ISSUE BRIEF
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The American Health Care Act: Economic and Employment Consequences for States

Leighton Ku, Erika Steinmetz, Erin Brantley, Nikhil Holla, and Brian K. Bruen

ABSTRACT

ISSUE: The American Health Care Act (AHCA), passed by the U.S. House of Representatives, would repeal and replace the Affordable Care Act. The Congressional Budget Office indicates that the AHCA could increase the number of uninsured by 23 million by 2026.

GOAL: To determine the consequences of the AHCA on employment and economic activity in every state.

METHODS: We compute changes in federal spending and revenue from 2018 to 2026 for each state and use the PI+ model to project the effects on states' employment and economies.

FINDINGS AND CONCLUSIONS: The AHCA would raise employment and economic activity at first, but lower them in the long run. It initially raises the federal deficit when taxes are repealed, leading to 864,000 more jobs in 2018. In later years, reductions in support for health insurance cause negative economic effects. By 2026, 924,000 jobs would be lost, gross state products would be $93 billion lower, and business output would be $148 billion less. About three-quarters of jobs lost (725,000) would be in the health care sector. States which expanded Medicaid would experience faster and deeper economic losses.

Click here to see an interactive map of economic and employment impact by state

KEY TAKEAWAYS

- If the American Health Care Act becomes law, projections show the U.S. economy overall will see a loss of 924,000 jobs by 2026. Most of these job losses will be in health care
- The 10 states with the largest job losses by 2026 include: New York (86,000), Pennsylvania (85,000), Florida (83,000), Michigan (51,000), Illinois (46,000), New Jersey (42,000), Ohio (42,000), North Carolina (41,000), California (32,000), and Tennessee (28,000)
- States that expanded Medicaid eligibility under the Affordable Care Act will experience the most severe economic losses

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BACKGROUND

On May 24, 2017, the U.S. House of Representatives passed the American Health Care Act (AHCA, H.R. 1628) to partially repeal and replace the Affordable Care Act (ACA), also known as Obamacare. The U.S. Senate is currently developing its own version of the legislation.

A January 2017 analysis found that repealing certain elements of the ACA—the Medicaid expansion and premium tax credits—could lead to 2.6 million jobs lost and lower gross state products of $1.5 trillion over five years.[1,2] That brief focused only on specific repeal elements because other details were not available. This brief examines all aspects of the AHCA, including restructuring Medicaid and health tax credits and repealing ACA taxes (Exhibit 1).

The Congressional Budget Office (CBO) reported the AHCA would increase the number of uninsured Americans under age 65 by 14 million in fiscal year 2018, eventually reaching 23 million more by 2026.[3] A RAND analysis of an earlier version of the bill was similar: 14 million more uninsured in 2020 and 20 million in 2026.[4]

This report examines the potential economic effects of the AHCA from calendar years 2018 to 2026, including:

- **employment levels,** measured as changes in the number of jobs created or lost due to policy changes
- **state economic growth,** as measured by changes in gross state products in current dollars, adjusted for inflation; an aggregate measure of state economies, analogous to the gross domestic product at the national level
- **state business output,** as measured by changes in business receipts in current dollars at production, wholesale, and retail levels, encompassing multiple levels of business activity.

Our estimates are based on changes in federal funding gained or lost to states, consumers, and businesses. The AHCA significantly reduces federal funding for Medicaid. It lowers federal match funding for the 31 states and District of Columbia that expanded Medicaid,

Exhibit 1. Key Provisions of the American Health Care Act as Passed by the U.S. House of Representatives

- Eliminates individual penalties for not having health insurance and penalties for employers that do not offer adequate coverage to employees. Raises premiums for people who do not maintain continuous insurance coverage.
- Replaces the current income-related premium tax credits to subsidize nongroup health insurance with age-based tax credits. Allows premiums to be five times higher for the oldest individuals, compared to the current threefold maximum.
- Restricts state Medicaid eligibility expansions for adults, primarily by reducing federal matching rates from 90 percent beginning in 2020 to rates ranging between 50 percent and 75 percent.
- Creates temporary funding for safety-net health services in states that did not expand Medicaid.
- Restructures Medicaid funding based on per capita allotments rather than the current entitlement. States may adopt fixed block grants instead.
- Creates a Patient and State Stability Fund and Invisible Risk-Sharing Program.
- Terminates the Prevention and Public Health Fund.
- Repeals numerous taxes included in the ACA, including Medicare taxes on investment income and on high-income earnings, taxes on health insurance and medical devices, and a tax on high-cost insurance (i.e., the "Cadillac tax"); raises limits for health savings accounts and lowers the threshold for medical care deductions.
- Allows states to waive key insurance rules, like community rating of health insurance and essential health benefits. Creates a fund that states could use to lower costs for those adversely affected by the waiver.

encouraging them to discontinue their expansions. It gives states an option to either adopt per capita allotments for Medicaid or fixed block grants; either option lowers federal Medicaid expenditures. Eliminating the tax penalty for individuals without health insurance reduces incentives to purchase insurance, raising the number of uninsured people. Restructuring premium tax credits and widening age-related differences in premiums are expected to shrink nongroup insurance coverage and reduce federal spending for health insurance subsidies. The AHCA is designed so that tax cuts take effect sooner than reductions in health insurance subsidies. Thus, state employment and economies could grow at first but shrink in later years as the coverage reductions deepen.

HOW FEDERAL HEALTH FUNDING STIMULATES JOB CREATION AND STATE ECONOMIES

Federal health funds are used to purchase health care. Then, fiscal effects ripple out through the rest of the economy, creating employment and other economic growth. This phenomenon is called the *multiplier effect*. Health funds directly pay hospitals, doctors' offices, and other providers; this is the *direct effect* of federal funding. These facilities use revenue to pay their employees and buy goods and services, such as rent or equipment; this is the *indirect effect* of the initial spending. In addition, there are *induced effects* that occur as health care employees or other businesses (and eventually their workers) use their income to purchase consumer goods like housing, transportation, or food, producing sales for a diverse range of businesses. Similarly, when federal taxes are reduced, consumers or businesses retain income and can purchase goods and services, invest, or save. Due to interstate commerce, each type of effect can flow across state lines.

Both government spending increases and tax reductions can stimulate job creation and economic growth. The relative effects depend on how the funds are used. Government spending or transfers, like health insurance subsidies, typically have stronger multiplier effects in stimulating consumption and economic growth than do tax cuts. Tax cuts usually aid people with high incomes who shift much of their gains into savings, stimulating less economic activity.[5,6,7] A recent analysis found that 90 percent of the AHCA's tax cuts go to the top one-fifth of the population by income.[8]

This report estimates how the AHCA will change federal funds gained or lost for all 50 states and the District of Columbia from 2018 to 2026. We allocate federal funding changes, based on CBO estimates, for each state. We then analyze how federal funding changes ripple through state economies, using the PI+ economic model, developed by Regional Economic Models, Inc. (REMI).[9] (See Appendix B. Study Methods.)

FINDINGS

Overall Effects

As illustrated in Exhibit 2, most of the AHCA's tax repeals begin almost at once, while coverage-related spending reductions phase in. The net effect initially raises the federal deficit. In 2018, the number of jobs would rise by 864,000 and state economies would grow. Health sector employment begins to fall immediately in 2018, with a loss of 24,000 jobs, and continues dropping to 725,000 health jobs lost by 2026 (Exhibit 3). Most other employment sectors gain initially, but then drop off and experience losses.

By 2020, the reduction in federal funding for coverage would roughly equal the total level of tax cuts. By the following year, 2021, coverage reductions outpace tax cuts. As a result, there are 205,000 fewer jobs than without the AHCA and state economies begin to shrink.

By 2026, 924,000 fewer people would have jobs. Gross state products would drop by $93 billion and business output would be $148 billion lower. These downward trends would continue after 2026.

