
ME	1,854	283	28	2,164	1,854	396	28	2,277	113	5.2
MD	7,232	532	475	8,239	7,227	807	475	8,508	269	3.3
MA	6,687	929	201	7,817	6,682	1,213	0	7,895	78	1.0
MI	14,174	954	91	15,220	14,166	1,461	91	15,718	499	3.3
MN	6,786	588	0	7,374	6,781	829	0	7,610	236	3.2
MS	4,509	720	0	5,230	4,518	1,005	0	5,523	293	5.6
MO	10,166	1,127	0	11,292	10,180	1,639	0	11,820	527	4.7
MT	2,076	230	24	2,330	2,076	331	24	2,431	101	4.3
NE	1,631	565	0	2,197	1,631	807	0	2,438	242	11.0
NV	3,265	330	0	3,594	3,269	545	0	3,814	220	6.1
NH	939	132	0	1,071	939	201	0	1,140	69	6.4
NJ	6,809	789	202	7,800	6,804	1,249	202	8,254	454	5.8
NM	5,796	177	0	5,972	5,798	247	0	6,045	73	1.2
NY	29,118	7,811	0	36,929	29,120	8,430	0	37,550	621	1.7

State	Enhanced PTCs Expire (\$millions)			Enhanced PTCs Are Extended (\$millions)			Difference			
	Medicaid and CHIP	Tax credits and subsidies	Other federal costs	Total federal spending	Medicaid and CHIP	Tax credits	Other federal	Total federal spending	Total federal spending (\$millions)	% change
NC	13,540	3,636	0	17,176	13,540	5,392	0	18,932	1,756	10.2
ND	491	87	23	602	490	145	23	658	56	9.3
OH	14,900	660	0	15,560	14,900	1,134	0	16,034	474	3.0
OK	5,985	733	0	6,717	5,984	1,129	0	7,113	395	5.9
OR	6,053	620	58	6,731	6,051	874	58	6,983	252	3.7
PA	15,789	1,837	0	17,626	15,783	2,539	0	18,322	696	4.0
RI	1,305	114	6	1,425	1,305	151	6	1,462	37	2.6
SC	4,761	1,441	0	6,202	4,765	2,110	0	6,875	672	10.8
SD	689	273	0	962	689	371	0	1,061	99	10.3
TN	8,083	1,340	0	9,423	8,085	1,881	0	9,966	543	5.8
TX	30,264	6,404	0	36,668	30,303	10,512	0	40,815	4,147	11.3
UT	3,458	1,048	0	4,506	3,460	1,285	0	4,745	239	5.3
VT	1,174	111	0	1,286	1,174	146	0	1,320	35	2.7
VA	7,449	1,425	0	8,874	7,451	1,880	0	9,331	457	5.1
WA	7,889	670	0	8,559	7,882	1,007	0	8,888	329	3.8
WV	3,154	98	0	3,253	3,150	241	0	3,392	139	4.3
WI	4,448	1,097	151	5,696	4,449	1,377	151	5,977	281	4.9
WY	349	297	0	647	350	376	0	725	79	12.1
<b>Total</b>	<b>386,811</b>	<b>64,790</b>	<b>1,541</b>	<b>453,142</b>	<b>386,836</b>	<b>92,890</b>	<b>1,340</b>	<b>481,066</b>	<b>27,924</b>	<b>6.2</b>

Source: Urban Institute Health Insurance Policy Simulation Model, 2022.

Notes: PTC is premium tax credit. CHIP is Children's Health Insurance Program. Medicaid and CHIP spending is on acute care for the nonelderly population.

TABLE 5

## State Medicaid and CHIP Spending If the Enhanced PTCs Expire and If the Enhanced PTCs Are Extended, 2023

State	Enhanced PTCs Expire (\$millions)			Enhanced PTCs Are Extended (\$millions)			Difference	
	Medicaid and CHIP	Other	Total	Medicaid and CHIP	Other	Total	\$millions	% of total
AL	1,765	0	1,765	1,765	0	1,765	0	0.0
AK	633	0	633	632	0	632	-1	-0.1
AZ	3,848	0	3,848	3,848	0	3,848	-1	0.0
AR	1,710	0	1,710	1,711	0	1,711	1	0.1
CA	30,315	304	30,619	30,308	0	30,308	-312	-1.0
CO	3,448	86	3,534	3,448	86	3,533	0	0.0
CT	3,469	0	3,469	3,467	0	3,467	-2	-0.1
DE	806	6	812	806	6	811	-1	-0.1
DC	691	0	691	687	0	687	-4	-0.5
FL	9,906	0	9,906	9,916	0	9,916	10	0.1
GA	4,402	0	4,402	4,403	0	4,403	2	0.0
HI	659	0	659	658	0	658	-1	-0.1
ID	727	0	727	727	0	727	0	0.0
IL	6,453	0	6,453	6,438	0	6,438	-15	-0.2
IN	3,325	0	3,325	3,326	0	3,326	0	0.0
IA	1,802	0	1,802	1,800	0	1,800	-2	-0.1
KS	1,149	0	1,149	1,149	0	1,149	0	0.0
KY	2,553	0	2,553	2,554	0	2,554	1	0.0
LA	2,840	0	2,840	2,840	0	2,840	0	0.0
ME	919	0	919	919	0	919	0	0.0
MD	4,907	16	4,922	4,902	16	4,918	-4	-0.1
MA	5,194	194	5,388	5,190	0	5,190	-198	-3.7
MI	5,655	97	5,752	5,650	97	5,746	-5	-0.1
MN	5,433	0	5,433	5,432	0	5,432	-2	0.0
MS	1,325	0	1,325	1,327	0	1,327	2	0.1
MO	4,329	0	4,329	4,331	0	4,331	2	0.0
MT	648	13	661	648	13	661	0	0.0
NE	923	0	923	923	0	923	0	0.0
NV	1,386	0	1,386	1,388	0	1,388	2	0.2
NH	682	0	682	681	0	681	-1	-0.1
NJ	4,490	82	4,572	4,484	82	4,566	-6	-0.1
NM	1,422	0	1,422	1,422	0	1,422	0	0.0
NY	18,600	0	18,600	18,601	0	18,601	0	0.0
NC	6,346	0	6,346	6,346	0	6,346	0	0.0

