

How the COVID-19 Recession Could Affect Health Insurance Coverage

Bowen Garrett and Anuj Gangopadhyaya

Timely Analysis of Immediate Health Policy Issues

MAY 2020

Introduction

Thirty million workers filed initial unemployment claims between March 15 and April 25.^{1,2} Near-term forecasts suggest the unemployment rate will likely be between 15 to 20 percent by June.^{3,4,5} Economic forecasters at S&P expect the unemployment rate to reach 18 percent in May, which they note would be closer to the Depression-era peak of 25 percent in 1933 than the 10 percent peak following the Great Recession.⁶ One estimate by the Federal Reserve Bank of St. Louis has suggested the unemployment rate could reach as high as 30 percent.⁷ As workers lose their jobs, many will lose their employer-sponsored health insurance (ESI). Many of these workers will newly qualify for Medicaid coverage, particularly in states that expanded Medicaid eligibility under the Affordable Care Act (ACA).⁸ Others will purchase individual coverage on the health insurance marketplaces, possibly with a subsidy to offset the premium cost (depending on their income). And some will be unable to replace their ESI coverage and will become uninsured.

In this brief, we estimate how health insurance coverage could change as millions of workers lose their jobs because of the slowdown in economic activity resulting from public health efforts to reduce the spread of the coronavirus. We present national and state-level estimates of coverage changes if unemployment rates rise from precrisis levels (around 3.5 percent nationally) to 15 percent, 20 percent, or 25 percent. We provide this range of unemployment

scenarios given the uncertainty around how high unemployment will climb, and because states have different pre-COVID-19 unemployment rates and will likely experience varying levels of economic disruption through the crisis. For each level of unemployment, we provide a base case scenario of coverage changes as well as a high (but also plausible) scenario, derived from two different estimation methods. We present an overview of our methods and main findings in the main body of the paper. We provide further details on our modeling assumptions and discuss uncertainties surrounding the estimates in the appendix.

We find the following:

- An estimated 160 million people under age 65 had ESI coverage before March 2020. If the unemployment rate rises to 20 percent, we estimate that 25 million people will lose their ESI coverage in our base scenario and 43 million would lose ESI in our scenario based on a higher estimate of responsiveness to unemployment rate changes.
- Among those people losing ESI in our base scenario, we estimate that 12 million (47 percent) will gain Medicaid coverage, 6 million (25 percent) will gain coverage through the marketplace or other private plan, and 7 million (29 percent) will become uninsured.
- Among those losing ESI in our high scenario, with 20 percent unemployment we estimate that 21 million will gain Medicaid coverage,

10 million will gain coverage through the marketplace or other private plan, and 12 million will become uninsured.

- Adults make up about 75 percent of people expected to lose ESI coverage in our base scenario but 91 percent of people expected to become uninsured.
- In expansion states, in our base scenario, among people losing ESI, more than half (about 9 million under a 20 percent unemployment rate) are expected to enroll in Medicaid and less than a quarter (nearly 4 million) are expected to become uninsured. In the high scenario with 20 percent unemployment, we estimate that more than 15 million will enroll in Medicaid and more than 6 million will become uninsured.
- In nonexpansion states, in our base scenario, among those losing ESI coverage, about one-third (3 million under a 20 percent unemployment rate) are expected to gain Medicaid coverage while about 40 percent (3.5 million) are expected to become uninsured. In the high scenario with 20 percent unemployment, we estimate that more than 5 million will enroll in Medicaid and nearly 6 million will become uninsured.

All unemployment scenarios indicate that millions of people under age 65 will lose ESI coverage throughout the country. States that have not expanded Medicaid under the ACA will see larger shares of those losing ESI coverage becoming uninsured. Proposed policy recommendations such as temporary

or permanent Medicaid expansions, expanding eligibility for subsidies for marketplace coverage, and providing subsidies for COBRA benefits could help mitigate the rise in uninsurance driven by the pandemic's effects on the economy.⁹

Moreover, our findings indicate that more than half of people estimated to lose ESI coverage in Medicaid expansion states will gain Medicaid coverage. This is the purpose of the Medicaid program, to provide a safety net to people in financial distress, including those with short-term changes in circumstances. However, given that jobless rates may reach unprecedented heights under the COVID-19 pandemic, steep increases in Medicaid coverage will strain state budgets, restricting already limited resources in the very communities hardest hit by the crisis. To help blunt this, current legislation has already enhanced the federal matching rate for Medicaid financing. Still, further increasing the federal matching rate could help provide the critical resources needed to protect the states most in need.¹⁰

Methods

We estimate changes in health insurance coverage for the United States and each state in three steps. First, we obtain estimates of the labor force situation in each state before March 2020, when the COVID-19 crisis started leading to large increases in unemployment in the United States. Then we use econometric estimates of how ESI rates change with the unemployment rate. The estimates in the base scenario are from individual-level regression models using American Community Survey (ACS) data from 2008–18. Estimates in the high scenario are from a time series model using national ESI and unemployment rates from 1998 to 2018.¹¹ We compute the number of adults and children in each state expected to lose ESI if the state's unemployment rate rises to 15, 20, or 25 percent. In the last step, given the estimated number losing ESI in each state, we estimate the number of adults and children likely to enroll in Medicaid, obtain marketplace or other private coverage, or become uninsured. Throughout our analysis, we exclude adults ages 65 or older because they are generally eligible for Medicare coverage

and as a result their coverage patterns are less likely to change (though some may lose employer-based coverage with Medicare as secondary coverage and shift to having Medicare as primary coverage).

Monthly Current Population Survey data provide us with estimates of the number of employed workers, unemployed workers (i.e., looking for work), and adults not in the labor force in each state. We combine 12 months of Current Population Survey data from March 2019 to February 2020 to obtain estimates of precrisis employment data for each state. With these data, we find that precrisis unemployment rates for nonelderly adults ranged from 4.9 percent in Mississippi to 1.7 percent in North Dakota.

We use the 2017–18 ACS to estimate precrisis health insurance coverage by state for adults and children, pooling two years of data to obtain more precise estimates of coverage within each state. We use coverage types reported in the ACS and edited by the Integrated Public Use Microdata Series to improve comparability of coverage types over time.^{12,13} A relatively small number of respondents report multiple types of health insurance coverage, and we classify these cases using the following coverage hierarchy: ESI, Medicare, Medicaid (including CHIP coverage for children), marketplace or other private insurance, and other public insurance.¹⁴ We reweight the ACS data to match population estimates by state and employment status in the more recent Current Population Survey data. Using the reweighted ACS data, we estimate the precrisis number and proportion of adults and children with employer-based coverage.

Using individual-level 2008–18 ACS data matched to state-level unemployment rates for each year from the Bureau of Labor Statistics, we estimate regression models of the probability of having ESI coverage as a function of the contemporaneous state unemployment rate and its one-year-lagged value, controlling individual and family demographic characteristics, state fixed effects, and a linear year trend.¹⁵

We estimate these regression models separately for nonelderly adults and children. Based on these models, we find that a 1 percentage-point increase in the unemployment rate leads to a 0.61 percentage-point decline in the ESI rate for adults and a 0.52 percentage-point decline for children. These sensitivity estimates capture not only the effects of individuals losing their employment and becoming unemployed, but also the effects on coverage of workers leaving the labor market as unemployment rises and of dependents losing coverage along with those workers. Our estimates capture both the immediate effect of rising unemployment on ESI coverage and the later effects that may occur over an adjustment period. What coverage effects ultimately materialize will likely depend on the time path the unemployment rate takes. Our estimates are best interpreted as the coverage levels that would result from unemployment rising to a given level and holding there for several months to a year. Fewer people could lose ESI coverage if the unemployment rate moderates quickly after it peaks.