Looking at Coverage-Related and Tax Repeal Policies

To better understand how the AHCA affects state economies and employment, Exhibit 4 looks at the two major components of the AHCA separately. The coverage-related policies (Title I of the AHCA and sections related to premium tax credits and individual and employer mandates) generally lower federal spending, particularly due to cuts to Medicaid and premium tax credits. Some

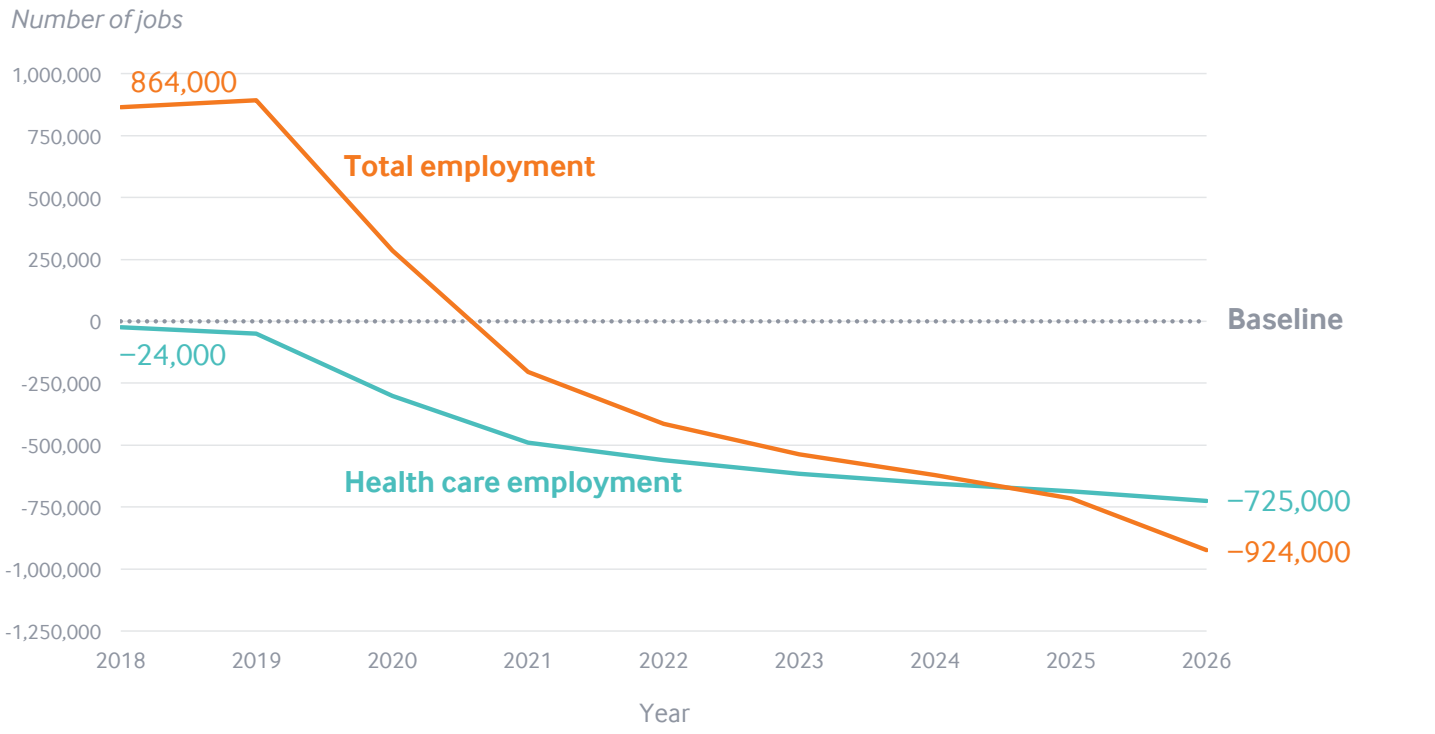
Exhibit 2. Total Estimated Changes in Employment, Gross State Products, and Business Output Due to the American Health Care Act, National Level, 2018 to 2026

All changes are compared to the baseline for that year

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025	2026
CHANGES IN FEDERAL FUNDING:									
Tax repeal (billions of current $)	$44.7	$45.2	$54.8	$62.6	$70.8	$85.2	$97.2	$103.6	$102.2
Coverage-related spending (billions of current $)	-$5.7	-$10.8	-$55.1	-$87.1	-$101.7	-$118.3	-$134.0	-$147.3	-$159.9
Net change in federal deficit (billions of current $)	**$38.9**	**$34.4**	**-$0.3**	**-$24.5**	**-$30.9**	**-$33.1**	**-$36.8**	**-$43.7**	**-$57.7**
CHANGES IN ECONOMIC OUTPUTS:									
Total employment (thousands of jobs)	**864**	**892**	**285**	**-205**	**-413**	**-538**	**-620**	**-715**	**-924**
Private employment	841	859	260	-214	-409	-525	-601	-691	-891
Health care	-24	-50	-301	-489	-559	-615	-655	-687	-725
Construction and real estate	197	245	190	116	66	38	22	4	-36
Retail trade	124	117	55	12	-4	-12	-17	-26	-51
Finance and insurance	91	88	56	34	29	28	28	25	14
All other private	453	460	261	113	58	35	22	-6	-94
Public employment	22	33	24	8	-4	-13	-19	-24	-32
Gross state product (billions of current $)	**$90.9**	**$97.8**	**$42.1**	**-$6.3**	**-$28.1**	**-$41.6**	**-$51.1**	**-$63.7**	**-$93.4**
Business output (billions of current $)	**$159.1**	**$172.3**	**$77.5**	**-$4.9**	**-$41.4**	**-$63.3**	**-$77.9**	**-$98.2**	**-$148.3**

Source: George Washington University analysis.

Exhibit 3. Changes in Total and Health Care Employment Due to the American Health Care Act, 2018 to 2026



Source: George Washington University analysis.

Exhibit 4. Changes in Employment, Gross State Products, and Business Output Associated with Coverage-Related and Tax Repeal Changes in the American Health Care Act, 2018 to 2026

All changes are compared to the baseline for that year

Calendar year	2018	2019	2020	2021	2022	2023	2024	2025	2026
COVERAGE-RELATED CHANGES:									
Federal funds (billions of current $)	**-$5.7**	**-$10.8**	**-$55.1**	**-$87.1**	**-$101.7**	**-$118.3**	**-$134.0**	**-$147.3**	**-$159.9**
Total employment lost/gained (thousands of jobs)	**24**	**-4**	**-784**	**-1,341**	**-1,555**	**-1,750**	**-1,877**	**-1,922**	**-1,940**
Private employment	23	-4	-764	-1298	-1497	-1680	-1798	-1838	-1853
Health care	-100	-125	-391	-586	-659	-726	-774	-805	-829
Construction and real estate	39	47	-43	-123	-162	-188	-200	-196	-184
Retail trade	13	8	-74	-125	-142	-161	-174	-178	-181
Finance and insurance	-1	-4	-47	-73	-79	-86	-90	-91	-91
All other private	72	71	-209	-392	-454	-518	-559	-568	-568
Public employment	0	-1	-20	-42	-58	-70	-79	-84	-87
Gross state product (billions of current $)	**$5.2**	**$3.1**	**-$74.9**	**-$135.5**	**-$163.8**	**-$191.4**	**-$212.8**	**-$225.3**	**-$234.8**
Business output (billions of current $)	**$9.9**	**$7.3**	**-$125.8**	**-$229.1**	**-$276.5**	**-$322.1**	**-$356.6**	**-$376.8**	**-$391.6**
TAX REPEAL CHANGES:									
Federal funds (billions of $)	**$44.7**	**$45.2**	**$54.8**	**$62.6**	**$70.8**	**$85.2**	**$97.2**	**$103.6**	**$102.2**
Total employment (thousands of jobs)	**837**	**894**	**1,067**	**1,136**	**1,144**	**1,215**	**1,260**	**1,210**	**1,018**
Private employment	815	860	1,023	1,086	1,090	1,158	1,200	1,150	963
Health care	76	75	90	97	100	111	119	118	104
Construction and real estate	158	197	232	239	229	227	223	200	149
Retail trade	110	108	129	137	139	150	157	153	130
Finance and insurance	91	91	102	107	109	114	118	116	105
All other private	380	388	470	505	514	555	582	563	474
Public employment	22	34	44	51	54	57	60	60	55
Gross state product (billions of current $)	**$85.5**	**$94.5**	**$117.0**	**$129.3**	**$135.9**	**$150.1**	**$162.0**	**$162.0**	**$141.7**
Business output (billions of current $)	**$148.7**	**$164.4**	**$203.1**	**$224.3**	**$235.5**	**$259.4**	**$279.4**	**$279.2**	**$243.7**

Note: The sums of these components differ from totals shown in Exhibits 2 and 3 because of interaction effects.
Source: George Washington University analysis.

policies partially offset those large cuts, such as the Patient and State Stability Fund. The tax repeal policies (Title II, except for sections about premium tax credits and individual and employer mandates), such as repeal of Medicare-related taxes, Cadillac tax, or medical device tax, predominantly help people with high incomes or selected businesses.

