Temporary Safety-Net Policies and Pandemic-Related Insurance Loss in New York State

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About This Report

In the wake of the coronavirus disease 2019 (COVID-19) pandemic, policymakers in New York and elsewhere were concerned about the implications of the resulting recession on health insurance coverage. We used a microsimulation model to estimate the effects of the COVID-19 pandemic on insurance loss in New York state in 2020 and 2021. We estimated that 560,000 New Yorkers lost job-based coverage in 2020, but this decline was fully offset by increases in Medicaid and other coverage. More than half of Medicaid growth was the result of a temporary disenrollment freeze enacted as part of the 2020 Families First Coronavirus Response Act. In 2021, temporary enhancements to subsidies available through the health insurance marketplaces enacted under the American Rescue Plan also played a role in stabilizing coverage.

Most of this work was conducted in 2020. Since that time, empirical data have emerged that show that health insurance coverage remained stable during the pandemic. Our microsimulation approach enabled us to estimate what could have happened if such temporary safety-net policies as the Medicaid disenrollment freeze had not been enacted. Our findings imply that temporary policies were critically important to stabilizing coverage in 2020 and 2021. Longer-term policy solutions, such as permanently enhancing the Affordable Care Act's premium tax credits, could ensure readiness for the next recession.

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Summary

Early reports suggest that insurance enrollment held steady or increased during 2020, despite the recessionary effects of the coronavirus disease 2019 (COVID-19) pandemic. However, we do not yet have a complete picture of why coverage remained stable despite substantial job loss. In this analysis, we used the COMPARE microsimulation model to assess the role of public and private safety-net policies on health insurance enrollment in New York state in 2020 and 2021. We simulated coverage loss and insurance enrollment for 2020 and 2021 under several scenarios, incorporating alternative assumptions about the availability of employer insurance during temporary furloughs, the presence or absence of the Medicaid disenrollment freeze enacted under the Families First Coronavirus Response Act, and the availability of enhanced marketplace tax credits enacted under the American Rescue Plan (ARP).

We estimated that, in 2020, approximately 560,000 New Yorkers lost employer-sponsored health insurance, but that this coverage loss was offset by increases in Medicaid, the Children's Health Insurance Program (CHIP), and other sources of insurance. We estimate that, without the Medicaid disenrollment freeze and employer-provided furlough coverage, 250,000 New Yorkers would have become uninsured in 2020. For 2021, we estimated that the combination of continued Medicaid disenrollment prohibition and temporary tax credits made available through the ARP would increase health insurance enrollment by 160,000 individuals. However, without these interventions, approximately 120,000 additional people would have become uninsured.

Our analysis suggests that temporary policies, including employer-provided furlough coverage, the Medicaid disenrollment freeze, and enhanced tax credits offered under the ARP, were critical in avoiding insurance loss in New York during 2020 and 2021. On their own, the permanent safety-net policies adopted under the Affordable Care Act (ACA), including Medicaid expansion and marketplace tax credits (without enhancements), would not have been sufficient to offset the loss of job-based coverage. Permanent policy solutions, such as enhancing the ACA's premium tax credits or supporting enrollment assistance, could ensure readiness for the next recession.

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1. Introduction

The coronavirus disease 2019 (COVID-19) pandemic–related recession and resulting job loss raised significant concerns that the U.S. uninsured population could increase, perhaps by millions (Garfield et al., 2020). However, worrisome predictions about coverage loss have not materialized. A report by the U.S. Department of Health and Human Services (HHS) found that the number of U.S. residents with insurance increased or held steady in 2020 relative to 2019 (Finegold et al., 2021). Another study estimated that, although coverage declined during the height of the pandemic, by the end of 2020, insurance enrollment rates were comparable to rates in 2019 (Bundorf, Gupta, and Kim, 2021). Because the pandemic-related recession marks the first economic downturn since the Affordable Care Act's (ACA's) major coverage provisions took effect in 2014, a possible explanation for the lack of coverage loss is that the ACA's safety-net provisions, such as Medicaid expansion and Advance Premium Tax Credits (APTCs) for marketplace coverage, did their job. However, it is also possible that other public and private responses to the pandemic that are unrelated to the ACA contributed to the maintenance of insurance levels. For example, a report by the Commonwealth Fund estimated that more than half of covered workers who lost their jobs as a result of the pandemic retained their employer-sponsored insurance (ESI), perhaps because the layoffs were not expected to be permanent (Collins et al., 2020). Temporary policies to retain Medicaid enrollees regardless of changes in eligibility also appear to have increased insurance enrollment. Furthermore, some states opened their health insurance marketplaces for a special enrollment period in 2020, enabling people to newly enroll in insurance in the middle of the year. In 2021, the American Rescue Plan (ARP), which temporarily enhanced marketplace tax credits, also led to an enrollment bump (HHS, 2021).

In this report, we (1) assess the importance of temporary provisions relative to long-standing policies in stabilizing health insurance enrollment despite heavy job loss and (2) run simulations using New York state as a case study. We also consider how new provisions introduced by Congress, including those that would temporarily enhance APTC amounts and extend them to more people, might affect coverage in 2021. We estimate that temporary provisions—particularly policies that precluded states from disenrolling people from Medicaid—played an outsized role in stabilizing coverage in 2020 and will continue to play a large role in 2021.

Background on Coverage Changes

Employer Insurance

Following years of declines in the unemployment rate, 2020 saw massive increases in job loss. Data from the U.S. Bureau of Labor Statistics (BLS) show that the civilian workforce declined by 23.4 million workers in April 2020 compared with levels in April 2019 (BLS, undated). Although the economy recovered somewhat by December 2020, there were still 8.9 million fewer workers compared with prior-year totals. Studies have estimated that roughly 46 to 48 percent of workers who lost jobs because of the pandemic had health insurance coverage in their own names (Fronstin and Woodbury, 2020; Zipperer and Bivens, 2020). These figures imply that millions of workers and dependents were at risk of losing ESI because of employment loss.

However, additional evidence suggests that a large share of workers who lost jobs were able to retain job-based insurance. Collins et al. estimates that 77 percent of those who lost jobs with employer coverage retained ESI through insurance that was made available through the 1985 Consolidated Omnibus Reconciliation Act (COBRA), furlough provisions enabling workers to maintain enrollment in ESI despite being temporarily laid off, or a spousal offer (Collins et al., 2020). The number of people with access to job-based insurance through furlough coverage—53 percent of those who lost jobs with ESI—was particularly high. Data from the U.S. Census Bureau's Household Pulse Survey paint a similar picture, suggesting that 79 percent of workers who were initially covered by ESI and were involuntarily not working remained enrolled in job-based coverage (Bivens and Zipperer, 2020). These results suggest that the ability to retain job-based coverage after being laid off may have been a substantial factor in holding national insurance rates steady.