As we discuss further in the appendix, the ACS-based sensitivity parameters we use are smaller in magnitude than those reported in previous work using pre-ACA data.¹⁶ We obtain alternative updated estimates of the sensitivity parameter using national time series data from 1998–2018, which has the benefit of spanning two recessions. From a time series regression model, we estimate that a 1 percentage-point increase in the unemployment rate leads to a 0.99 percentage point decrease in the ESI rate for adults and children combined, which is a larger effect than the ACS-based estimates with individual-level data, but very similar to estimates from previous work. Accordingly, we produce two sets of estimates. Our first set of estimates (base scenarios) apply the smaller ACS-based ESI sensitivity parameters and may be viewed as conservative. The second set (higher response scenarios) uses the larger ESI sensitivity parameter (applied to both adults and children) that we estimate from time series data. Whereas the ACS models allow us to control for individual-level factors that affect ESI coverage and arguably lead to less-biased estimates of unemployment

rate effects, the time series model draws on a longer period including two recessions in estimating how ESI rates change with unemployment rates.

We obtain estimated changes in ESI rates by multiplying the applicable ESI-unemployment sensitivity estimates by the increase in unemployment rates from precrisis levels. Multiplying the changes in ESI rates by population levels (separately for adults and children) provides the estimated number of individuals losing ESI under different unemployment rates in each state.

As a last step, given the number of adults and children losing ESI, we compute changes in the number of people enrolling in Medicaid, obtaining marketplace or other private coverage, and becoming uninsured. A small share of the population under age 65 has Medicare or other public insurance, and we assume this share remains fixed. We compute the distribution of coverage types by state among adults and children without ESI and apply these rates to the estimated number losing

ESI. Idaho, Maine, Utah, and Virginia expanded Medicaid after 2018, the most recent year of ACS data. For these four states, we apply the average coverage distribution for adults and children without ESI in the other 32 expansion states to predict coverage transitions for people losing ESI in these states. Using this approach, states with high ratios of Medicaid coverage to uninsurance (and marketplace/other private coverage to uninsurance) will be estimated to have higher growth in Medicaid (marketplace) coverage as unemployment rates rise. Though our approach assumes people losing ESI will obtain coverage at rates similar to groups already lacking ESI, such people may go uninsured or gain Medicaid/nongroup coverage at higher or lower rates, depending on the composition of those losing their jobs and how they behave. A limitation of our approach is that it does not capture other potential coverage transitions that are not associated with the loss of ESI. Income loss resulting from higher unemployment could, for example, result in some individuals with marketplace coverage enrolling in Medicaid or

becoming uninsured. In this situation, our approach would underestimate the total increases in Medicaid enrollment and the uninsured. We discuss our estimation approach and sources of uncertainty further in the appendix.

National Estimates of Coverage Changes under the COVID-19 Recession

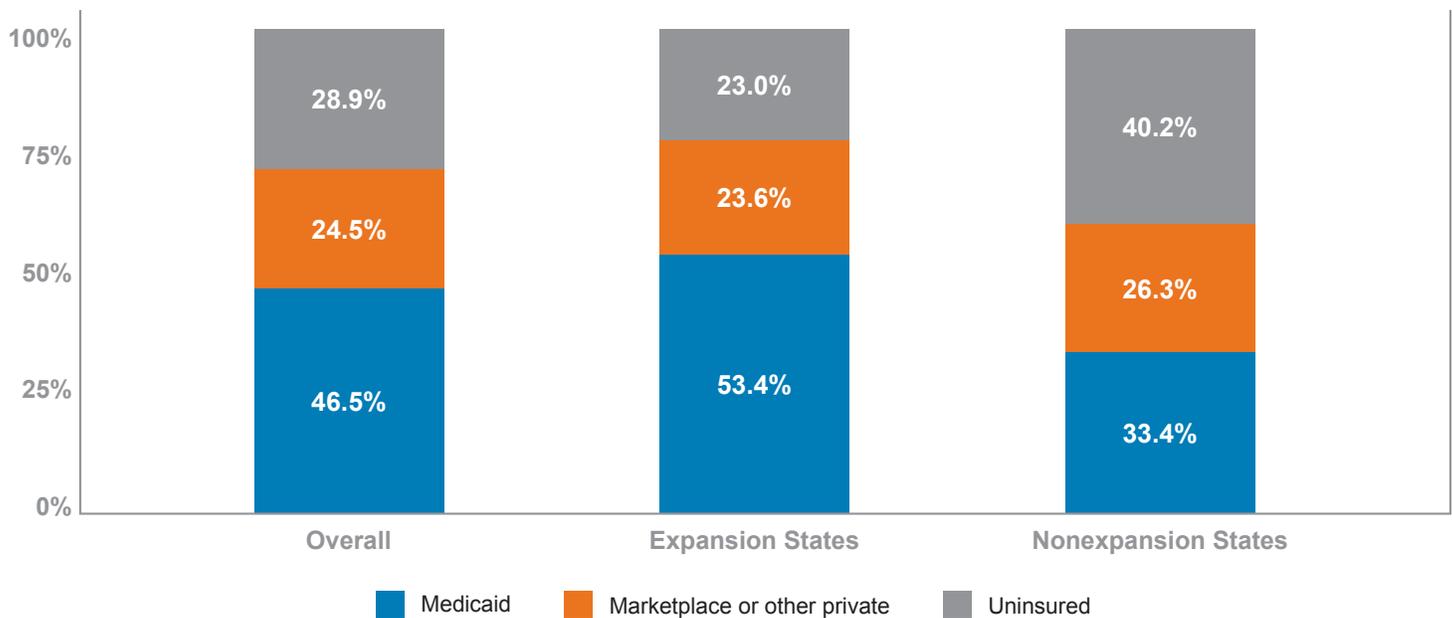
We present national estimates of changes in health insurance coverage under 15, 20, and 25 percent unemployment for our base scenario in the top panel of Table 1. We focus on the estimated changes under a 20 percent unemployment rate. Before the crisis, an estimated 160 million Americans under age 65 had employer-sponsored health insurance. With 20 percent unemployment, we estimate that 25 million people would lose employer-sponsored health insurance. Of these, 11.8 million would gain Medicaid coverage, 6.2 million would gain marketplace or other private coverage, and 7.3 million would become uninsured. The magnitude of these estimates scales with the postcrisis unemployment rate,

Table 1. National Estimates of Changes in Health Insurance Coverage with 15, 20, and 25 Percent Unemployment Rates, Base Scenarios

Coverage type	3.5% (precrisis) Precrisis levels (# of people)	Unemployment rate scenario		
		15% Change	20% Change	25% Change
US TOTALS				
Employer-sponsored insurance	160,282,000	-17,689,000	-25,363,000	-33,037,000
Medicaid	50,339,000	8,225,000	11,798,000	15,371,000
Marketplace or other private insurance	24,538,000	4,348,000	6,229,000	8,109,000
Medicare or other public insurance	7,474,000	0	0	0
Uninsured	28,415,000	5,116,000	7,336,000	9,557,000
EXPANSION STATES				
Employer-sponsored insurance	108,114,000	-11,606,000	-16,653,000	-21,699,000
Medicaid	35,737,000	6,191,000	8,887,000	11,583,000
Marketplace or other private insurance	15,129,000	2,745,000	3,934,000	5,123,000
Medicare or other public insurance	4,599,000	0	0	0
Uninsured	14,246,000	2,670,000	3,832,000	4,993,000
NONEXPANSION STATES				
Employer-sponsored insurance	52,169,000	-6,084,000	-8,711,000	-11,337,000
Medicaid	14,602,000	2,034,000	2,911,000	3,788,000
Marketplace or other private insurance	9,409,000	1,604,000	2,295,000	2,986,000
Medicare or other public insurance	2,876,000	0	0	0
Uninsured	14,168,000	2,446,000	3,505,000	4,563,000

Sources: Urban Institute analysis based on 2017 and 2018 American Community Survey data and 2019 and 2020 monthly Current Population Survey data.