Implemented alone, the coverage-related policies would lead to steep job losses over time, reaching 1.9 million by 2026, driven by deep Medicaid cuts (Exhibit 4). Job losses begin to mount in 2019.

Alternatively, the tax repeal policies on their own would be associated with higher employment and state economic growth. Gains begin with 837,000 more jobs in 2018; this rises through 2024, and leads to 1 million additional jobs in 2026. Combined, tax repeal and coverage-related changes lead to initial economic and employment growth but eventual losses.

The detailed employment results show how these two components of the AHCA affect different economic sectors. Coverage and spending-related policies are directly related to funding for health services (e.g., Medicaid, premium tax credits, high-risk pools). The reductions directly affect the health sector—hospitals, doctors' offices, or pharmacies—but then flow out to other sectors. Thus, about two-fifths of jobs lost due to coverage policies are in the health sector while three-fifths are in other sectors. Tax changes affect consumption broadly, spreading effects over most job sectors.

Within the health sector, job losses due to coverage-related cuts are much greater than gains due to tax repeal; losses in health care jobs begin immediately. In other sectors, employment grows at the beginning but later declines.

State-Level Effects

Consequences differ from state to state. We summarize data for nine states: Alaska, Florida, Kentucky, Maine, Michigan, New York, Ohio, Pennsylvania, and West Virginia. Exhibit 5 shows the effects of the AHCA in 2018 and in 2026. Complete results for all 50 states and the District of Columbia are available in Appendices A1–A4. In this analysis, states that expanded Medicaid tend to experience deeper and faster economic declines, although substantial losses occur even among nonexpansion states:

Exhibit 5. Effects of the American Health Care Act on Employment and Economic Growth in Selected States, 2018 and 2026

All changes are compared to the baseline for that year

		Employment (thousands of jobs)		Health employment (thousands of jobs)		Gross state product (millions of current $)		Business output (milions of current $)	
State	**Status***	**2018**	**2026**	**2018**	**2026**	**2018**	**2026**	**2018**	**2026**
Alaska	M	2.2	-2.6	0.1	-1.9	$265	-$324	$505	-$564
Florida		57.8	-83.2	-0.1	-54.1	$5,186	-$8,689	$8,273	-$14,193
Kentucky	M	8.5	-16.5	-0.6	-10.5	$782	-$1,586	$1,490	-$2,582
Maine		3.0	-10.0	-0.3	-5.8	$268	-$995	$486	-$1,627
Michigan	M, T	-15.7	-50.8	-17.4	-30.6	-$804	-$5,070	-$895	-$8,032
New York	M	60.8	-86.1	5.0	-61.8	$7,635	-$10,465	$13,428	-$16,216
Ohio	M	23.8	-41.7	-1.8	-28.1	$2,471	-$4,126	$4,518	-$6,488
Pennsylvania	M	34.9	-84.9	0.6	-52.5	$3,562	-$8,920	$6,270	-$14,217
West Virginia	M	3.3	-10.2	-0.2	-6.1	$345	-$1,044	$626	-$1,729

* M = Medicaid expansion state, T = state terminates expansion if match rate is reduced.
Source: George Washington University analysis.

- Eight of the nine states (Alaska, Florida, Kentucky, Maine, New York, Ohio, Pennsylvania, and West Virginia) begin with positive economic and employment effects in 2018, but are worse off by 2026, with outcomes typically turning negative well before 2026.
- Michigan is worse off in 2018 and continues to decline through 2026. We assume Michigan will terminate its Medicaid expansion immediately because of a state law that automatically cancels the expansion if the federal matching rate changes.[10] Six other states (Arkansas, Illinois, Indiana, New Hampshire, New Mexico, and Washington) have similar legislation and experience losses sooner than other states.
- Most job losses are in health care. In six states (Florida, Kentucky, Maine, Michigan, Ohio, and West Virginia) health care job losses begin in 2018, but all nine states have significant reductions in health employment by 2026. Looking at the U.S. overall, in most states, losses in health care jobs begin by 2020 (Appendix A2).
- States that expanded Medicaid have deeper and faster losses. Having earned more federal funds, they lose more when Medicaid matching rates fall. While cutting funds to states that expanded health insurance for low-income Medicaid populations, the bill temporarily increases funding to states that did not expand Medicaid. Nonetheless, states that did not expand Medicaid, like Florida and Maine, experience job and economic losses after a few years. In fact, Florida has the third-highest level of job loss in the nation by 2026.
- Other factors that can affect the size of economic and employment effects include:
  - the extent to which states gained coverage in the ACA health insurance marketplaces; states with higher marketplace enrollment tend to lose more
  - the cost of health insurance in the state; the new tax credits are the same regardless of location, making insurance less affordable in high-cost states and reducing participation
  - age structure; older people will find insurance less affordable
  - state population size; the population size of states magnifies their losses or gains
  - other factors that affect tax distribution, like number of residents with investment income or high incomes or whether medical device or pharmaceutical manufacturers are located in the state.

Overall, the 10 states with the largest job losses by 2026 are: New York (86,000), Pennsylvania (85,000), Florida (83,000), Michigan (51,000), Illinois (46,000), New Jersey (42,000), Ohio (42,000), North Carolina (41,000), California (32,000), and Tennessee (28,000). Forty-seven states have job losses by 2026; four states (Colorado, Hawaii, Utah, and Washington) have small job gains in 2026, but would likely incur losses in another year or two (Appendix A1).

CONCLUSIONS

The House bill to repeal and replace the Affordable Care Act would greatly reduce the number of people with insurance coverage, effectively reversing gains made since the law's enactment. The AHCA would initially create more employment and economic growth, driven by a federal deficit increase in 2018 and 2019, but the effects turn negative as coverage reductions deepen, with job losses and lower economic growth beginning in 2021. By 2026, 924,000 jobs would be lost, gross state products would be $93 billion lower, and business output could fall by $148 billion.

Health care has been one of the main areas of job growth in recent years.[11] Under the AHCA, the sector would lose jobs immediately, with a loss of 24,000 jobs in 2018. By 2026, 725,000 fewer health sector jobs would exist. This would be a major reversal from current trends. While our analysis shows other employment sectors grow initially, most other sectors would experience losses within a decade.

It may be useful to look at these findings in a macroeconomic context. The U.S. unemployment rate for May 2017 was 4.3 percent, the lowest in 16 years and about half as high as during the recent recession. When unemployment is low, additional job growth creates a tighter labor market, so that businesses often have greater difficulties filling job vacancies. In turn, this can accelerate inflation.

It is likely that the business cycle will eventually slow down again. In that event, the AHCA could accentuate job loss and economic contraction. Combined with major increases in the number of uninsured, this could contribute to a period of economic and medical hardship in the U.S. The AHCA could exaggerate both the highs and lows of the business cycle. From a national policy perspective, it may be more useful to develop countercyclical policies that strengthen employment and the economy during times of contraction.