Medicaid

Between January and September 2020, Medicaid and Children's Health Insurance Program (CHIP) enrollment increased by more than six million individuals (Centers for Medicare & Medicaid Services [CMS], undated c). Some of this increase might reflect new enrollment from individuals who lost access to ESI. However, increased Medicaid enrollment also might reflect an emergency policy that required states to retain Medicaid enrollees in coverage, regardless of eligibility status, to receive enhanced federal medical assistance percentages (FMAP) offered under the Families First Coronavirus Response Act (FFCRA) (CMS, undated b). Halting Medicaid disenrollment could have substantial effects on enrollment levels over time because 35 to 55 percent of Medicaid enrollees might become ineligible in a given year as a result of changes in income (Planalp, Fried, and Sonier, 2014). It is possible that Medicaid turnover would be lower during the pandemic if, for example, fewer people were able to find new jobs. However, Frenier, Nikpay, and Golberstein, 2020, found that changes in Medicaid enrollment in

2020 were minimally correlated with state unemployment rates, suggesting that enrollment increases were only weakly related to labor market conditions. The Kaiser Family Foundation found that, while Medicaid enrollment increased steadily over the course of the pandemic, the number of new applications fell by 6 percent during the same period (Corallo and Rudowitz, 2021).

Marketplace Coverage

Enrollment in the marketplaces remained steady between March and September 2020, in a deviation from past trends in which enrollment has fallen over the calendar year because of attrition (McDermott et al., 2020). A CMS report found that the number of people enrolling because of loss of other coverage increased substantially in April and May 2020 relative to prior years (CMS, 2020a). However, the influx of new enrollees did not extend into the 2021 open enrollment period, which ran from November 1, 2020, through December 15, 2020. During this period, 8.2 million people made plan selections (CMS, 2020c), a 6.6-percent increase over 2020 open enrollment levels (Keith, 2020). However, the trend was driven by reenrollment; new enrollment declined relative to 2020 levels (Keith, 2020).

American Rescue Plan

In 2021, the U.S. Congress enacted the ARP, which provided further provisions aimed at stabilizing insurance coverage. Most significantly, the ARP temporarily enhanced APTCs for marketplace coverage. Prior to the ARP, APTCs were available only to people with incomes between 100 and 400 percent of the federal poverty level (FPL) who had no other affordable source of coverage. The ARP temporarily extended APTCs to people with incomes above 400 percent of the FPL if they otherwise would have to pay more than 8.5 percent of their income to enroll and have no other affordable source of coverage. The ARP also increased APTC amounts for previously eligible enrollees. These provisions will be in effect for two years (2021 and 2022). In addition, for calendar year 2021, the ARP boosted APTCs and enhanced subsidies that were designed to reduce out-of-pocket medical expenses for people who received unemployment insurance. The ARP also offered subsidies to cover 100 percent of the costs of COBRA insurance for a six-month period beginning on April 1, 2021, and ending on September 30, 2021.

2. Methods

We simulated health insurance enrollment for the under–65-year-old population in New York under several scenarios regarding the availability of furlough coverage and Medicaid in 2020. We also simulated enrollment in 2021, accounting for certain provisions in the ARP. We generated these estimates using the COMPARE microsimulation model, which RAND researchers developed to help policymakers understand responses to changes in health care policies. Our model, which we describe in more detail in the appendix, uses a cost-benefit approach to allow simulated individuals to choose among available health plans, accounting for eligibility for public coverage and marketplace tax credits. The underlying data come from nationally representative, publicly available data sources, including the U.S. Census Bureau's Survey of Income and Program Participation (SIPP) (2010), the Kaiser Family Foundation and the Health Research and Educational Trust's annual Employer Health Benefits Survey (2009), and the Medical Expenditure Panel Survey (MEPS) (2011–2012). We adjusted the population to reflect current New York demographics using data from the 2018 U.S. Census Bureau American Community Survey (ACS) (U.S. Census Bureau, undated). For 2020 and 2021, we projected the population using New York state population projections from the University of Virginia Weldon Cooper Center (University of Virginia, 2018). We estimated health expenditures using National Health Expenditures Account (NHEA) projected per capita growth rates by payer type, supplemented with marketplace premium growth in 2017 and 2018 (CMS, 2020b; HHS, Office of the Assistant Secretary for Planning and Evaluation, 2017; Kamal et al., 2018). We also assigned premiums to reflect 2020 and 2021 levels in New York using approved rates (New York Department of Financial Services, undated; New York State of Health, 2021).

We accounted for New York–specific policies, such as the state's basic health program (the Essential Plan [EP]) and full community rating on the individual market. Because the underlying data predate the pandemic, we assigned job loss to modeled individuals by industry based on New York–specific data from the BLS, accounting for industry-specific differences in employment and racial and ethnic variation in unemployment rates. To model the pandemic, we allowed individuals to update their coverage status to account for changes in program eligibility because of job changes.

For 2020, we considered four policy scenarios that varied by whether FFCRA-related Medicaid continuous enrollment ("continuance") and furlough coverage were available: (1) no furlough, no continuance; (2) furlough only; (3) continuance only; and (4) furlough and continuance. We compared each scenario with a counterfactual scenario without the pandemic. We modeled Medicaid continuance by assuming that individuals who were enrolled in Medicaid or CHIP remained enrolled regardless of changes in circumstances, such as getting a new job (even if that job had a health insurance offer). This approach likely overstates the number of

people who relied on Medicaid as their primary source of insurance because some people who retained Medicaid might have opted to enroll in ESI. However, we expected that ESI take-up among people who retained Medicaid eligibility would be low because they faced potentially sizable premium contributions for employer insurance. Our Medicaid continuance scenarios also accounted for pandemic-related grace periods that were available on New York's basic health plan (New York State of Health, 2021), which allowed people to remain enrolled even if they had not paid premiums. To model furlough coverage, we assumed that 53 percent of people who lost jobs with ESI were able to retain job-based coverage through their employer at standard premium contribution levels (Collins et al., 2020).