Notes: Medicaid coverage is inclusive of CHIP coverage for children. Coverage changes modeled for US population under age 65.

Figure 1. Estimated Coverage Types of People Losing Employer-Sponsored Health Insurance

Sources: Urban Institute analysis based on 2017 and 2018 American Community Survey data and 2019 and 2020 monthly Current Population Survey data.
Notes: Medicaid coverage is inclusive of CHIP coverage for children. Coverage changes modeled for US population under age 65.

Table 2. National Estimates of Changes in Health Insurance Coverage with 15, 20, and 25 Percent Unemployment Rates, High Scenarios

Coverage type	3.5% (precrisis) Precrisis levels (# of people)	Unemployment rate scenario		
		15% Change	20% Change	25% Change
US TOTALS				
Employer-sponsored insurance	160,282,000	-30,076,000	-43,123,000	-56,170,000
Medicaid	50,339,000	14,347,000	20,579,000	26,812,000
Marketplace or other private insurance	24,538,000	7,264,000	10,405,000	13,547,000
Medicare or other public insurance	7,474,000	0	0	0
Uninsured	28,415,000	8,466,000	12,139,000	15,812,000
EXPANSION STATES				
Employer-sponsored insurance	108,114,000	-19,718,000	-28,293,000	-36,868,000
Medicaid	35,737,000	10,717,000	15,383,000	20,049,000
Marketplace or other private insurance	15,129,000	4,585,000	6,571,000	8,558,000
Medicare or other public insurance	4,599,000	0	0	0
Uninsured	14,246,000	4,417,000	6,339,000	8,260,000
NONEXPANSION STATES				
Employer-sponsored insurance	52,169,000	-10,358,000	-14,830,000	-19,303,000
Medicaid	14,602,000	3,630,000	5,196,000	6,762,000
Marketplace or other private insurance	9,409,000	2,679,000	3,834,000	4,989,000
Medicare or other public insurance	2,876,000	0	0	0
Uninsured	14,168,000	4,049,000	5,800,000	7,552,000

Sources: Urban Institute analysis based on 2017 and 2018 American Community Survey data and 2019 and 2020 monthly Current Population Survey data.
Notes: Medicaid coverage is inclusive of CHIP coverage for children. Coverage changes modeled for US population under age 65.

Table 3. Composition of National Changes in Coverage under 20 Percent Unemployment Rate, by Age Group

Age Group	ESI	Share	Medicaid	Share	Marketplace or other private	Share	Uninsured	Share
COMPOSITION OF CHANGES IN BASE SCENARIO								
Nonelderly adults ages 19 to 64	-18,722,000	73.8%	6,801,000	57.6%	5,278,000	84.7%	6,643,000	90.6%
Children from birth to age 18	-6,641,000	26.2%	4,997,000	42.4%	951,000	15.3%	693,000	9.4%
Total change	-25,363,000		11,798,000		6,229,000		7,336,000	
COMPOSITION OF CHANGES IN HIGH SCENARIO								
Nonelderly adults ages 19 to 64	-30,495,000	70.7%	11,078,000	53.8%	8,596,000	82.6%	10,821,000	89.1%
Children from birth to age 18	-12,629,000	29.3%	9,502,000	46.2%	1,809,000	17.4%	1,318,000	10.9%
Total change	-43,123,000		20,579,000		10,405,000		12,139,000	

Sources: Urban Institute analysis based on 2017 and 2018 American Community Survey data and 2019 and 2020 monthly Current Population Survey data.

Notes: ESI = employer-sponsored insurance. Medicaid coverage is inclusive of CHIP coverage for children. Coverage changes modeled for US population under age 65.

and therefore the sizes of the changes are smaller in the 15 percent unemployment scenario and larger in the 25 percent unemployment scenario.

In Figure 1 and in the middle and bottom panels of Table 1, we show how national changes in coverage differ for two groups of states—those that expanded Medicaid under the ACA (36 states) and those that did not (15 states). Of the 25.3 million people estimated to lose ESI under the 20 percent unemployment scenario, 16.7 million live in expansion states (Table 1, middle panel). Of these, more than half (8.9 million) would gain Medicaid coverage, 24 percent (3.9 million) would gain marketplace or other private coverage, and 23 percent (3.8 million) would become uninsured. In nonexpansion states, we estimate that 8.7 million individuals would lose ESI (Table 1, bottom panel). Relative to expansion states, a smaller share of people losing ESI in nonexpansion states would gain Medicaid coverage (33 percent, or 2.9 million) or marketplace or other private coverage (26 percent or 2.3 million), and a greater share of people would become uninsured (40 percent or 3.5 million). Even though expansion states are predicted to see 7.9 million more people lose ESI coverage under a 20 percent unemployment rate, we estimate similar numbers of people would become uninsured in expansion and nonexpansion states (3.8 million versus 3.5 million).

In Table 2 (top panel), we report national estimates of changes in health insurance coverage under the same unemployment

scenarios but applying the higher estimate of ESI responsiveness to the unemployment rate. With 20 percent unemployment, we find that 43 million would lose ESI in this scenario (as compared with 25 million in the main scenario Table 1). Of those losing ESI, 20.6 million would enroll in Medicaid, 10.4 million would obtain marketplace or other private insurance, and 12.1 million would become uninsured. In Medicaid expansion states (middle panel), 15.4 million people would enroll in Medicaid and 6.3 million would become uninsured in this scenario. In nonexpansion states (bottom panel), 5.2 million would enroll in Medicaid and 5.8 million would become uninsured.

In Table 3 (top panel), we report the number and proportion of adults and children losing ESI coverage under a 20 percent unemployment rate in the base scenario. Among the estimated 25 million people losing ESI coverage, 18.7 million are nonelderly adults and 6.6 million are children under age 19. Among nonelderly adults losing ESI coverage, we estimate that 6.8 million (36 percent) will gain Medicaid coverage, 5.3 million (28 percent) will gain marketplace or other private coverage, and 6.6 (35 percent) will become uninsured. Nearly three out of four children losing ESI coverage are estimated to gain Medicaid or Children's Health Insurance Program (CHIP) coverage (5.0 million children), reflecting that income eligibility limits for children's Medicaid or CHIP coverage are much higher than such limits for parents or childless adults. We estimate that 1.0 million children would gain marketplace or other private coverage (15 percent

of all children estimated to lose ESI coverage), and about 693,000 children would become uninsured (10 percent of children estimated to lose ESI). We report analogous figures for the high scenario in the bottom panel. While the shares of non-elderly adults and children estimated to lose ESI, to gain Medicaid or Marketplace or other private coverage, or to become uninsured in this scenario are similar to our base scenario, there are a greater total number of people in each of these categories, reflecting the additional 18 million estimated to lose ESI coverage in the high scenario relative to the base scenario.

State-Level Estimates of Health Insurance Coverage Changes under the COVID-19 Recession

Though all states will likely see very large increases in unemployment rates, states will differ in the rates of unemployment they experience over the coming months and years. States will also differ in the extent to which Medicaid coverage is available to those losing ESI and how affordable marketplace coverage would be given differences in premium levels and eligibility for premium subsidies across states.¹⁷ Table 4 reports estimated changes in coverage by state in our main scenarios (see Appendix Table 1 for coverage changes by state in our scenarios with higher responsiveness). The changes in health insurance coverage account for differential coverage patterns among individuals without employer-based coverage across states.