This analysis finds that the net effect of the AHCA would be a loss of almost 1 million jobs by 2026, combined with 23 million more Americans without health insurance, according to the CBO. In late May, the Trump administration released its budget proposal, which appears to propose an additional $610 billion in Medicaid cuts, beyond those included in the AHCA.[12] Such deep cuts would further deepen the employment and economic losses discussed in this study.

This analysis has many limitations. We do not know whether or when the AHCA or an alternative will be enacted into law. Alternative policies could yield different effects. We focus only on the consequences of the AHCA. Other legislation, such as infrastructure, trade, national security, or tax policies, may be considered by Congress and might also affect economic growth and employment.

These projections, like others, are fraught with uncertainty. Economic, technical, or policy changes could alter results. In particular, the AHCA grants substantial discretion to states, such as in Medicaid expansions, waivers of federal regulations, and use of new funds like the Patient and State Stability Fund. While this analysis is aligned with CBO's national estimates, we developed state-level projections, introducing further uncertainty. Our approach conservatively spreads changes across states and may underestimate the highs and lows for individual states.

NOTES

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11 Bureau of Labor Statistics, *Occupational Outlook Handbook* (BLS, Dec. 2015).

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ABOUT THE AUTHORS

All the authors are members of the Center for Health Policy Research in the Department of Health Policy and Management within the Milken Institute School of Public Health at the George Washington University in Washington, D.C. In January 2017, they authored reports about the effects of repealing key components of the Affordable Care Act.

Leighton Ku, Ph.D., M.P.H., is a professor of health policy and management and director, Center for Health Policy Research. He has conducted health policy and health services research for over 25 years, focusing on topics like health reform, Medicaid, and the health care safety net. He has authored articles in *Health Affairs, New England Journal of Medicine, American Journal of Public Health,* the Cato Institute's *Economic Development Bulletin,* and other journals. He is on the board of the District of Columbia's Health Benefits Exchange Authority.

Erika Steinmetz, M.B.A., is a senior research scientist with extensive research experience encompassing Medicare, Medicaid, and private insurance. Ms. Steinmetz's expertise is in analyzing complex data sources to advance our understanding of public health problems. She previously worked at the Association of American Medical Colleges and the Census Bureau.

Erin Brantley, M.P.H., Ph.D. (cand.), is a senior research associate. Her research interests focus on using rigorous quantitative and qualitative methods to improve health care and health policy. She has examined issues including the health care safety net and the use of preventive services by low-income populations.

Nikhil Holla is a medical student at the George Washington University School of Medicine and Health Sciences. He previously worked at the Urban Institute.

Brian K. Bruen, M.S., Ph.D. (cand.), is a lead research scientist with more than 20 years of experience in health policy analysis, focused primarily on Medicaid, Medicare, and pharmaceutical benefit programs. Mr. Bruen is also a lecturer, teaching applied statistics and pharmaceutical policy at the graduate level. He previously worked at Avalere Health, the National Association of Chain Drug Stores, and the Urban Institute.

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For more information about this brief, please contact:

Leighton Ku, Ph.D., M.P.H.
Director, Center for Health Policy Research
Department of Health Policy and Management
Milken Institute School of Public Health
George Washington University

lku@gwu.edu

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Appendix A1. State-Level Changes in Employment Due to the American Health Care Act, 2018 to 2026 (thousands of jobs)

	Status*	2018	2019	2020	2021	2022	2023	2024	2025	2026
Alabama		12.9	15.8	6.4	-0.2	-2.8	-4.8	-6.1	-7.4	-10.2
Alaska	M	2.2	2.1	0.3	-0.8	-1.3	-1.6	-1.8	-2.1	-2.6
Arizona	M	23.8	25.9	14.7	7.0	3.6	1.6	-0.5	-2.8	-7.6
Arkansas	M, T	-0.3	1.1	-4.3	-8.6	-10.5	-12.1	-12.5	-13.0	-14.3
California	M	136.3	97.9	63.3	22.7	6.1	2.5	-2.3	-10.7	-32.1
Colorado	M	22.5	23.2	19.6	14.5	11.8	10.4	9.2	7.3	2.8
Connecticut	M	12.2	9.6	-1.2	-9.4	-12.9	-14.5	-15.8	-17.4	-20.3
Delaware	M	2.7	2.3	-0.6	-2.8	-3.7	-4.2	-4.7	-5.1	-5.9
Dist. Columbia	M	2.5	1.9	-0.2	-1.8	-2.4	-2.8	-3.2	-3.6	-4.3
Florida		57.8	69.9	3.7	-40.1	-51.7	-60.8	-66.2	-71.1	-83.2
Georgia		32.2	41.2	21.4	6.0	0.3	-4.1	-7.0	-10.0	-16.2
Hawaii	M	7.1	6.5	6.0	5.2	4.5	3.5	3.2	2.7	1.8
Idaho		4.8	5.5	3.4	1.6	1.0	0.4	0.1	-0.4	-1.4
Illinois	M, T	-1.7	3.1	-14.3	-29.4	-35.4	-39.2	-39.0	-39.9	-45.5
Indiana	M, T	5.3	7.4	-3.8	-12.9	-17.0	-19.9	-21.2	-22.6	-26.0
Iowa	M	8.0	7.7	2.9	-1.5	-3.6	-5.0	-5.9	-7.0	-9.2
Kansas		8.4	10.1	5.0	1.1	-0.5	-1.7	-2.5	-3.3	-5.3
Kentucky	M	8.5	6.6	1.1	-5.2	-8.6	-10.8	-12.3	-13.8	-16.5
Louisiana	M	14.8	17.6	2.5	-8.3	-12.8	-15.8	-16.0	-17.6	-21.0
Maine		3.0	3.4	-1.6	-5.2	-6.6	-7.5	-8.2	-8.9	-10.0
Maryland	M	19.2	16.7	4.8	-5.5	-10.3	-12.5	-14.4	-16.7	-21.2
Massachusetts	M	21.2	24.6	10.5	-1.4	-7.4	-10.0	-12.5	-15.9	-22.2
Michigan	M, T	-15.7	-13.4	-24.9	-36.2	-41.8	-45.8	-46.1	-47.0	-50.8
Minnesota	M	16.7	15.1	4.9	-5.0	-9.9	-13.0	-15.3	-17.7	-22.1
Mississippi		7.6	9.3	3.8	0.0	-1.7	-3.0	-3.7	-4.5	-6.2
Missouri		13.7	16.3	1.9	-8.1	-12.0	-14.9	-16.6	-18.5	-22.6
Montana	M	3.4	3.4	1.6	-0.1	-0.9	-1.7	-2.1	-2.5	-3.3
Nebraska		5.7	6.5	2.8	-0.1	-1.4	-2.3	-2.9	-3.6	-5.0
Nevada	M	10.5	8.9	6.6	4.2	3.1	2.7	2.2	1.5	-0.5
New Hampshire	M, T	2.5	3.0	0.0	-2.4	-3.6	-4.2	-4.4	-4.9	-6.0
New Jersey	M	31.3	25.3	1.3	-17.5	-25.3	-28.6	-31.6	-35.2	-41.9
New Mexico	M, T	-3.7	-3.9	-6.3	-8.3	-9.4	-10.3	-10.3	-10.3	-11.0
New York	M	60.8	58.5	5.1	-29.6	-45.7	-53.4	-61.5	-70.6	-86.1
North Carolina		26.3	30.0	0.3	-19.4	-25.6	-30.0	-32.8	-35.3	-41.2
North Dakota	M	3.1	3.3	1.8	0.2	-0.7	-1.3	-1.7	-2.1	-2.9
Ohio	M	23.8	20.0	6.9	-9.8	-19.4	-24.9	-29.1	-33.7	-41.7
Oklahoma		11.4	14.4	7.5	2.3	0.0	-1.7	-2.7	-3.7	-6.0
Oregon	M	10.5	4.8	0.0	-5.7	-8.5	-10.0	-11.2	-12.4	-15.0
Pennsylvania	M	34.9	27.0	-11.4	-42.0	-55.2	-62.9	-69.0	-74.8	-84.9
Rhode Island	M	2.6	1.7	-1.1	-3.4	-4.5	-5.1	-5.6	-6.1	-7.0
South Carolina		13.0	15.2	5.4	-1.3	-3.6	-5.3	-6.5	-7.7	-10.4
South Dakota		2.7	2.9	1.3	-0.2	-0.8	-1.3	-1.6	-1.9	-2.6
Tennessee		18.1	21.8	3.8	-9.5	-15.1	-19.2	-21.8	-24.0	-28.4
Texas		118.3	151.1	94.9	51.1	31.6	17.1	8.6	0.0	-19.8
Utah		12.2	14.4	12.1	9.6	8.5	7.8	7.2	6.2	3.9
Vermont	M	1.9	2.0	0.1	-1.3	-2.0	-2.4	-2.8	-3.1	-3.7
Virginia		24.9	27.3	13.4	2.6	-1.6	-3.7	-5.4	-7.7	-12.9
Washington	M, T	7.0	9.5	12.5	12.2	11.3	11.0	11.7	11.1	7.8
West Virginia	M	3.3	2.5	-1.7	-5.1	-6.7	-7.7	-8.4	-9.1	-10.2
Wisconsin		11.1	12.8	0.4	-9.0	-12.9	-15.6	-17.2	-18.8	-22.5
Wyoming		2.1	2.4	1.9	1.3	1.0	0.7	0.6	0.4	-0.1