For 2021, we assumed that Medicaid continuance is available as the public health emergency continues. However, we assumed that furlough coverage would be unavailable in 2021 because elevated unemployment that persists beyond 2020 could reflect permanent job loss rather than temporary layoffs. We further revised our scenarios to account for two provisions in the ARP: enhancing APTCs for the currently eligible population and extending APTCs to people with incomes above 400 percent of the FPL. Although the APTC changes in the ARP would be in effect for only two years (2021 and 2022), the Build Back Better Act of 2021, if passed, would make them permanent. We did not consider provisions in the ARP that would subsidize COBRA coverage or disregard income above 133 percent of the FPL when determining APTC eligibility for people who received unemployment benefits. These provisions would be in effect for only 2021.

3. Findings

Coverage Changes

Figure 3.1 shows the estimated change in insurance coverage in 2020 relative to the counterfactual scenarios for each of the four pandemic scenarios. In all scenarios, Medicaid and other safety-net sources played a large role in mitigating the effect of ESI losses. For example, in the scenario with neither furlough coverage nor continuance, we estimate that approximately 520,000 New Yorkers would have lost access to ESI. However, only 250,000 individuals would have lost insurance in this scenario, implying that more than half of the ESI losses were counteracted (in net) by increased enrollment in safety-net coverage. Most of this increase in enrollment resulted from gains in Medicaid coverage. Accounting for furlough coverage and Medicaid continuance counteracts the loss of ESI to an even greater degree. In the scenario that includes both furlough coverage and continuance, the net reduction in insurance is zero.

Figure 3.1. Estimated Changes in the Number of People Under Age 65 Enrolled Relative to Scenario Without the Pandemic, New York, 2020
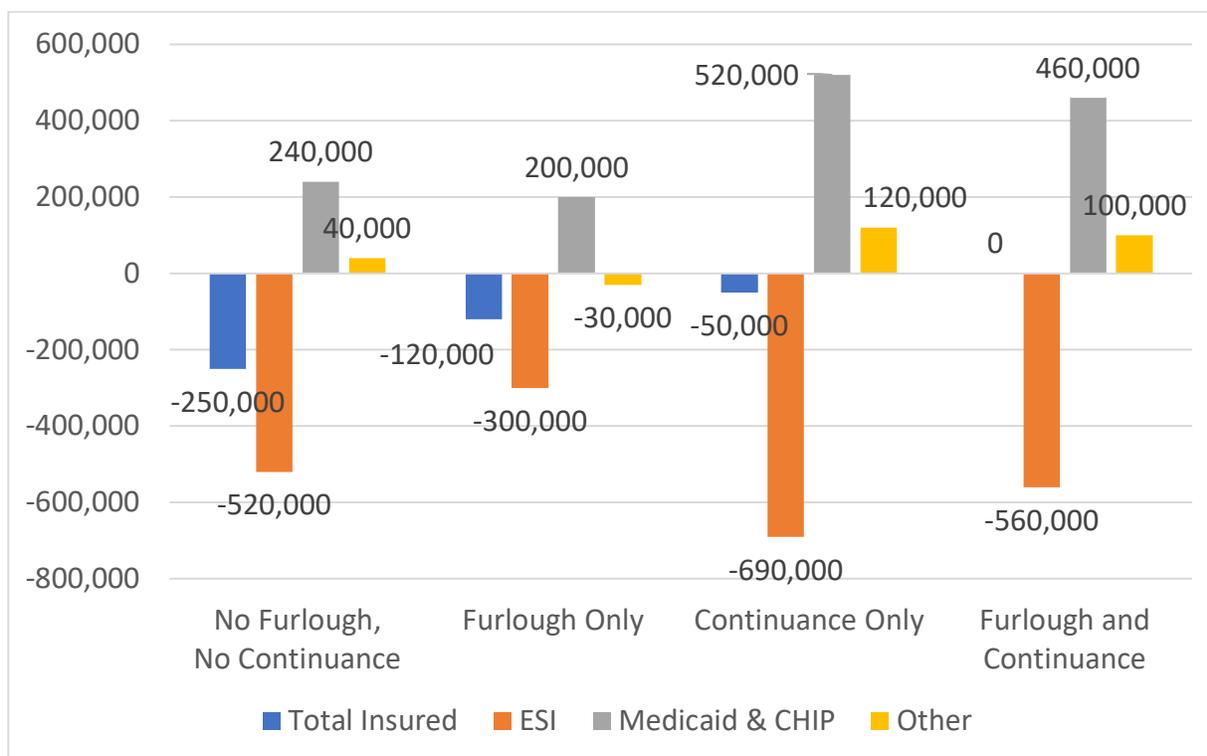
SOURCE: Authors' analysis of the COMPARE for New York, which we describe in more detail in the appendix.
NOTES: Numbers might not sum because of rounding. The "other" category includes individual market, marketplace, EP, and other public coverage.

Two other findings are noteworthy. First, continuance dramatically increased the number of people who gained insurance via Medicaid and CHIP. In the scenarios without continuance, we estimate that Medicaid and CHIP enrollment would have increased by 200,000 to 240,000 individuals, depending on assumptions about furlough coverage. When we allow for Medicaid continuance, these estimates jump to 460,000 to 520,000 additional individuals covered by Medicaid and CHIP. This increase is similar to what was actually observed in New York (see the appendix for details). "Other" enrollment also increases in the scenarios with continuance because these scenarios account for extended grace periods affecting New York's basic health plan.

Second, the loss of ESI is larger in scenarios that include Medicaid continuance; for example, in the "furlough only" scenario, we estimate that 300,000 people would have lost ESI coverage, compared with 560,000 losing ESI in the scenario with both furlough coverage and continuance. This finding reflects the fact that people who might otherwise have moved from Medicaid to ESI (e.g., because of a job change) remain enrolled in Medicaid when we assume that continuous enrollment is in place. As described in more detail in the appendix, our estimate of the increase in Medicaid enrollment approximates the change in Medicaid enrollment that was observed in New York in 2020. However, because we assign everyone in the model a single source of insurance coverage, we do not capture people who enrolled in both Medicaid and ESI. As a result, we may underestimate ESI enrollment in scenarios with continuance.

Distribution of Uninsurance

Figure 3.2 shows the uninsurance rate by income (as a percentage of the FPL) for each of the four scenarios, compared with a hypothetical case in which the pandemic has not occurred. In all scenarios, people with incomes at or below 400 percent of the FPL are more likely to be uninsured than higher-income individuals. For people in the higher-income group, the pandemic unambiguously increased the uninsurance rate, although the increase is smaller in scenarios with furlough and continuance policies relative to the scenario without these policies. (People with high annual incomes can benefit from Medicaid continuance because Medicaid eligibility is determined on a monthly basis.) For people with lower incomes, the uninsurance rate falls slightly in the scenarios that include Medicaid continuance relative to the counterfactual scenario. These results suggest that the pandemic could lead to a distributional shift in the composition of the uninsured, with some lower-income people gaining (or retaining) coverage as a result of continuance policies and some higher-income people losing coverage because of job loss.