Table 4. Estimated Changes in ESI Coverage, Medicaid Enrollment, Marketplace Coverage, and Uninsurance with 15, 20, and 25 Percent Unemployment Rates, Main Scenarios, by State

	15%				20%				25%			
	ESI	Medicaid	Marketplace or other private	Uninsured	ESI	Medicaid	Marketplace or other private	Uninsured	ESI	Medicaid	Marketplace or other private	Uninsured
US Total	-17,689,000	8,225,000	4,348,000	5,116,000	-25,363,000	11,798,000	6,229,000	7,336,000	-33,037,000	15,371,000	8,109,000	9,557,000
Expansion states	-11,606,000	6,191,000	2,745,000	2,670,000	-16,653,000	8,887,000	3,934,000	3,832,000	-21,699,000	11,583,000	5,123,000	4,993,000
Alaska	-37,000	15,000	10,000	13,000	-55,000	22,000	15,000	19,000	-74,000	29,000	20,000	25,000
Arizona	-371,000	175,000	76,000	120,000	-535,000	252,000	110,000	173,000	-698,000	329,000	143,000	226,000
Arkansas	-157,000	81,000	34,000	42,000	-225,000	116,000	49,000	61,000	-293,000	151,000	63,000	79,000
California	-2,110,000	1,165,000	499,000	447,000	-3,065,000	1,691,000	724,000	649,000	-4,019,000	2,218,000	949,000	851,000
Colorado	-338,000	148,000	104,000	86,000	-475,000	208,000	147,000	120,000	-612,000	268,000	189,000	155,000
Connecticut	-184,000	100,000	46,000	38,000	-268,000	145,000	67,000	56,000	-351,000	190,000	88,000	73,000
Delaware	-50,000	25,000	13,000	12,000	-72,000	36,000	18,000	17,000	-94,000	48,000	24,000	22,000
District of Columbia	-35,000	21,000	10,000	4,000	-52,000	31,000	16,000	6,000	-70,000	41,000	21,000	8,000
Hawaii	-83,000	36,000	35,000	13,000	-116,000	50,000	49,000	18,000	-149,000	64,000	62,000	23,000
Idaho	-99,000	54,000	23,000	22,000	-139,000	76,000	32,000	31,000	-180,000	99,000	41,000	40,000
Illinois	-666,000	339,000	155,000	172,000	-969,000	494,000	226,000	250,000	-1,273,000	648,000	297,000	328,000
Indiana	-372,000	169,000	82,000	121,000	-529,000	241,000	116,000	172,000	-686,000	312,000	150,000	224,000
Iowa	-185,000	94,000	53,000	38,000	-258,000	131,000	75,000	52,000	-332,000	168,000	96,000	67,000
Kentucky	-233,000	144,000	44,000	45,000	-336,000	208,000	63,000	65,000	-438,000	271,000	83,000	84,000
Louisiana	-230,000	127,000	45,000	58,000	-339,000	187,000	66,000	86,000	-448,000	248,000	87,000	113,000
Maine	-72,000	38,000	17,000	17,000	-101,000	53,000	24,000	24,000	-131,000	69,000	31,000	31,000
Maryland	-336,000	160,000	95,000	80,000	-480,000	229,000	136,000	114,000	-624,000	298,000	177,000	149,000
Massachusetts	-387,000	247,000	97,000	43,000	-550,000	351,000	138,000	61,000	-712,000	454,000	179,000	79,000
Michigan	-518,000	299,000	112,000	107,000	-749,000	432,000	163,000	155,000	-980,000	565,000	213,000	203,000
Minnesota	-335,000	181,000	89,000	65,000	-468,000	253,000	125,000	90,000	-601,000	325,000	160,000	116,000
Montana	-61,000	26,000	19,000	16,000	-85,000	37,000	26,000	23,000	-109,000	47,000	33,000	29,000
Nevada	-159,000	68,000	34,000	57,000	-230,000	98,000	49,000	83,000	-301,000	128,000	65,000	108,000
New Hampshire	-77,000	34,000	23,000	21,000	-108,000	47,000	32,000	29,000	-139,000	61,000	41,000	38,000
New Jersey	-489,000	224,000	116,000	149,000	-701,000	322,000	166,000	214,000	-914,000	419,000	216,000	279,000
New Mexico	-102,000	61,000	16,000	25,000	-150,000	89,000	24,000	36,000	-197,000	118,000	32,000	48,000
New York	-1,056,000	641,000	219,000	196,000	-1,519,000	923,000	315,000	282,000	-1,983,000	1,204,000	411,000	368,000
North Dakota	-48,000	13,000	21,000	14,000	-67,000	18,000	28,000	20,000	-85,000	23,000	36,000	25,000
Ohio	-625,000	348,000	125,000	151,000	-895,000	499,000	179,000	217,000	-1,165,000	650,000	233,000	282,000
Oregon	-226,000	117,000	55,000	54,000	-322,000	167,000	78,000	77,000	-419,000	216,000	102,000	100,000
Pennsylvania	-676,000	349,000	168,000	159,000	-969,000	500,000	241,000	228,000	-1,262,000	651,000	314,000	297,000
Rhode Island	-54,000	31,000	14,000	9,000	-78,000	46,000	20,000	13,000	-103,000	60,000	26,000	17,000
Utah	-202,000	112,000	46,000	44,000	-280,000	156,000	63,000	61,000	-359,000	200,000	81,000	78,000
Vermont	-35,000	21,000	8,000	5,000	-49,000	30,000	12,000	7,000	-63,000	39,000	15,000	9,000
Virginia	-489,000	261,000	115,000	113,000	-690,000	369,000	162,000	160,000	-892,000	477,000	209,000	206,000
Washington	-426,000	214,000	116,000	97,000	-605,000	303,000	164,000	137,000	-783,000	393,000	212,000	178,000
West Virginia	-83,000	52,000	12,000	18,000	-122,000	77,000	18,000	27,000	-162,000	102,000	24,000	36,000
Nonexpansion states	-6,084,000	2,034,000	1,604,000	2,446,000	-8,711,000	2,911,000	2,295,000	3,505,000	-11,337,000	3,788,000	2,986,000	4,563,000
Alabama	-245,000	94,000	63,000	88,000	-356,000	136,000	92,000	128,000	-467,000	179,000	121,000	168,000
Florida	-1,060,000	329,000	328,000	403,000	-1,530,000	475,000	473,000	581,000	-1,999,000	621,000	619,000	759,000
Georgia	-574,000	179,000	144,000	251,000	-825,000	257,000	208,000	360,000	-1,077,000	335,000	271,000	470,000
Kansas	-169,000	53,000	58,000	58,000	-237,000	75,000	81,000	82,000	-306,000	96,000	105,000	105,000
Mississippi	-138,000	54,000	30,000	54,000	-206,000	81,000	44,000	81,000	-275,000	108,000	59,000	107,000
Missouri	-337,000	116,000	98,000	124,000	-478,000	164,000	138,000	175,000	-618,000	212,000	179,000	227,000
Nebraska	-118,000	36,000	43,000	39,000	-164,000	50,000	59,000	54,000	-210,000	65,000	76,000	69,000
North Carolina	-557,000	195,000	170,000	193,000	-798,000	279,000	244,000	276,000	-1,039,000	363,000	317,000	359,000
Oklahoma	-213,000	70,000	51,000	93,000	-305,000	100,000	72,000	133,000	-396,000	130,000	94,000	172,000
South Carolina	-260,000	97,000	69,000	94,000	-375,000	139,000	100,000	136,000	-490,000	182,000	130,000	178,000
South Dakota	-52,000	16,000	19,000	17,000	-72,000	22,000	26,000	24,000	-93,000	28,000	34,000	31,000
Tennessee	-356,000	149,000	87,000	120,000	-513,000	215,000	126,000	172,000	-669,000	280,000	164,000	225,000
Texas	-1,623,000	475,000	336,000	813,000	-2,321,000	679,000	480,000	1,162,000	-3,019,000	883,000	625,000	1,511,000
Wisconsin	-348,000	164,000	98,000	87,000	-484,000	228,000	136,000	120,000	-620,000	291,000	174,000	154,000
Wyoming	-33,000	9,000	11,000	14,000	-47,000	12,000	15,000	20,000	-60,000	16,000	19,000	26,000

Sources: Urban Institute analysis based on 2017 and 2018 American Community Survey data and 2019 and 2020 monthly Current Population Survey data.