* M = Medicaid expansion state, T = state terminates expansion if match rate is reduced.

Source: George Washington University analysis.

Appendix A2. State-Level Changes in Health Employment Due to American Health Care Act, 2018 to 2026 (thousands of jobs)

	Status*	2018	2019	2020	2021	2022	2023	2024	2025	2026
Alabama		0.4	0.8	-2.9	-5.3	-6.0	-6.8	-7.3	-7.7	-8.1
Alaska	M	0.1	0.0	-0.9	-1.4	-1.5	-1.6	-1.7	-1.8	-1.9
Arizona	M	1.9	2.0	-2.9	-6.0	-7.2	-8.0	-8.9	-9.6	-10.4
Arkansas	M, T	-3.5	-3.0	-5.3	-7.0	-7.7	-8.4	-8.6	-8.7	-8.9
California	M	6.2	-11.2	-26.2	-42.9	-49.9	-53.8	-57.7	-60.8	-64.2
Colorado	M	1.3	0.4	-1.0	-2.8	-3.6	-4.2	-4.6	-5.0	-5.5
Connecticut	M	0.4	-1.4	-6.2	-9.5	-10.8	-11.6	-12.5	-13.2	-13.9
Delaware	M	0.1	-0.2	-1.5	-2.3	-2.6	-2.9	-3.1	-3.2	-3.4
Dist. Columbia	M	0.1	-0.2	-1.2	-1.9	-2.2	-2.4	-2.5	-2.7	-2.9
Florida		-0.1	2.7	-23.9	-40.5	-44.0	-47.9	-50.5	-52.2	-54.1
Georgia		1.1	3.3	-4.0	-9.3	-10.9	-12.5	-13.5	-14.3	-15.2
Hawaii	M	1.0	0.6	0.3	-0.1	-0.4	-0.9	-1.1	-1.1	-1.3
Idaho		0.1	0.2	-0.8	-1.6	-1.9	-2.1	-2.3	-2.4	-2.6
Illinois	M, T	-15.7	-13.8	-20.0	-25.5	-27.7	-29.8	-30.1	-30.3	-30.8
Indiana	M, T	-4.7	-4.2	-8.7	-12.1	-13.5	-14.7	-15.3	-15.8	-16.3
Iowa	M	-0.3	-0.8	-2.5	-4.0	-4.6	-5.1	-5.5	-5.7	-6.1
Kansas		0.2	0.5	-1.6	-3.0	-3.5	-4.0	-4.3	-4.6	-4.9
Kentucky	M	-0.6	-2.0	-4.2	-6.6	-7.9	-8.8	-9.4	-10.0	-10.5
Louisiana	M	0.1	0.1	-6.3	-10.2	-11.4	-12.4	-12.2	-12.8	-13.5
Maine		-0.3	-0.3	-2.6	-4.1	-4.6	-5.0	-5.3	-5.5	-5.8
Maryland	M	1.0	-1.0	-5.9	-9.8	-11.3	-12.4	-13.3	-14.1	-15.0
Massachusetts	M	0.6	1.6	-4.4	-9.0	-11.1	-12.4	-13.7	-15.0	-16.4
Michigan	M, T	-17.4	-15.9	-20.4	-25.1	-27.4	-29.5	-29.8	-30.1	-30.6
Minnesota	M	0.4	-1.0	-5.0	-8.7	-10.3	-11.5	-12.4	-13.2	-14.0
Mississippi		0.1	0.3	-1.9	-3.3	-3.7	-4.2	-4.5	-4.7	-5.0
Missouri		-0.8	-0.3	-6.4	-10.2	-11.4	-12.5	-13.3	-13.9	-14.6
Montana	M	0.2	0.0	-0.9	-1.6	-1.8	-2.2	-2.3	-2.4	-2.6
Nebraska		0.1	0.2	-1.3	-2.4	-2.7	-3.0	-3.3	-3.4	-3.6
Nevada	M	0.4	-0.5	-1.3	-2.2	-2.5	-2.7	-2.9	-3.1	-3.3
New Hampshire	M, T	-1.1	-1.0	-2.1	-2.9	-3.3	-3.5	-3.7	-3.8	-4.0
New Jersey	M	1.7	-2.5	-12.3	-19.6	-22.3	-24.1	-25.9	-27.4	-29.0
New Mexico	M, T	-4.3	-4.3	-5.3	-6.1	-6.6	-7.0	-7.0	-7.0	-7.0
New York	M	5.0	3.4	-21.8	-36.7	-43.6	-48.1	-53.0	-57.2	-61.8
North Carolina		-0.1	0.0	-12.1	-19.3	-21.0	-22.8	-24.1	-25.0	-26.1
North Dakota	M	0.0	-0.1	-0.7	-1.2	-1.4	-1.5	-1.7	-1.7	-1.8
Ohio	M	-1.8	-4.9	-10.0	-16.7	-20.4	-22.7	-24.7	-26.3	-28.1
Oklahoma		0.4	0.8	-2.1	-3.9	-4.6	-5.2	-5.6	-5.9	-6.2
Oregon	M	-0.1	-3.1	-5.4	-8.0	-9.2	-10.1	-10.8	-11.2	-11.8
Pennsylvania	M	0.6	-4.9	-22.4	-35.3	-40.2	-43.8	-47.1	-49.7	-52.5
Rhode Island	M	0.0	-0.7	-2.0	-3.0	-3.5	-3.8	-4.1	-4.3	-4.6
South Carolina		0.3	0.6	-3.0	-5.3	-5.9	-6.5	-6.9	-7.3	-7.7
South Dakota		0.0	0.0	-0.8	-1.3	-1.5	-1.7	-1.8	-1.9	-2.0
Tennessee		0.1	0.6	-5.8	-9.9	-11.4	-12.7	-13.6	-14.3	-15.0
Texas		8.3	13.5	-8.7	-23.1	-27.6	-32.1	-35.1	-37.3	-40.1
Utah		0.7	1.0	-0.1	-1.0	-1.4	-1.7	-1.9	-2.1	-2.3
Vermont	M	0.1	0.0	-0.8	-1.4	-1.6	-1.8	-1.9	-2.0	-2.2
Virginia		0.9	1.0	-4.2	-7.8	-8.9	-9.8	-10.6	-11.1	-11.8
Washington	M, T	-5.3	-4.3	-3.5	-4.1	-4.8	-5.5	-5.4	-5.4	-5.6
West Virginia	M	-0.2	-0.7	-2.7	-4.1	-4.7	-5.1	-5.5	-5.8	-6.1
Wisconsin		-1.4	-1.1	-6.1	-9.5	-10.7	-11.7	-12.4	-12.9	-13.5
Wyoming		0.1	0.0	-0.2	-0.3	-0.4	-0.4	-0.4	-0.5	-0.5

* M = Medicaid expansion state, T = state terminates expansion if match rate is reduced.