Figure 3.2. Estimated Uninsurance Rate (population under age 65), New York, 2020
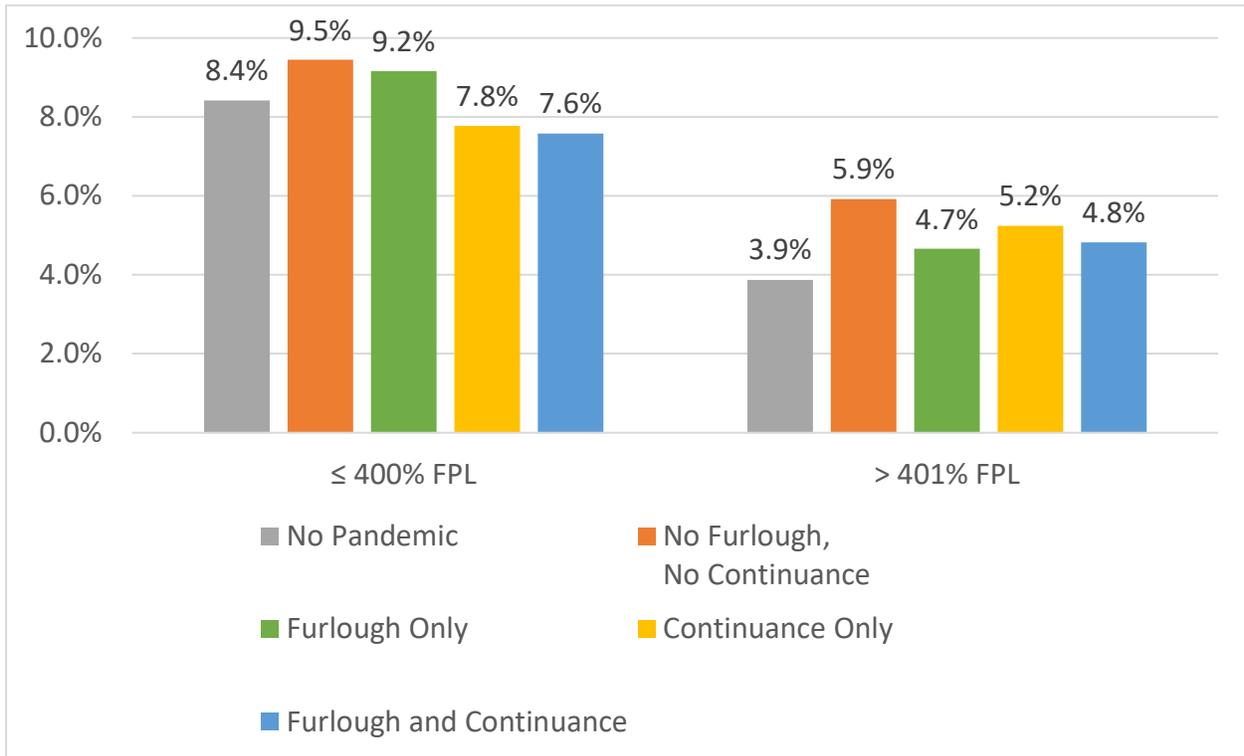
SOURCE: Authors' analysis of COMPARE for New York, which we describe in more detail in the appendix.

Effects of 2021 Policies

In Figure 3.3, we show the estimated changes in insurance in 2021 relative to a scenario without the pandemic, eliminating the furlough coverage and adding a scenario with APTC enhancements and extensions.

We estimate that, without any policy interventions, approximately 120,000 fewer people would have insurance in New York relative to a counterfactual scenario without the pandemic. Continuous Medicaid enrollment reverses this insurance decline, leading to a 100,000-person increase in insurance coverage relative to the scenario without the pandemic. However, as modeled, Medicaid continuance results in a substantial decline in ESI enrollment, with almost 1,000,000 fewer people enrolled in employer coverage. This finding rests partly on our assumption that those who retain Medicaid coverage because of continuance policies do not take up other coverage, such as ESI.

Figure 3.3. Estimated Changes in the Number of People Under Age 65 Enrolled Relative to the Scenario Without the Pandemic, New York, 2021
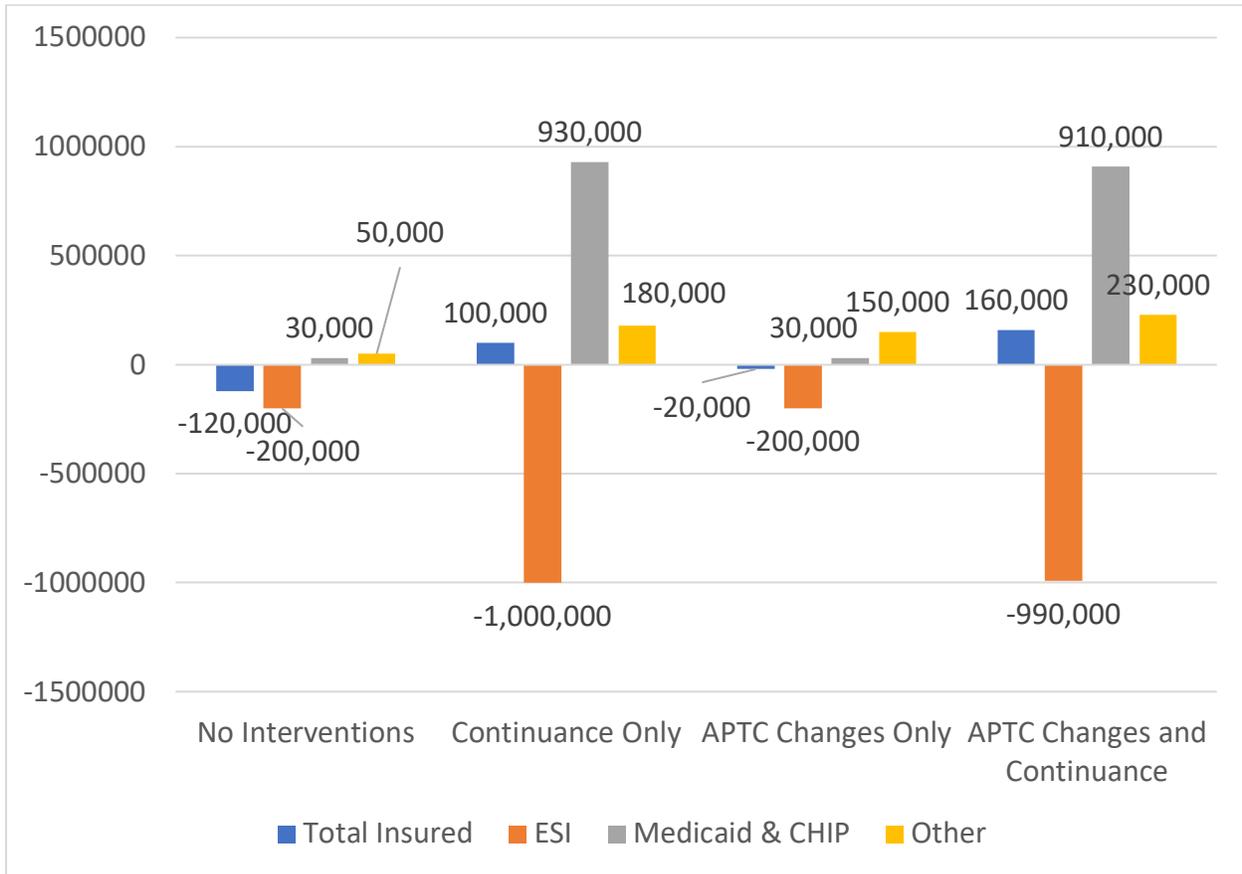
SOURCE: Authors' analysis of the COMPARE for New York, which we describe in more detail in the appendix.
NOTES: Numbers might not sum because of rounding. The "other" category includes individual market, marketplace, EP, and other public coverage.