Notes: ESI = employer-sponsored insurance. Medicaid coverage is inclusive of CHIP coverage for children. Coverage changes modeled for US population under age 65.

In California, which expanded Medicaid under the ACA, we estimate that more than 3 million people will lose ESI under a 20 percent unemployment rate. More than half of people losing ESI would gain Medicaid coverage (1.7 million), about 724,000 would obtain marketplace or other private coverage, and 649,000 would become uninsured. In Texas, which has not expanded Medicaid, we estimate that nearly 2.3 million people would lose ESI coverage if the state's unemployment rate reaches 20 percent, of which about half (1.2 million) would become uninsured.

As a share of the number of people expected to lose ESI in the state, former workers and their dependents in Massachusetts (11 percent), the District of Columbia (12 percent), Hawaii (15 percent), and Vermont (15 percent) are least likely to become uninsured, whereas such individuals are most likely to become uninsured in Texas (50 percent), Georgia (44 percent), Oklahoma (44 percent), and Wyoming (42 percent). Massachusetts, the District of Columbia, and Vermont all have programs that provide subsidized coverage beyond the levels provided under the ACA.

Discussion

As more workers lose their jobs and incomes in the wake of the COVID-19 pandemic, the number of people qualifying for Medicaid and subsidized marketplace coverage will climb. However, the increase in Medicaid coverage will be uneven across the country. As our results show, more workers and their dependents losing ESI will be eligible for Medicaid in states that expanded Medicaid under the ACA than in the 15 states that have not. We estimate that more than half of workers losing ESI coverage in expansion states will gain Medicaid coverage. In nonexpansion states, workers losing ESI are more likely to become uninsured than to gain Medicaid coverage (or marketplace coverage).

Though our estimation approach is designed to capture differences in coverage patterns across states after ACA implementation, some uncertainty surrounds what share of workers

losing ESI would gain other coverage or become uninsured. Former workers with little past exposure to Medicaid or the marketplaces may not know whether they are eligible for benefits or subsidies, and state Medicaid administrative systems may not be able to handle the large, sudden influx of new applicants. For these reasons, our results could underestimate the share of workers losing ESI who become uninsured. Alternatively, former workers accustomed to having insurance coverage for themselves and their dependents and who may have heightened concerns regarding their potential need for medical care may be highly motivated to seek out other forms of insurance and determine whether they are eligible. In this case, our estimates could overstate the share of those losing ESI who become uninsured.

Enabling temporary (at a minimum) and speedy Medicaid expansions in nonexpansion states and expanding the income range for eligibility for premium subsidies in the ACA marketplaces could help mitigate the rise in uninsurance.⁹ Providing subsidies for COBRA coverage could help make previously held ESI coverage options affordable for those who are unemployed but ineligible for Medicaid or marketplace subsidies. Finally, enhancing Medicaid matching rates beyond those mandated under the Families First Coronavirus Response Act and the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, would help secure states' finances as they prepare to provide Medicaid coverage to what will likely be record-setting numbers of new enrollees, especially in Medicaid expansion states. Additional funding for and staffing of enrollment assisters for both Medicaid and marketplace coverage will be necessary to keep up with the increasing need for these programs.

Testing for the virus and isolating those who have been exposed and/or infected are critical to limiting the spread of the virus and having adequate medical providers and supplies available for people who contract COVID-19. The recently enacted Families First Coronavirus Response Act requires state Medicaid programs to cover COVID-19 testing without cost sharing and allows

states to extend Medicaid coverage to uninsured people for COVID-19 testing.¹⁸ Still, current legislation does not address comprehensive coverage that would include both general medical care and COVID-19 treatment for the uninsured.¹⁹ Lack of coverage for medical services for other illnesses unrelated to COVID-19 may dissuade uninsured people with COVID-19 symptoms from visiting their providers for proper testing.

Some people who lose their jobs and access to employer-based insurance may be newly eligible for Medicaid or marketplace-based subsidized coverage but not realize it, which could contribute to increasing uninsurance. Several strategies could help prevent this, including increasing state resources directed to outreach and enrollment assistance for Medicaid, CHIP, and the marketplaces; increasing awareness that people losing their ESI coverage may be eligible for subsidized coverage through one of these programs; creating a national special open enrollment period, regardless of whether a person had prior insurance coverage (currently in effect in 11 states), and providing sufficient staffing to enroll the increased number of people applying midyear; and expediting Medicaid expansion in the current 15 nonexpansion states.

Finally, the Supreme Court will soon consider *California v. Texas*, which could completely overturn the ACA. Depending on the outcome, expanded eligibility for Medicaid, premium subsidies for nongroup insurance coverage, and marketplace plans could be eliminated, along with current regulations requiring enrollment of all applicants regardless of health status and coverage of essential health benefits. If the ACA is reversed, unemployment would likely lead to much more uninsurance than currently projected, as well as underinsurance, because the benefits covered through nongroup insurance would decrease while cost-sharing requirements would increase. Reversing the ACA, and thereby strengthening the relationship between joblessness and uninsurance, would counteract efforts to contain the virus, improve public health, and stabilize the economy.

Appendix. Modeling Approach and Sources of Uncertainty

Our estimates contain three main sources of uncertainty. First, it is unknown how high unemployment rates will climb over the next several months or at what level and over what time frame they will stabilize. Further, the changes in unemployment rates will likely vary across states. Rather than incorporate specific unemployment rate forecasts into our coverage estimates, we provide estimates for multiple scenarios over a range of possible unemployment rates (15, 20, and 25 percent). Our estimated coverage changes are best interpreted as those that would result if unemployment rates hold at a particular rate for several months to a year, allowing time for adjustment.

Second, there is uncertainty around our main parameter: the percentage-point change in employer-sponsored health insurance rates resulting from a 1 percentage-point change in the unemployment rate. For our main scenarios, we estimate this parameter separately for nonelderly adults and children (as in prior work) and use the same national values for all states. It is not clear that this parameter should vary systematically across states, nor is it clear that the parameter should be different now, after the ACA, than in earlier years. Nonetheless, we use updated estimates of the parameter using ACS data from 2008 to 2018, which includes years of recession and recovery and five years of implementation of the ACA's main coverage provisions for our main scenarios. The ACS did not measure health insurance coverage before 2008.

As we show in Appendix Table 2, different time periods and estimation methods yield somewhat different values for this parameter. We present three sets of estimates: The first are our individual-level regression estimates using ACS data from 2008 to 2018. The second are estimates from state-year-level regression models reported in previous work using data from 1990 to 2003, which spans years before the ACA and the Great Recession, but also spans two

periods of rising unemployment (1990–92 and 2000–03) and the implementation of the State Children's Health Insurance Program.¹⁶ The third set of estimates uses national-level, annual data on ESI coverage rates for the nonelderly population from 1998 to 2018 matched to annual unemployment rates from the Bureau of Labor Statistics. Though only at the aggregate level, these data cover a long period extending to recent years and spanning two recessions (including the Great Recession), years of economic recovery, and five years after ACA implementation.²⁰ With these data, we estimate time series regression models using the ESI rate as the dependent variable and the contemporaneous unemployment rate, one-year-lagged unemployment rate, and a linear time trend as explanatory variables. The linear time trend picks up the long-standing secular trend of falling ESI rates (likely attributable to health care costs and insurance premium growth exceeding income growth over decades), and the lag allows rising unemployment rates to affect ESI rates with a delay (all of our parameter estimates sum the contemporaneous and lagged effect). We estimate the time series models using three alternative periods (the full sample covering 1998 to 2018, 2008–18 to coincide with our ACS data, and 2007–18 to include the year before unemployment began to rise during the Great Recession, which officially began December 2007 and ended June 2009). Finally, as a simple check, we directly compute the change in the ESI rate divided by the change in the unemployment rate from trough (2007) to peak (2010) unemployment during the Great Recession and its immediate aftermath.