Source: George Washington University analysis.

Appendix A3. State-Level Changes in Gross State Product Due to American Health Care Act, 2018 to 2026 (millions of current $)

	Status*	2018	2019	2020	2021	2022	2023	2024	2025	2026
Alabama		$1,135	$1,434	$672	$93	-$136	-$328	-$455	-$597	-$932
Alaska	M	$265	$277	$87	-$52	-$115	-$158	-$196	-$237	-$324
Arizona	M	$2,187	$2,474	$1,552	$888	$608	$452	$279	$55	-$513
Arkansas	M, T	$65	$194	-$259	-$646	-$837	-$1,009	-$1,088	-$1,170	-$1,365
California	M	$15,362	$12,129	$8,750	$4,457	$2,784	$2,645	$2,373	$1,502	-$1,582
Colorado	M	$2,289	$2,463	$2,167	$1,708	$1,487	$1,408	$1,345	$1,173	$608
Connecticut	M	$1,504	$1,338	$216	-$704	-$1,136	-$1,345	-$1,538	-$1,795	-$2,295
Delaware	M	$282	$259	-$18	-$242	-$347	-$413	-$473	-$540	-$658
Dist. Columbia	M	$380	$329	$54	-$180	-$298	-$372	-$445	-$534	-$689
Florida		$5,186	$6,470	$782	-$3,248	-$4,481	-$5,532	-$6,269	-$7,010	-$8,689
Georgia		$3,009	$3,937	$2,181	$753	$229	-$200	-$496	-$836	-$1,648
Hawaii	M	$701	$671	$652	$588	$530	$437	$411	$370	$259
Idaho		$394	$469	$316	$176	$128	$91	$67	$34	-$72
Illinois	M, T	$445	$929	-$790	-$2,401	-$3,143	-$3,658	-$3,757	-$4,007	-$4,929
Indiana	M, T	$707	$939	-$54	-$926	-$1,361	-$1,680	-$1,854	-$2,061	-$2,560
Iowa	M	$819	$843	$415	$1	-$206	-$346	-$440	-$562	-$852
Kansas		$794	$976	$545	$193	$48	-$62	-$129	-$219	-$458
Kentucky	M	$782	$686	$234	-$329	-$655	-$877	-$1,052	-$1,240	-$1,586
Louisiana	M	$1,461	$1,803	$485	-$551	-$1,032	-$1,371	-$1,427	-$1,646	-$2,127
Maine		$268	$306	-$105	-$415	-$557	-$663	-$750	-$841	-$995
Maryland	M	$1,918	$1,797	$677	-$370	-$896	-$1,173	-$1,427	-$1,755	-$2,402
Massachusetts	M	$2,485	$2,941	$1,483	$163	-$522	-$820	-$1,121	-$1,594	-$2,570
Michigan	M, T	-$804	-$614	-$1,692	-$2,830	-$3,484	-$3,988	-$4,167	-$4,418	-$5,070
Minnesota	M	$1,830	$1,793	$795	-$229	-$771	-$1,136	-$1,423	-$1,750	-$2,420
Mississippi		$611	$775	$354	$42	-$96	-$210	-$280	-$361	-$552
Missouri		$1,297	$1,590	$350	-$575	-$968	-$1,276	-$1,484	-$1,736	-$2,284
Montana	M	$294	$308	$153	$2	-$79	-$155	-$202	-$251	-$350
Nebraska		$545	$640	$322	$47	-$74	-$168	-$234	-$313	-$494
Nevada	M	$999	$908	$720	$496	$399	$364	$326	$247	$8
New Hampshire	M, T	$294	$355	$78	-$168	-$291	-$357	-$393	-$455	-$611
New Jersey	M	$3,493	$3,106	$681	-$1,341	-$2,276	-$2,714	-$3,132	-$3,687	-$4,780
New Mexico	M, T	-$202	-$203	-$428	-$631	-$757	-$868	-$893	-$925	-$1,047
New York	M	$7,635	$7,718	$2,023	-$2,068	-$4,128	-$5,184	-$6,326	-$7,777	-$10,465
North Carolina		$2,406	$2,829	$274	-$1,523	-$2,149	-$2,623	-$2,963	-$3,320	-$4,126
North Dakota	M	$375	$426	$255	$63	-$55	-$136	-$193	-$257	-$390
Ohio	M	$2,471	$2,326	$1,150	-$422	-$1,371	-$1,966	-$2,450	-$3,029	-$4,126
Oklahoma		$1,096	$1,422	$833	$349	$138	-$25	-$106	-$199	-$494
Oregon	M	$1,016	$591	$177	-$354	-$636	-$798	-$926	-$1,077	-$1,426
Pennsylvania	M	$3,562	$3,105	-$347	-$3,313	-$4,771	-$5,708	-$6,526	-$7,402	-$8,920
Rhode Island	M	$256	$200	-$41	-$263	-$377	-$445	-$509	-$584	-$713
South Carolina		$1,163	$1,410	$585	-$11	-$228	-$396	-$515	-$653	-$992
South Dakota		$253	$285	$139	$7	-$55	-$103	-$138	-$179	-$268
Tennessee		$1,696	$2,134	$352	-$1,067	-$1,716	-$2,247	-$2,623	-$2,993	-$3,676
Texas		$11,773	$15,491	$10,557	$6,443	$4,660	$3,384	$2,742	$1,951	-$547
Utah		$1,092	$1,334	$1,172	$979	$912	$881	$859	$789	$541
Vermont	M	$166	$179	$25	-$101	-$166	-$215	-$251	-$292	-$368
Virginia		$2,461	$2,798	$1,481	$387	-$59	-$302	-$495	-$795	-$1,523
Washington	M, T	$1,027	$1,335	$1,688	$1,700	$1,669	$1,714	$1,887	$1,871	$1,418
West Virginia	M	$345	$314	-$57	-$387	-$559	-$680	-$778	-$875	-$1,044
Wisconsin		$1,104	$1,323	$239	-$656	-$1,059	-$1,363	-$1,560	-$1,787	-$2,290
Wyoming		$252	$298	$238	$167	$127	$102	$87	$62	-$10

* M = Medicaid expansion state, T = state terminates expansion if match rate is reduced.

Source: George Washington University analysis.

Appendix A4. State-Level Changes in Business Output Due to the American Health Care Act, 2018 to 2026 (millions of current $)