We estimate that, without other policy changes, enhancing APTCs and extending them to more people nearly offsets the decline in insurance coverage resulting from the pandemic, with only 20,000 fewer people insured than estimated in the no-pandemic counterfactual scenario. Combining continuous Medicaid enrollment with APTC changes results in a 160,000-person increase in coverage relative to the counterfactual scenario without the pandemic. However, the addition of continuance is again associated with a substantial decline in ESI enrollment.

"Other" coverage increases in scenarios with continuance and with APTC changes. Changes to APTCs directly increase enrollment in marketplace coverage, which is included in the "other" category. The increase in the scenario with continuance and no other changes reflects the effect of the grace period on enrollment in New York's EP.

In Figure 3.4, we show the estimated uninsurance rates in New York in 2021, by income, in the counterfactual scenario without the pandemic and under our four pandemic scenarios. In all cases, people with incomes at or below 400 percent of the FPL have higher uninsurance rates

than those with incomes above 400 percent of the FPL. For the population with incomes at or below 400 percent of the FPL, the pandemic has little impact on insurance coverage in 2021 relative to the counterfactual scenario. However, the scenarios involving continuous Medicaid enrollment lead to substantial declines in uninsurance for this lower-income group.

For the population with incomes above 400 percent of the FPL, the pandemic increases uninsurance rates from 3.9 to 5.5 percent. Both continuous coverage and extensions and enhancements to APTCs reduce uninsurance for the higher-income population relative to the scenario with no interventions. However, uninsurance remains elevated relative to the no-pandemic counterfactual scenario. Those in this income group who remain uninsured might be middle-income people who continue to view insurance as unaffordable, despite ARP's APTC enhancements.

Figure 3.4. Estimated Uninsurance Rate (population under age 65), New York, 2021
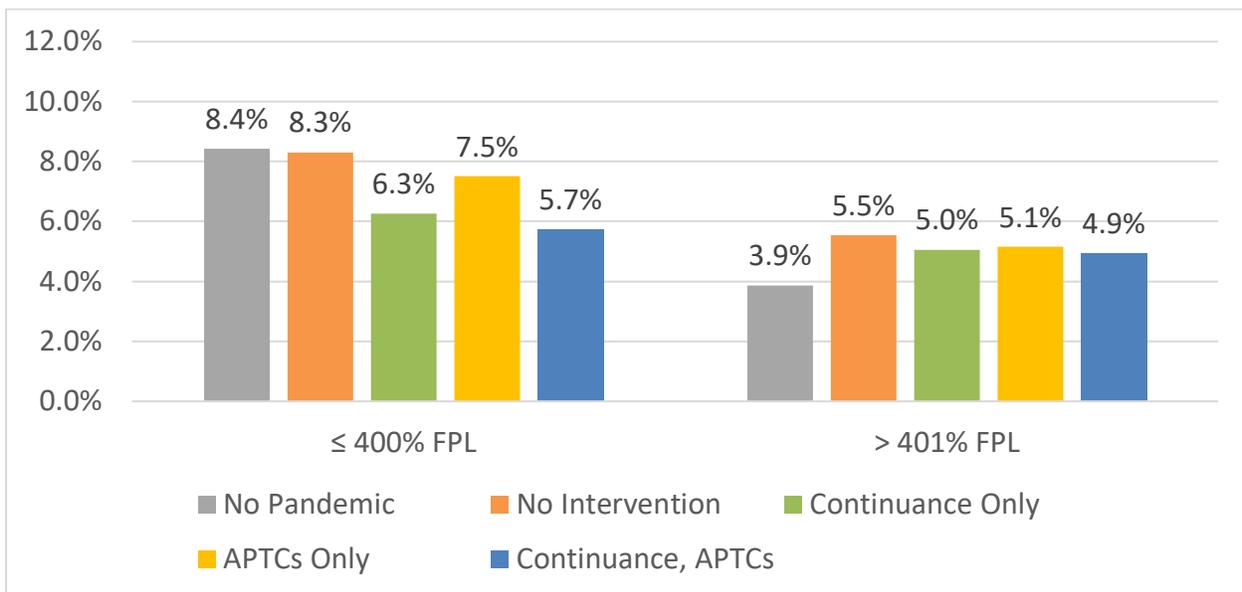
SOURCE: Authors' analysis of the COMPARE for New York, which we describe in more detail in the appendix.