The parameter estimates in Appendix Table 2 all show the expected negative effect and range from -0.99 to -0.52. We make six observations. First, the ACS-based estimates we use for our base scenarios are the most conservative in that they imply the smallest overall coverage changes of all the estimates. Second, in the first two sets of estimates (ACS-based estimates and estimates from prior work), there is not much

difference between the estimated parameters of the ESI effect for nonelderly adults and children. Third, the time series estimate using data from 1998 to 2018 (-0.99) is nearly identical to estimates from previously mentioned work.¹⁶ Fourth, estimates based on more recent data tend to be smaller in magnitude. Fifth, the individual-level regressions using the ACS are similar to (though somewhat smaller than) the time series estimate we obtain with aggregate National Health Interview Survey/Bureau of Labor Statistics data over the same period (-0.61 for adults and -0.52 for children, compared with -0.74 for all nonelderly people combined).²¹ And sixth, the effect we directly calculate from the 2007–10 period, which includes the Great Recession (-0.88), lies between the ACS-based estimates and the full-sample time series estimates.

Accordingly, we believe the full-sample time series parameter estimate of -0.99, applied to both nonelderly adults and children, provides a reasonable, high-end estimate of the potential coverage changes to complement our ACS-based estimates. We use this larger parameter value in our higher responsiveness estimates in Table 2 and Appendix Table 2. Our national estimates of ESI coverage changes in Table 2 is 70 percent larger in magnitude than the main scenario estimates reported in Table 1. Whereas the ACS models underlying our base scenarios are fully based on data since 2008 and allow us to control for individual-level factors related to ESI rates that may shift over time and thereby produce arguably less-biased estimates of unemployment rate effects, the time series model draws on a longer historical record of how ESI rates vary over economic cycles at the aggregate level. Both provide a plausible basis for making estimates of how coverage could change in the current recession.

Thus, even drawing on historical data, there is uncertainty in this key parameter. If people becoming unemployed because of the pandemic are less (or more) likely to have had ESI before the crisis, our estimates of lost ESI could be overstated (or understated). Potential

policy responses, such as subsidizing COBRA coverage, could also affect coverage changes, including how many people lose ESI, in ways not accounted for in our modeling.

For people predicted to lose ESI, we estimate what other types of coverage they obtain or whether they become uninsured. Because the ACA substantially expanded Medicaid eligibility and altered the private health insurance market by introducing means-tested subsidies to purchase marketplace coverage (among other changes), pre-ACA evidence measuring how Medicaid and private nongroup enrollment and uninsurance rates respond to changes unemployment

need to be updated, particularly for adults. But there is insufficient post-ACA variation in state unemployment rates (i.e., since 2014) to obtain good, updated parameters for these coverage types using econometric models that rely on within-state variation in unemployment rates, as done in earlier work.

Instead, we use the distribution of coverage within each state, separately for adults and children, to estimate the coverage distribution of those without ESI. Including those with ESI, the coverage distribution of unemployed, out-of-the-labor-force, and employed populations are quite different. But among those without ESI, the coverage

distribution across these three groups is much more similar, indicating it is reasonable to apply these groups' pooled coverage distributions to people estimated to have lost ESI. This approach generates estimates that capture post-ACA implementation differences in coverage patterns across states and by age group, but it does not directly model eligibility for Medicaid/CHIP or marketplace subsidies for any unemployed worker or family member. Additionally, people newly losing their jobs may obtain other coverage or become uninsured in ways that differ from precrisis patterns among people previously without ESI. Thus, uncertainty remains among these estimates.

Appendix Table 1. Estimated Changes in ESI Coverage, Medicaid Enrollment, Marketplace Coverage, and Uninsurance with 15, 20, and 25 Percent Unemployment Rates, High Scenarios, by State

	15%				20%				25%			
	ESI	Medicaid	Marketplace or other private	Uninsured	ESI	Medicaid	Marketplace or other private	Uninsured	ESI	Medicaid	Marketplace or other private	Uninsured
US Total	-30,076,000	14,347,000	7,264,000	8,466,000	-43,123,000	20,579,000	10,405,000	12,139,000	-56,170,000	26,812,000	13,547,000	15,812,000
Expansion states	-19,718,000	10,717,000	4,585,000	4,417,000	-28,293,000	15,383,000	6,571,000	6,339,000	-36,868,000	20,049,000	8,558,000	8,260,000
Alaska	-63,000	25,000	17,000	21,000	-94,000	38,000	25,000	31,000	-125,000	50,000	34,000	41,000
Arizona	-632,000	304,000	127,000	200,000	-911,000	438,000	184,000	289,000	-1,190,000	573,000	240,000	377,000
Arkansas	-268,000	142,000	56,000	70,000	-384,000	203,000	81,000	100,000	-501,000	265,000	105,000	131,000
California	-3,585,000	2,015,000	833,000	738,000	-5,207,000	2,926,000	1,210,000	1,071,000	-6,828,000	3,836,000	1,587,000	1,405,000
Colorado	-574,000	257,000	175,000	142,000	-806,000	361,000	246,000	199,000	-1,039,000	466,000	316,000	257,000
Connecticut	-312,000	172,000	77,000	64,000	-454,000	250,000	111,000	92,000	-596,000	329,000	146,000	121,000
Delaware	-84,000	44,000	21,000	19,000	-122,000	63,000	30,000	28,000	-159,000	83,000	40,000	37,000
District of Columbia	-59,000	35,000	17,000	7,000	-88,000	52,000	26,000	10,000	-117,000	69,000	34,000	14,000
Hawaii	-141,000	62,000	58,000	21,000	-197,000	87,000	82,000	29,000	-253,000	111,000	105,000	37,000
Idaho	-169,000	94,000	38,000	36,000	-238,000	133,000	53,000	51,000	-307,000	172,000	69,000	66,000
Illinois	-1,133,000	591,000	259,000	283,000	-1,648,000	860,000	376,000	412,000	-2,163,000	1,128,000	494,000	541,000
Indiana	-634,000	296,000	136,000	202,000	-901,000	421,000	193,000	287,000	-1,168,000	545,000	251,000	372,000
Iowa	-315,000	163,000	89,000	62,000	-440,000	228,000	125,000	87,000	-565,000	293,000	160,000	112,000
Kentucky	-397,000	249,000	74,000	74,000	-572,000	359,000	106,000	107,000	-746,000	468,000	138,000	140,000
Louisiana	-392,000	222,000	74,000	96,000	-578,000	327,000	109,000	141,000	-763,000	432,000	145,000	186,000
Maine	-122,000	65,000	28,000	28,000	-171,000	92,000	40,000	39,000	-221,000	119,000	52,000	51,000
Maryland	-570,000	278,000	159,000	132,000	-815,000	398,000	227,000	189,000	-1,060,000	518,000	296,000	246,000
Massachusetts	-655,000	422,000	162,000	71,000	-931,000	600,000	230,000	101,000	-1,206,000	777,000	298,000	131,000
Michigan	-881,000	517,000	187,000	177,000	-1,273,000	746,000	270,000	256,000	-1,665,000	976,000	354,000	335,000
Minnesota	-569,000	313,000	149,000	108,000	-796,000	437,000	208,000	151,000	-1,022,000	561,000	267,000	193,000
Montana	-104,000	46,000	31,000	27,000	-145,000	64,000	43,000	37,000	-185,000	82,000	56,000	48,000
Nevada	-270,000	118,000	57,000	95,000	-391,000	171,000	83,000	137,000	-512,000	223,000	108,000	180,000
New Hampshire	-131,000	59,000	38,000	34,000	-183,000	83,000	53,000	48,000	-236,000	106,000	68,000	62,000
New Jersey	-831,000	391,000	194,000	247,000	-1,191,000	560,000	277,000	353,000	-1,551,000	729,000	361,000	460,000
New Mexico	-174,000	106,000	27,000	41,000	-255,000	155,000	40,000	60,000	-336,000	204,000	53,000	79,000
New York	-1,789,000	1,100,000	367,000	322,000	-2,575,000	1,583,000	528,000	464,000	-3,361,000	2,066,000	690,000	606,000
North Dakota	-82,000	23,000	35,000	24,000	-113,000	32,000	48,000	33,000	-144,000	41,000	61,000	42,000
Ohio	-1,062,000	602,000	209,000	251,000	-1,522,000	863,000	299,000	360,000	-1,981,000	1,124,000	389,000	468,000
Oregon	-383,000	202,000	92,000	89,000	-547,000	288,000	131,000	127,000	-710,000	374,000	170,000	166,000
Pennsylvania	-1,147,000	603,000	280,000	264,000	-1,644,000	864,000	402,000	378,000	-2,142,000	1,125,000	523,000	493,000
Rhode Island	-91,000	54,000	23,000	14,000	-133,000	78,000	33,000	21,000	-174,000	103,000	44,000	27,000