	Status*	2018	2019	2020	2021	2022	2023	2024	2025	2026
Alabama		$2,152	$2,721	$1,393	$382	-$2	-$300	-$475	-$685	-$1,270
Alaska	M	$505	$530	$180	-$77	-$192	-$268	-$333	-$405	-$564
Arizona	M	$3,508	$3,991	$2,471	$1,361	$882	$607	$309	-$70	-$995
Arkansas	M, T	$231	$485	-$314	-$991	-$1,311	-$1,588	-$1,702	-$1,829	-$2,169
California	M	$25,920	$20,485	$14,739	$7,455	$4,628	$4,386	$3,935	$2,480	-$2,650
Colorado	M	$3,900	$4,207	$3,691	$2,898	$2,513	$2,370	$2,260	$1,968	$1,013
Connecticut	M	$2,596	$2,340	$469	-$1,056	-$1,756	-$2,084	-$2,382	-$2,797	-$3,626
Delaware	M	$479	$442	-$31	-$413	-$592	-$703	-$802	-$914	-$1,113
Dist. Columbia	M	$643	$557	$87	-$311	-$510	-$633	-$755	-$906	-$1,166
Florida		$8,273	$10,418	$1,147	-$5,437	-$7,442	-$9,140	-$10,318	-$11,508	-$14,193
Georgia		$5,207	$6,793	$3,797	$1,378	$516	-$172	-$628	-$1,165	-$2,524
Hawaii	M	$1,221	$1,182	$1,147	$1,032	$926	$764	$715	$640	$444
Idaho		$683	$808	$539	$292	$204	$139	$97	$38	-$147
Illinois	M, T	$1,045	$1,927	-$1,055	-$3,837	-$5,091	-$5,930	-$6,050	-$6,449	-$8,040
Indiana	M, T	$1,688	$2,182	$359	-$1,233	-$1,986	-$2,490	-$2,707	-$3,011	-$3,924
Iowa	M	$1,779	$1,863	$970	$134	-$255	-$482	-$593	-$778	-$1,346
Kansas		$1,460	$1,797	$1,027	$396	$142	-$44	-$148	-$297	-$723
Kentucky	M	$1,490	$1,370	$540	-$462	-$1,022	-$1,391	-$1,665	-$1,972	-$2,582
Louisiana	M	$2,809	$3,476	$1,155	-$674	-$1,492	-$2,032	-$2,070	-$2,403	-$3,240
Maine		$486	$556	-$147	-$679	-$916	-$1,087	-$1,219	-$1,364	-$1,627
Maryland	M	$3,127	$2,957	$1,150	-$540	-$1,386	-$1,827	-$2,222	-$2,742	-$3,778
Massachusetts	M	$4,239	$4,996	$2,541	$319	-$822	-$1,318	-$1,815	-$2,606	-$4,238
Michigan	M, T	-$895	-$478	-$2,380	-$4,365	-$5,458	-$6,260	-$6,497	-$6,885	-$8,032
Minnesota	M	$3,259	$3,217	$1,454	-$341	-$1,276	-$1,888	-$2,347	-$2,887	-$4,045
Mississippi		$1,167	$1,489	$745	$193	-$39	-$219	-$313	-$433	-$767
Missouri		$2,334	$2,873	$741	-$852	-$1,513	-$2,013	-$2,327	-$2,728	-$3,664
Montana	M	$555	$587	$298	$16	-$131	-$262	-$339	-$423	-$604
Nebraska		$1,076	$1,260	$667	$158	-$56	-$207	-$298	-$422	-$755
Nevada	M	$1,666	$1,524	$1,202	$813	$639	$574	$504	$369	-$33
New Hampshire	M, T	$500	$600	$134	-$280	-$484	-$594	-$656	-$762	-$1,023
New Jersey	M	$5,840	$5,282	$1,388	-$1,846	-$3,319	-$3,979	-$4,592	-$5,447	-$7,198
New Mexico	M, T	-$314	-$306	-$691	-$1,038	-$1,247	-$1,426	-$1,461	-$1,511	-$1,716
New York	M	$13,428	$13,546	$4,115	-$2,691	-$6,023	-$7,663	-$9,410	-$11,742	-$16,216
North Carolina		$4,177	$4,917	$601	-$2,425	-$3,455	-$4,215	-$4,744	-$5,313	-$6,663
North Dakota	M	$702	$802	$485	$126	-$93	-$240	-$343	-$459	-$701
Ohio	M	$4,518	$4,377	$2,281	-$435	-$2,023	-$2,975	-$3,702	-$4,617	-$6,488
Oklahoma		$1,925	$2,513	$1,498	$659	$299	$29	-$95	-$243	-$747
Oregon	M	$1,744	$1,040	$332	-$579	-$1,066	-$1,344	-$1,563	-$1,823	-$2,420
Pennsylvania	M	$6,270	$5,603	-$180	-$5,138	-$7,533	-$9,027	-$10,294	-$11,693	-$14,217
Rhode Island	M	$434	$353	-$42	-$401	-$584	-$690	-$789	-$908	-$1,118
South Carolina		$2,059	$2,510	$1,112	$99	-$258	-$521	-$696	-$904	-$1,474
South Dakota		$455	$515	$248	$7	-$106	-$191	-$251	-$323	-$480
Tennessee		$3,032	$3,822	$752	-$1,682	-$2,765	-$3,633	-$4,225	-$4,821	-$5,981
Texas		$20,230	$26,706	$18,307	$11,264	$8,242	$6,131	$5,131	$3,857	-$365
Utah		$1,863	$2,279	$2,000	$1,666	$1,546	$1,489	$1,451	$1,333	$910
Vermont	M	$284	$307	$43	-$171	-$281	-$362	-$422	-$491	-$619
Virginia		$4,174	$4,749	$2,523	$677	-$69	-$470	-$782	-$1,277	-$2,492
Washington	M, T	$1,920	$2,464	$3,039	$3,042	$2,996	$3,096	$3,419	$3,414	$2,629
West Virginia	M	$626	$587	-$65	-$642	-$934	-$1,134	-$1,285	-$1,442	-$1,729
Wisconsin		$2,104	$2,513	$575	-$1,027	-$1,737	-$2,252	-$2,565	-$2,944	-$3,841
Wyoming		$487	$574	$462	$329	$255	$211	$186	$142	$6

* M = Medicaid expansion state, T = state terminates expansion if match rate is reduced.

Source: George Washington University analysis.

Appendix B. Study Methods

Our approach is similar to the methodology described in our previous reports on ACA repeal.[1,2] We use REMI's PI+ model (version 2.0), which is a dynamic, structural equation system that has been widely used for a variety of economic analyses by public agencies, state legislatures, universities, and private clients across the nation.[3] More information about the model, its methodology, and data sources is available at REMI's website (www.remi.com). The figure below illustrates the structural linkages in the model. The economic, demographic, and employment data used in PI+ come from a variety of sources, particularly from the Bureau of Economic Analysis.