Limitations

We assume that people make choices by weighing the costs and benefits of available options, but we do not account for nonpecuniary factors, such as political ideology or marketing, that also might influence decisions. The data underlying the model are outdated; however, we have addressed this issue by reweighting to match current population totals and demographics in New York and by adjusting price levels based on recent premium data and inflation rates. We assume that those who are eligible for Medicaid because of continuance policies will remain enrolled and will not seek coverage through another source, such as a new job. Although many lower-income people might prefer Medicaid to job-based insurance because Medicaid does not charge

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premiums, this assumption does not always hold. Data from the Kaiser Family Foundation show that approximately 20 percent of New Yorkers with incomes below 200 percent of the FPL had job-based coverage in 2020, even though nearly everyone in this group was eligible for public insurance through Medicaid, CHIP, or the EP (Kaiser Family Foundation, undated).[1] Although these data show that some people who are eligible for public coverage opt to enroll in ESI, the data do not shed light on likely ESI take-up among people who are enrolled in Medicaid and subsequently become eligible for ESI while maintaining Medicaid eligibility. Uncertainty about ESI take-up among those who are enrolled in Medicaid does not affect our estimates of the number of people who are uninsured. However, it might lead us to underestimate ESI enrollment in scenarios that include continuance because some people assigned to Medicaid in the model would, in reality, be enrolled in both Medicaid and ESI. Finally, our assumption about the availability of furlough coverage is based on a national analysis; availability in New York state might be different.

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[1] Undocumented residents are not eligible for these programs, even if their incomes are below the thresholds.

4. Discussion

Recent evidence shows that insurance enrollment in the United States held steady during the pandemic, despite substantial job losses in 2020 and elevated unemployment forecasted through 2021. The stability in insurance coverage indicates that the country's health insurance safety net is working. However, our analysis, and emerging evidence from other sources, suggests that temporary policies—notably, continuous Medicaid enrollment and furlough coverage—are major contributing factors to this success. We estimate that the temporary extension and enhancement of APTCs will additionally contribute to enrollment stability in 2021.

The importance of temporary policies in stabilizing enrollment suggests that, on their own, the ACA's coverage provisions might not have fully prevented insurance loss during the COVID-19 pandemic. When continuous Medicaid enrollment and other temporary provisions expire, hundreds of thousands of U.S. residents might become uninsured. Many of these people could qualify for coverage through other sources, such as the marketplaces or employer insurance. But they likely will need help to ensure that they are aware of their options and able to effectively navigate special enrollment periods and employer rules regarding insurance uptake. Expanded outreach and enrollment assistance, such as through navigators or certified application counselors, could be important to ensure that this population remains covered.

More generally, without the help of temporary provisions, the safety net might not have been robust enough to fully offset pandemic-related declines in employer coverage. This evidence indicates that modifications to the ACA might be necessary to ensure that the U.S. health insurance system is prepared for future recessions. For New York state, we estimated that extending and enhancing APTCs—two temporary policies that legislators have proposed making permanent through the Build Back Better Act of 2021 (Keith, 2021; U.S. House Committee on Ways and Means, 2021)—could offset most of the decline in insurance that would be expected because of elevated unemployment in 2021, even without continuous Medicaid enrollment. Enhancing and extending APTCs might have a larger effect in other states, given New York's relatively robust approach to ensuring health care affordability, including requiring full community rating on the individual market and offering a basic health plan for people with incomes between 138 and 200 percent of the FPL. Other polices, such as creating a public health insurance option on the ACA's marketplace or increasing the generosity of the ACA's benchmark plan for determining APTC amounts, also might help ensure that the U.S. health care system can withstand future coverage crises.

Appendix. Additional Detail on Methods and Data

Simulating Coverage Changes

We estimated coverage changes in New York using a combination of the COMPARE model, a nationally representative microsimulation model, and New York–specific data from the 2018 ACS. First, we adjusted the COMPARE model to reflect New York–specific factors, including full community rating in the individual market, reported premiums, and the presence of a basic health plan (the EP). We then used the model to estimate changes in coverage that could be expected because of changes in circumstances, such as job loss and income loss. However, results from COMPARE cannot be used to directly estimate coverage changes in New York because the data underlying COMPARE are not representative at the state level. Instead, we used the COMPARE model to estimate transition probabilities for groups based on age, income, race and ethnicity, insurance category, and job loss status. We then applied the transition probabilities to the New York–specific data from the ACS. The transition probabilities enabled us to use the COMPARE architecture to estimate the chance that someone will change insurance status given their demographic characteristics without requiring that the model be fully representative of the New York population. A key assumption of this approach is that transition probabilities within demographic groups in New York would be similar to transitions for people in the same demographic groups in the rest of the United States, if the rest of the United States were exposed to New York's insurance market regulations and program eligibility rules. This approach preserves the demographic characteristics of New York's population, while accounting for estimated changes in coverage stemming from the pandemic-related recession. In the next section, we describe the COMPARE model and the New York–specific adjustments in more detail.

Estimating Transitions in the COMPARE Model

COMPARE is a microsimulation model that uses economic theory, nationally representative data, and evidence from past experience to estimate how consumers and businesses will respond to health policy changes (Cordova et al., 2013). The model creates a synthetic population of individuals, families, and firms and assigns health expenditures using data from the April 2010 wave of the 2008 SIPP, the 2011–2012 MEPS, and the 2009 Kaiser Family Foundation and Health Research and Educational Trust Employer Health Benefits Survey. Although the data sources predate the implementation of the ACA, we updated them to reflect population growth based on factors reported by the U.S. Census Bureau and to reflect health care cost growth using the CMS NHEA. Our inflation factors vary by payer.

We assigned each individual in the SIPP a spending amount using the spending of a similar individual from the MEPS. We then augmented spending imputations with data on high-cost claims from the Society of Actuaries. These adjustments account for the fact that the MEPS underrepresents individuals with high spending. We also adjusted the MEPS spending estimates to align with the NHEA estimates, according to the procedure developed by researchers from the Agency for Healthcare Research and Quality (Sing et al., 2006; Bernard, Selden, and Pylypchuk, 2015).

Individuals in COMPARE make health insurance enrollment decisions by weighing the costs and benefits of available options, an approach that is referred to by economists as *utility maximization*. The utility-maximization framework accounts for

- premium costs
- anticipated out-of-pocket health care spending
- the value of health care consumption
- the risk of incurring a financially devastating health care bill.

Premium costs are adjusted to account for tax credits if such credits are available to the enrollee. All else being equal, higher premiums reduce an individual's probability of enrolling in health insurance. In contrast, several factors encourage enrollment, such as a lower risk of catastrophic spending, reduced out-of-pocket spending, the avoidance of penalties (if they apply), and increases in health care utilization.

Businesses in the model make decisions by considering the value of health insurance to their workers. Tax credits for individual market coverage and Medicaid eligibility expansions may reduce the value of health insurance to workers, leading firms to drop insurance. However, mandates requiring individuals to enroll in insurance, along with mandates requiring firms to offer coverage, tend to increase the likelihood that a firm will offer insurance. The model also takes into account the tax exclusion for ESI, which makes insurance more valuable to workers (relative to wages) and increases firms' likelihood of offering coverage.