Appendix Table 1. Estimated Changes in ESI Coverage, Medicaid Enrollment, Marketplace Coverage, and Uninsurance with 15, 20, and 25 Percent Unemployment Rates, High Scenarios, by State (cont.)

	15%				20%				25%			
	ESI	Medicaid	Marketplace or other private	Uninsured	ESI	Medicaid	Marketplace or other private	Uninsured	ESI	Medicaid	Marketplace or other private	Uninsured
Utah	-346,000	197,000	77,000	73,000	-481,000	273,000	106,000	101,000	-616,000	350,000	136,000	130,000
Vermont	-59,000	37,000	14,000	8,000	-83,000	52,000	19,000	12,000	-107,000	66,000	25,000	15,000
Virginia	-830,000	452,000	191,000	187,000	-1,172,000	638,000	270,000	264,000	-1,515,000	825,000	349,000	341,000
Washington	-724,000	371,000	193,000	159,000	-1,026,000	526,000	274,000	226,000	-1,329,000	681,000	355,000	292,000
West Virginia	-141,000	90,000	20,000	30,000	-208,000	134,000	30,000	44,000	-275,000	177,000	39,000	59,000
Nonexpansion states	-10,358,000	3,630,000	2,679,000	4,049,000	-14,830,000	5,196,000	3,834,000	5,800,000	-19,303,000	6,762,000	4,989,000	7,552,000
Alabama	-417,000	167,000	105,000	145,000	-606,000	243,000	153,000	210,000	-796,000	319,000	201,000	276,000
Florida	-1,798,000	586,000	547,000	665,000	-2,594,000	845,000	789,000	960,000	-3,390,000	1,105,000	1,031,000	1,254,000
Georgia	-977,000	321,000	241,000	415,000	-1,405,000	462,000	347,000	596,000	-1,834,000	603,000	453,000	778,000
Kansas	-288,000	95,000	97,000	96,000	-405,000	133,000	136,000	135,000	-522,000	172,000	175,000	174,000
Mississippi	-235,000	97,000	50,000	89,000	-352,000	145,000	74,000	133,000	-469,000	193,000	99,000	177,000
Missouri	-573,000	206,000	163,000	204,000	-813,000	291,000	231,000	290,000	-1,052,000	377,000	300,000	375,000
Nebraska	-202,000	65,000	72,000	65,000	-280,000	90,000	99,000	90,000	-358,000	115,000	127,000	115,000
North Carolina	-948,000	346,000	284,000	318,000	-1,357,000	496,000	407,000	455,000	-1,767,000	645,000	529,000	592,000
Oklahoma	-364,000	126,000	85,000	153,000	-520,000	180,000	121,000	219,000	-676,000	233,000	157,000	285,000
South Carolina	-442,000	172,000	115,000	155,000	-638,000	248,000	166,000	224,000	-834,000	324,000	217,000	293,000
South Dakota	-88,000	28,000	32,000	29,000	-123,000	39,000	44,000	40,000	-158,000	50,000	56,000	52,000
Tennessee	-606,000	263,000	146,000	198,000	-872,000	378,000	210,000	284,000	-1,137,000	493,000	274,000	371,000
Texas	-2,772,000	859,000	563,000	1,349,000	-3,963,000	1,228,000	805,000	1,930,000	-5,155,000	1,598,000	1,047,000	2,510,000
Wisconsin	-592,000	285,000	163,000	144,000	-822,000	396,000	226,000	200,000	-1,053,000	508,000	289,000	256,000
Wyoming	-56,000	15,000	18,000	23,000	-80,000	21,000	25,000	33,000	-103,000	28,000	32,000	43,000

Sources: Urban Institute analysis based on 2017 and 2018 American Community Survey data and 2019 and 2020 monthly Current Population Survey data.

Notes: ESI = employer-sponsored insurance. Medicaid coverage is inclusive of CHIP coverage for children. Coverage changes modeled for US population under age 65.

Appendix Table 2. Estimates of the Effect of the Unemployment Rate on ESI Coverage Rates

Data source/study	Data years	Method	Population	Parameter estimate	Estimated number losing ESI under 20% unemployment rate
American Community Survey (this study)	2008–18	Individual-year regression	Adults (nonelderly)	-0.61	-18,722,000
			Children	-0.52	-6,641,000
			All nonelderly		-25,363,000
Current Population Survey (Holahan and Garrett 2009)	1990–2003	State-year regression	Adults (nonelderly)	-0.92	-28,338,000
			Children	-0.95	-12,118,000
			All nonelderly		-40,457,000
National Health Interview Survey (this study)	1998–2018	National time series regression	All nonelderly	-0.99	-43,123,000
	2008–18	National time series regression	All nonelderly	-0.74	-32,234,000
	2007–18	National time series regression	All nonelderly	-0.80	-34,847,000
	2007–10	Change in ESI rate / change in unemployment rate	All nonelderly	-0.88	-38,332,000

Notes: ESI = employer-sponsored insurance. For more information on the Holahan and Garrett CPS study, see Holahan J, Garrett B. *Rising unemployment, Medicaid, and the uninsured*. Henry J. Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured. 2009. <https://www.kff.org/wp-content/uploads/2013/03/7850.pdf>. Accessed April 21, 2020.