State	Enhanced PTCs Expire (\$millions)			Enhanced PTCs Are Extended (\$millions)			Difference	
	Medicaid and CHIP	Other	Total	Medicaid and CHIP	Other	Total	\$millions	% of total
ND	329	27	357	328	27	356	-1	-0.2
OH	6,806	0	6,806	6,805	0	6,805	-1	0.0
OK	2,329	0	2,329	2,328	0	2,328	-1	0.0
OR	2,540	17	2,557	2,539	17	2,556	-1	-0.1
PA	10,570	0	10,570	10,562	0	10,562	-8	-0.1
RI	850	10	860	850	10	860	0	0.0
SC	1,909	0	1,909	1,910	0	1,910	1	0.1
SD	445	0	445	445	0	445	0	0.0
TN	4,116	0	4,116	4,116	0	4,116	1	0.0
TX	18,408	0	18,408	18,431	0	18,431	23	0.1
UT	1,224	0	1,224	1,224	0	1,224	1	0.0
VT	844	6	850	845	0	845	-5	-0.5
VA	4,633	0	4,633	4,633	0	4,633	0	0.0
WA	4,703	0	4,703	4,697	0	4,697	-6	-0.1
WV	854	0	854	852	0	852	-1	-0.1
WI	2,914	13	2,926	2,914	13	2,927	0	0.0
WY	327	0	327	327	0	327	0	0.1
<b>Total</b>	<b>206,562</b>	<b>869</b>	<b>207,431</b>	<b>206,534</b>	<b>364</b>	<b>206,899</b>	<b>-532</b>	<b>-0.3</b>

Source: Urban Institute Health Insurance Policy Simulation Model, 2022.

Notes: PTC is premium tax credit. CHIP is Children's Health Insurance Program. Medicaid and CHIP spending is on acute care for the nonelderly population.

## Notes

- <sup>1</sup> King v. Burwell, No. 14-114, slip op. (S. Ct. Jun. 25, 2015).
- <sup>2</sup> Some models are based on elasticities from the literature. An earlier version of the Congressional Budget Office model and a model by Jonathan Gruber used that approach. The Congressional Budget Office has updated its model to be based on an expected utility approach.
- <sup>3</sup> Centers for Medicare & Medicaid Services, letter to state health officials regarding “Promoting Continuity of Coverage and Distributing Eligibility and Enrollment Workload in Medicaid, the Children’s Health Insurance Program (CHIP), and Basic Health Program (BHP) upon Conclusion of the COVID-19 Public Health Emergency,” March 3, 2022, <https://www.medicaid.gov/federal-policy-guidance/downloads/sho22001.pdf>.
- <sup>4</sup> Centers for Medicare & Medicaid Services, “Marketplace 2022 Open Enrollment Period Report: Final National Snapshot,” news release, January 27, 2022, <https://www.cms.gov/newsroom/fact-sheets/marketplace-2022-open-enrollment-period-report-final-national-snapshot>.
- <sup>5</sup> CMS, letter regarding “Promoting Continuity of Coverage and Distributing Eligibility and Enrollment Workload in Medicaid, CHIP, and BHP upon Conclusion of the Public Health Emergency.”
- <sup>6</sup> Tobacco users who enroll in a plan that has tobacco-use premium rating may still have to pay a premium.
- <sup>7</sup> We estimated income volatility over the course of a year using Survey of Income and Program Participation data from the 2008 Survey of Income and Program Participation panel (which collected data until 2014) and aged them to match our 2023 HIPSM population.
- <sup>8</sup> “Monthly Medicaid and CHIP Application, Eligibility Determination, and Enrollment Reports and Data,” Medicaid.gov, accessed March 30, 2022, <https://www.medicaid.gov/medicaid/national-medicaid-chip-program-information/medicaid-chip-enrollment-data/monthly-medicaid-chip-application-eligibility-determination-and-enrollment-reports-data/index.html>.
- <sup>9</sup> Centers for Medicare & Medicaid Services, “2021 Marketplace Special Enrollment Period Report,” news release, August 10, 2021, <https://www.cms.gov/newsroom/fact-sheets/2021-marketplace-special-enrollment-period-report-4>.

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**Matthew Buettgens** is a senior fellow in the Health Policy Center at the Urban Institute, where he is the mathematician leading the development of Urban’s Health Insurance Policy Simulation Model (HIPSM). The model is currently being used to provide technical assistance for health reform implementation in Massachusetts, Missouri, New York, Virginia, and Washington as well as to the federal government. His recent work includes a number of research papers analyzing various aspects of national health insurance reform, both nationally and state-by-state. Research topics have included the costs and coverage implications of Medicaid expansion for both federal and state governments; small firm self-insurance under the Affordable Care Act and its effect on the fully insured market; state-by-state analysis of changes in health insurance coverage and the remaining uninsured; the effect of reform on employers; the affordability of coverage under health insurance exchanges; and the implications of age rating for the affordability of coverage. Buettgens was previously a major developer of the Health Insurance Reform Simulation Model—the predecessor to HIPSM—used in the design of the 2006 Roadmap to Universal Health Insurance Coverage in Massachusetts.

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