The data in the COMPARE model are nationally representative, but they are not representative for individual states. To model outcomes in New York, we adjusted the national model to reflect New York–specific policies, such as full community rating in the individual market and the existence of the EP. We modeled New York's policy of full community rating on the individual market, which means that individuals receive the same premium regardless of age, smoking status, and health status for both on- and off-marketplace plans. The EP is available to individuals with household incomes below 200 percent of the FPL and those who are not eligible for Medicaid. Those with incomes below 150 percent of the FPL have zero premiums, and those with incomes between 150 and 200 percent of the FPL have a $20 monthly premium. The Child Health Plus (CHP) program is available to children up to age 19. Those with household incomes below 400 percent of the FPL are eligible for subsidized coverage. There are no premiums for households with incomes below 160 percent of the FPL, sliding-scale premiums for those at 160 to 400 percent of the FPL, and full premiums for those above 400 percent of the FPL. We

estimated insurance transitions using the adjusted national model and applied them to New York–specific data from the ACS. More detail on the New York–specific adjustments and approach is provided in the next section.

New York–Specific Data

We modeled the New York population using the 2018 ACS data. To estimate changes in insurance, we assigned insurance categories to individuals and adjusted to administrative totals. First, we assigned primary insurance categories using the following hierarchy: Medicare over age 65; other public dual eligible (Medicare and Medicaid); Medicaid; ESI; other public insurance, such as TRICARE, Department of Veterans Affairs, and Medicare under age 65; nongroup; and uninsured. Next, we assigned EP and CHP enrollment based on program eligibility among individuals who reported insurance that was purchased directly from an insurance company or coverage from Medicaid, medical assistance, or any kind of government assistance plan for those with low incomes or disabilities in the ACS. The EP, CHP, and marketplace enrollment totals are benchmarked to New York State of Health enrollment data (New York State of Health, 2020); off-marketplace enrollment totals were estimated using data from Mark Farrah Associates (Mark Farrah Associates, 2019; Mark Farrah Associates, 2020). We projected the population to 2020 and 2021 using ten-year state population projections from the University of Virginia Weldon Cooper Center and linearly interpolating for 2021 (University of Virginia, 2018). Table A.1 shows insurance status for 2018, 2020, and 2021 without the pandemic.

Table A.1. Primary Insurance Category for New York Residents Under Age 65 in 2018, 2020, and 2021

Insurance Category	2018 (millions)	2020 Projected (millions)	2021 Projected (millions)
ESI	9.35	9.38	9.38
Nongroup	0.37	0.31	0.31
EP	0.74	0.80	0.80
CHP	0.38	0.45	0.45
Medicaid	3.97	3.90	3.91
Other public insurance	0.50	0.50	0.50
Uninsured	1.03	1.04	1.04

NOTES: 2018 estimates are based on ACS data with modifications to reflect New York administrative totals (U.S. Census Bureau, undated). 2020 and 2021 estimates are from the COMPARE model. Other public insurance includes TRICARE, Veterans Affairs, Medicare for those under age 65, and dual eligible in Medicare and Medicaid.

We assigned average premiums to individuals based on insurance category (Table A.2).

Table A.2. Average Annual Premiums, by Insurance, 2020 and 2021

Insurance Type	2020	2021
ESI, single	$8,372	$8,884
ESI, family	$24,186	$25,573
Nongroup, platinum	$12,857	$13,033
Nongroup, gold	$10,149	$10,282
Nongroup, silver	$8,061	$8,163
Nongroup, bronze	$6,388	$6,475
Nongroup, catastrophic	$3,629	$3,709
EP	$82	$82
CHP	$430	$430

SOURCES: New York State of Health, 2020; HHS, Agency for Healthcare Research and Quality, undated; New York Department of Financial Services, 2020; New York Department of Health, 2021; New York City, Office of Citywide Health Insurance Access, 2020.

NOTES: EP premiums are $0 for households with incomes of 150 percent of the FPL and below and $20 per month for those with incomes above 150 percent of the FPL. Monthly premiums for CHP enrollees are as follows: $9 for incomes of 160 to 221 percent of the FPL, $15 for 222 to 249 percent of the FPL, $30 for 250 to 299 percent of the FPL, $45 for 300 to 349 percent of the FPL, $60 for 350 to 400 percent of the FPL, and full premiums for more than 400 percent of the FPL, which was $231 in 2020. This table shows average annual premiums, including individuals with zero premiums.

Accounting for the Recession

The survey data used in COMPARE and the ACS were collected prior to the COVID-19 pandemic and the recession. To account for the effects of the recession on health insurance coverage, we first estimated the employment levels and then estimated how this change influences the sources of insurance. To create the baseline job loss value for 2020, we started by comparing employment data for New York state from the BLS Local Area Unemployment Statistics in June 2020 with that in June 2019. We then modified the job loss using the national employment forecasts released by the Federal Open Market Committee (FOMC) in September 2020 (Board of Governors of the Federal Reserve System, 2020). The patterns reflected in the FOMC analysis are similar to New York–specific projections estimated by the Boston Consulting Group (BCG) and published on the New York Office of the Budgets website (BCG, 2020). However, the FOMC data are more recent and easier to work with because they are presented in a more granular format than those in the BCG analysis.

In Table A.3, the mid-range values for the FOMC estimate come from a comparison of the median estimate for 2021 with the median estimate for 2020. The low recessionary effect value comes from the lower end of the FOMC's projection range, and the high recessionary effect value is derived from the values at the upper end of the range.

Table A.3. Job Loss Projections in New York and in the United States

	New York Job Loss Estimate, 2020 (%)	FOMC Unemployment Rate Estimate, 2020 (%)	FOMC Unemployment Rate Estimate, 2021 (%)	FOMC Unemployment Percentage Change	New York Job Loss Estimate, 2021 (%)
Mid-range recessionary effects	13.1	7.6	5.5	–28	9.5
Low recessionary effects	N/A	6.5	4.0	–38	8.1
High recessionary effects	N/A	8.0	8.0	0	13.1

SOURCE: Data are from Board of Governors of the Federal Reserve System, 2020.
NOTE: N/A = not applicable.