ENDNOTES

- 1 U.S. Department of Labor. *News Release: Unemployment Insurance Weekly Claims*. Washington: U.S. Department of Labor; 2020. <https://www.dol.gov/ui/data.pdf>. Accessed April 22, 2020.
- 2 Schwartz ND. “Nowhere to hide” as unemployment permeates the economy. *New York Times*. April 16, 2020. <https://www.nytimes.com/2020/04/16/business/economy/unemployment-numbers-coronavirus.html>. Accessed April 22, 2020.
- 3 Faberman J. (2020). *Predicting the Unemployment Rate in a Time of Coronavirus*. Chicago Fed Insights blog, Federal Reserve Bank of Chicago. <https://www.chicagofed.org/publications/blogs/chicago-fed-insights/2020/unemployment-rate>. Accessed April 22, 2020.
- 4 Wolfers J. The unemployment rate is probably around 13 percent. *New York Times*. April 3, 2020. <https://www.nytimes.com/2020/04/03/upshot/coronavirus-jobless-rate-great-depression.html?action=click&module=Well&pgtype=Homepage§ion=The%20Upshot>. Accessed April 22, 2020.
- 5 Domm P. JPMorgan now sees economy contracting by 40% in second quarter, and unemployment reaching 20%. CNBC. April 9, 2020. <https://www.cnbc.com/2020/04/09/jpmorgan-now-sees-economy-contracting-by-40percent-and-unemployment-reaching-20percent.html>. Accessed April 22, 2020.
- 6 Bovino BA, Panday S. Economic research: An already historic U.S. downturn now looks even worse. S&P Global website. <https://www.spglobal.com/ratings/en/research/articles/200416-economic-research-an-already-historic-u-s-downturn-now-looks-even-worse-11440567>. Published April 16, 2020. Accessed April 22, 2020.
- 7 Matthews S. U.S. unemployment rate may soar to 30%, Fed’s Bullard says. *Bloomberg*. March 22, 2020. <https://www.bloomberg.com/news/articles/2020-03-22/fed-s-bullard-says-u-s-jobless-rate-may-soar-to-30-in-2q>. Accessed April 22, 2020.
- 8 Gangopadhyaya A, Garrett B. Unemployment, health insurance, and the COVID-19 recession. Urban Institute. 2020. <https://www.urban.org/research/publication/unemployment-health-insurance-and-covid-19-recession>. Accessed April 22, 2020.
- 9 Blumberg LJ, Mann C. Quickly expanding Medicaid as an urgent response to the coronavirus pandemic. Urban Institute. 2020. <https://www.urban.org/research/publication/quickly-expanding-medicaid-eligibility-urgent-response-coronavirus-pandemic>. Accessed April 22, 2020.
- 10 Holahan J, Haley J, Buettgens M, Elmendorf C, Wang R. Increasing federal Medicaid matching rates to provide fiscal relief to states during the COVID-19 pandemic. Urban Institute. 2020. https://www.urban.org/sites/default/files/publication/102098/increasing-federal-medicaid-matching-rates-to-provide-fiscal-relief-to-states-during-the-covid-19-pandem_0.pdf. Accessed April 30, 2020.
- 11 We use national rates of ESI among the non-elderly calculated by the Kaiser Family Foundation’s analysis of data from the National Health Interview Survey. For more information, see: <https://www.healthsystemtracker.org/brief/long-term-trends-in-employer-based-coverage>.
- 12 For detailed information on the health insurance edits applied by the Integrated Public Use Microdata Series, see https://usa.ipums.org/usa/acs_healthins.shtml.
- 13 Ruggles S, Flood S, Goeken R, et al. IPUMS USA: Version 10.0 [dataset]. Integrated Public Use Microdata Series USA website. <https://doi.org/10.18128/D010.V10.0>. Accessed April 22, 2020.
- 14 Additional edits to address potential misclassification of coverage in the ACS were not applied in this analysis (see Lynch V, Kenney GM, Haley J, Resnick D. *Improving the Validity of the Medicaid/CHIP Estimates on the American Community Survey: The Role of Logical Coverage Edits*. Washington: U.S. Census Bureau; 2011. <https://www.census.gov/content/dam/Census/library/working-papers/2011/demo/improving-the-validity-of-the-medicaid-chip-estimates-on-the-acs.pdf>. Accessed April 22, 2020). For adults, such edits would slightly reduce estimates of employer-sponsored and nongroup coverage and slightly increase estimates of Medicaid coverage. However, these edits’ effects are relatively small for adults and are therefore unlikely to meaningfully affect assessments of changes over time or variation across subgroups presented here.
- 15 The adult model controls for age group, sex, race/ethnicity, education, marital status, parental status, disability status (measured as an indicator for whether an individual is receiving Supplemental Security Income), and citizenship. The child model is similar but excludes controls for education, marital status, parental status, or disability status. Instead, specifications for children control for the highest level of educational attainment in the household, the number of adults in the household, and an indicator for whether anyone in the household was disabled (because only people ages 15 or older are asked about receipt of Supplemental Security Income).
- 16 Holahan J, Garrett B. Rising unemployment, Medicaid, and the uninsured. Henry J. Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured. 2009. <https://www.kff.org/wp-content/uploads/2013/03/7850.pdf>. Accessed April 21, 2020.
- 17 Individuals with incomes between 100 and 138 percent of FPL are eligible for premium subsidies for marketplace plans in nonexpansion states only. In Medicaid expansion states, nonelderly adults with incomes below 138 percent of FPL are eligible for Medicaid.
- 18 Brooks T, Schneider A. The Families First Coronavirus Response Act: Medicaid and CHIP provisions explained. Georgetown University Health Policy Institute Center for Children and Families. 2020. <https://ccf.georgetown.edu/wp-content/uploads/2020/03/Families-First-final-rev.pdf>. Accessed April 22, 2020.
- 19 The CARES Act allocates federal funding to pay for the uninsured’s claims for COVID-19 testing. The CARES Act also includes \$100 billion in hospital funding that the administration recently announced would be used for reimbursing hospitals for testing and treating uninsured COVID-19 patients. See Corlette S. (2020). *Expanded Coverage for COVID-19 Testing Is an Important Step, But Loopholes Expose All of Us to Greater Risk*. Say Ahhh! blog, Georgetown University Health Policy Institute Center for Children and Families. <https://ccf.georgetown.edu/2020/04/06/expanded-coverage-for-covid-19-testing-is-an-important-step-but-loopholes-expose-all-of-us-to-greater-risk>. Accessed April 22, 2020.
- 20 Annual ESI data from the National Health Interview Survey were obtained from Rae M, McDermott D, Levitt L, Claxton G. Long-term trends in employer-based coverage. Peterson-KFF Health System Tracker. 2020. <https://www.healthsystemtracker.org/brief/long-term-trends-in-employer-based-coverage>. Accessed April 22, 2020.
- 21 Estimating analogous national time series models with the ACS data from 2008 to 2018, we obtain parameters of -0.78 for adults and -0.69 for children, which are very similar to the National Health Interview Survey time series for all nonelderly people and somewhat higher than the individual-level regression model results we obtain using the ACS.

The views expressed are those of the authors and should not be attributed to the Robert Wood Johnson Foundation or the Urban Institute, its trustees, or its funders.

ABOUT THE AUTHORS & ACKNOWLEDGMENTS

Bowen Garrett is a Senior Fellow and Anuj Gangopadhyaya is a Research Associate in the Urban Institute's Health Policy Center. The authors are grateful for comments and suggestions from Jessica Banthin, Linda Blumberg, Jonathan Gruber, John Holahan, Genevieve Kenney, and Stephen Zuckerman, and editing by Rachel Kenney.

ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is dedicated to elevating the debate on social and economic policy. For nearly five decades, Urban scholars have conducted research and offered evidence-based solutions that improve lives and strengthen communities across a rapidly urbanizing world. Their objective research helps expand opportunities for all, reduce hardship among the most vulnerable, and strengthen the effectiveness of the public sector. For more information specific to the Urban Institute's Health Policy Center, its staff, and its recent research, visit <http://www.urban.org/policy-centers/health-policy-center>.

ABOUT THE ROBERT WOOD JOHNSON FOUNDATION

For more than 45 years the Robert Wood Johnson Foundation has worked to improve health and health care. We are working alongside others to build a national Culture of Health that provides everyone in America a fair and just opportunity for health and well-being. For more information, visit www.rwjf.org. Follow the Foundation on Twitter at www.rwjf.org/twitter or on Facebook at www.rwjf.org/facebook.