To assign job loss to individuals in the model, we used employment data for nonfarm industries from the Current Employment Statistics (CES) from June 2019 and June 2020. First, we crosswalked the CES industry codes, which are based on the North American Industry Classification System, to U.S. Census industry codes used in the SIPP and ACS (U.S. Census Bureau, 2020). Then, we assigned job loss to individuals based on the unemployment rates by industry and in proportion to the distribution of current unemployment by race and ethnicity. Black and Hispanic or Latino populations are more likely than the white population to be unemployed (BLS, 2020a; BLS, 2020b). Furthermore, black workers are more likely than workers of other races to lose their jobs (Williams, 2020). Table A.4 shows unemployment by race and ethnicity in New York in 2018.

Table A.4. Unemployment by Race/Ethnicity in New York

Race or Ethnicity	Labor Force	Employed	Unemployed	Share of Labor Force (%)	Share of Unemployed (%)	Unemployment Rate (%)
White non-Hispanic	5,685,117	5,468,655	216,462	58	43	4.0
Hispanic or Latino	1,806,394	1,689,997	116,397	18	23	6.9
Black non-Hispanic	1,383,975	1,272,278	111,697	13	22	8.8
Other non-Hispanic	1,136,165	1,077,518	58,647	11	12	5.4
Total	10,011,649	9,508,448	503,201			5.3

SOURCE: Data are from the 2018 ACS for New York (U.S. Census Bureau, undated).

In scenarios without furlough coverage, we assumed that those who lost their jobs would lose access to own-name ESI (although they might retain ESI coverage through a spouse). We further assumed that those who lost their jobs also experienced income loss, which affects their eligibility for Medicaid, EP, CHP, and marketplace tax credits. We assumed that the income loss would be in proportion to historical unemployment duration following the Great Recession (Cunningham, 2018). Specifically, we used the distribution of unemployment in 2011, which

was the year with the highest levels of unemployment during the recovery from the Great Recession (Table A.5). For example, 19.5 percent of those unemployed in 2011 were unemployed for less than five weeks, so we assumed that 19.5 percent of people with pandemic-related job loss also would be unemployed for less than five weeks and that their incomes would decline by an average of 2.5 weeks out of every 52 weeks, or 4.8 percent. In 2011, 31.3 percent of the unemployed were unemployed for 52 weeks or more, so we assumed that 31.3 percent of people with pandemic-related job loss would lose their entire annual income. For scenarios that include the pandemic, we grouped people into FPL categories based on their incomes after having adjusted for the effect of job loss.

Table A.5. Distribution of Unemployment, by Duration of Unemployment, 2011

Duration of Unemployment	Percentage of Unemployed
Less than 5 weeks	19.5
5 to 14 weeks	21.8
15 to 26 weeks	15.0
27 to 51 weeks	12.4
52 weeks and over	31.3

SOURCE: Data are from the BLS Current Population Survey (Cunningham, 2018).

Accounting for Continuous Coverage

Under the FFCRA (Pub. L. 116-127, 2020), states that receive increased FMAP are also subject to "maintenance of effort" during the COVID-19 public health emergency. This includes continuous coverage for Medicaid enrollees that prevents states from terminating Medicaid coverage. To account for the continuous coverage provision, we treated Medicaid and CHIP as an "absorbing state" to restrict people from transitioning out of this insurance status.

CMS reported that Medicaid and CHIP enrollment in New York state was 6,475,604 as of September 2020 (CMS, undated a), which is an increase of nearly 500,000 relative to the roughly 6,000,000 enrollees reported as of December 2019 (CMS, 2019). These results are similar to those of our analysis, which ranged from 420,000 to 560,000, depending on assumptions about furlough coverage.

A limitation of our approach is that we did not account for the possibility that some people who remain enrolled in Medicaid because of continuous coverage provisions become eligible for and enroll in ESI over time—for example, because they become employed. COMPARE's insurance status hierarchy, which prioritizes Medicaid, assigns all of these people to Medicaid as their primary insurance category. In reality, ESI would be the first payer for people who had both Medicaid and employer insurance. However, it is unclear how many people with Medicaid would enroll in their employer's plan, particularly because employer coverage typically requires the worker to pay a premium contribution.

Accounting for Furlough Coverage

In scenarios that include furlough coverage, we assumed that 53 percent of the newly unemployed with own-name ESI offers were able to remain enrolled in own-name ESI because they were furloughed instead of fully separated from their employers (Collins et al., 2020). The remaining population would select from the insurance options available to them (these might include Medicaid, nongroup insurance from the exchange, ESI from a spouse, or becoming uninsured).

Enhancing and Extending Advance Premium Tax Credits

To estimate the effects of the revised tax credit schedule in 2021, we used the applicable contribution amounts specified in the ARP (Pub. L. 117-2, 2021), as shown in Table A.6. The APTC amount is equal to the difference between the price of the second-lowest-cost silver plan available in the marketplaces and the applicable percentage contribution applied to the enrollee's income.

Table A.6. APTCs Under the American Rescue Plan, 2021

Income	Original Applicable Percentage Contribution	Revised Applicable Percentage Contribution Under ARP
Less than 100% of the FPL	N/A	N/A
100–138% of the FPL	2.07%	0
139–150% of the FPL	3.10–4.14%	0
150–200% of the FPL	4.14–6.52%	0–2.0%
200–250% of the FPL	6.52–8.33%	2.0–4.0%
250–300% of the FPL	8.33–9.83%	4.0–6.0%
300–400% of the FPL	9.83%	6.0–8.5%
More than 400% of the FPL	N/A	8.5%

SOURCES: Original applicable percentage contributions come from Internal Revenue Service guidance (26 CFR 601.105), and revised percentages come from the ARP.
NOTE: N/A = not applicable.

Because New Yorkers with incomes between 133 and 200 percent of the FPL are eligible for the EP, we assume that they are not affected by the APTC change. Regardless of an enrollee's income, APTCs are available only if the enrollee has no affordable offer of coverage from another source, such as employer insurance.

Abbreviations

ACA	Affordable Care Act
ACS	American Community Survey
APTC	Advance Premium Tax Credit
ARP	American Rescue Plan
BLS	U.S. Bureau of Labor Statistics
CHIP	Children's Health Insurance Program
CHP	Child Health Plus
CMS	Centers for Medicare & Medicaid Services
COBRA	Consolidated Omnibus Reconciliation Act
COVID-19	coronavirus disease 2019
EP	Essential Plan
ESI	employer-sponsored insurance
FFCRA	Families First Coronavirus Response Act
FMAP	federal medical assistance percentages
FOMC	Federal Open Market Committee
FPL	federal poverty level
HHS	U.S. Department of Health and Human Services
MEPS	Medical Expenditure Panel Survey
NHEA	National Health Expenditures Account
SIPP	Survey of Income and Program Participation

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