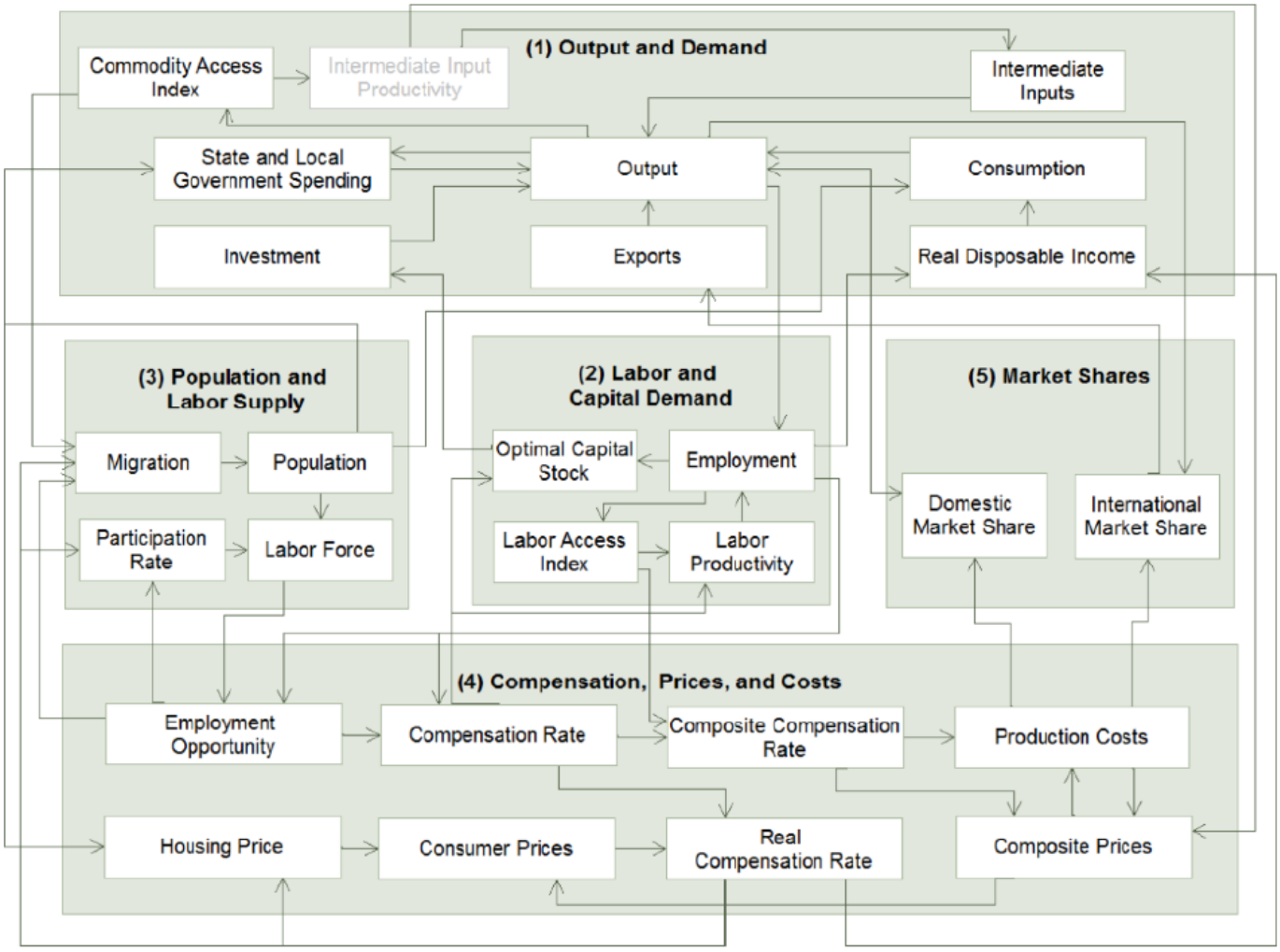
Researchers at George Washington University estimated changes in federal funds (spending or revenue) for all major provisions of the AHCA for all states for every year from calendar year 2018 to 2026. At the national level, our estimates are aligned with the Congressional Budget Office's (CBO's) May 24 estimates[4] and we allocated these changes to every state. The state-level estimates were then applied as policy changes (or inputs) to the economic baselines in the PI+ model. The model includes year- and state-specific baseline projections for models of employment and other economic parameters for each state and modifies the estimates based on changes in the inputs. Estimates of the effects of the AHCA are based on differences between the baseline and estimates that result after the addition or subtraction of funds in various parts of the economies. For example, changes related to direct health care spending, such as changes in Medicaid spending or health insurance tax credits, are modeled as changes in hospital, ambulatory, pharmaceutical, and long-term care spending, while changes in general taxes are related to changes in general consumer or business consumption.

The AHCA's tax cuts predominantly help those with high incomes. Urban Institute analyses found that 90 percent of the tax reductions help those in the top 20 percent of income. Economic research indicates that tax cuts, which primarily help high-income people, have less of a stimulative effect than spending or transfers for low- or moderate-income people.[5,6,7] Essentially, if a low- or moderate-income person gains $1,000 in benefits, the income gained will rapidly translate into about $1,000 in additional consumption of goods and services, providing rapid stimulus to economies and employment. But if a high-income person gains an additional $1,000 through tax cuts, much of it will be saved and less spent, resulting in less of a stimulative effect in the near term.

However, the tax module in PI+ does not account for the distribution of income by those receiving the tax gains. After consultation with REMI economists, we adjusted estimates of the effects of tax repeal policies to account for lower levels of the consumption by those with high incomes. Our estimates of the marginal propensity to consume among those in the top quintile of income were based on 2015 data from the Bureau of Labor Statistics and the Consumer Expenditure Survey,[8] which indicated that expected consumption should be reduced by about one-third. These adjustments were applied to three tax repeal categories for individuals that are skewed to those with high incomes, noted below. To be conservative, we apply these adjustments only to those three categories and not to the other tax categories. It is likely that most of the other individual and business tax changes also preferentially help those with high incomes, and thus also are somewhat less stimulative. Thus, we probably still overestimate the extent to which overall AHCA tax cuts enhance employment or economic growth.

In our previous publication, we estimated the effects of repeal on state and local tax revenues, but do not do so in this report. Many of the AHCA's economic effects are due to federal tax policy changes. When federal tax policies change, states often "piggyback" on the federal changes, changing state taxes, too.[9] While federal tax cuts might lead to increases in gross state products because of increased economic activity, piggybacking would reduce state tax revenue because state taxes are also cut. Since we do not know the extent to which states would adopt the AHCA's federal tax changes, we cannot estimate effects on state and local tax revenues. If states do not piggyback on the federal changes, state and local revenues may rise, but if they piggyback, they likely will fall.

PI+ Model and System of Equations



Source: Regional Economic Models, Inc. (REMI).

Our findings are generally compatible with other recent studies that analyzed the potential economic and employment effects of repealing the ACA, including studies by the UC Berkeley Center for Labor Research and Education[10] and the Economic Policy Institute.[11] The principal policy difference is that this report provides a detailed analysis of the consequences of the AHCA, as passed by the U.S. House of Representatives. Some technical differences also exist. The Berkeley report used IMPLAN, a well-known regional economic model, while the Economic Policy Institute used a set of economic multipliers based on its analysis of the literature. Our study used REMI's PI+, which is a more sophisticated model that has dynamic and interstate capabilities.

We used the following methods to allocate changes for each state. To conduct the analysis, we estimate each component separately, but the total model includes all components, estimated jointly. All estimates in this report were developed so that the sum of state estimates is about the same as CBO's national level estimates for each provision.[12] Four important coverage-related changes are:

1. Medicaid changes. Using recent estimates of additional federal funding for Medicaid expansions[13] and state estimates of 2017 expenditures (from CMS–37 reports filed by states), we developed baseline estimates of federal funding for Medicaid expansions and overall Medicaid programs through 2026. We partitioned state effects in three phases. The

first phase assumed that the seven states (Arkansas, Illinois, Indiana, Michigan, New Hampshire, New Mexico, and Washington) that have state legislation will automatically terminate expansions if federal matching rates change. Next, there are additional, but more gradual reductions in expansion funding in the remaining expansion states. It seems plausible that some states will completely terminate their expansions, while others will find ways to curtail costs without complete termination, but we are unable to predict which or when, so we spread these reductions proportionately across all expansion states. Finally, we then gradually reduce federal funding proportionately all across all states, including nonexpansion states, in response to the per capita allocation method and other AHCA changes in Medicaid policies. Thus, the greatest reductions occur among the seven states that automatically terminate their expansions, followed by the other expansion states, but all states have some reductions that gradually deepen over time.

2. Elimination of current premium tax credits. As discussed in our previous report, we developed baselines of tax credit expenditures for each state, based on actual costs from March 2016. These estimates were used to proportionately allocate reductions in current tax credit funding through 2026.

3. Use of new tax credits. The new tax credits are to be used by people with nongroup coverage, with the value of credits based on age, with the value phasing out for higher-income people. There are no other adjustments for income or location. We used data from the 2015 American Community Survey (ACS) public use file to estimate the number of people by age band (18 to 30, 31 to 50, and 51 to 64) with nongroup health insurance coverage. We also used data from an analysis by the Kaiser Family Foundation of the effect of AHCA vs. ACA premium tax credits on health insurance premiums.[14] These data were used to estimate net health insurance costs by age in 2020 by state, based on projected health insurance premiums minus the AHCA tax credits. Our model assumed that the probability of purchasing nongroup insurance falls as the net cost of health insurance rises, adjusting for the fact that incomes and health needs tend to rise with age. This permits the distribution of utilization to vary with the age structure of each state and its health care costs. These estimates were used to allocate the value of new federal tax credits used in each state.

4. Patient and State Stability Fund. This component of the legislation includes the invisible risk-sharing program, funding for individuals affected adversely by state waivers of insurance regulations, and funding for maternity care, mental health care, and substance abuse treatment. We allocated funds to states based on estimates for fiscal year 2018 by the Oliver Wyman consulting firm, aligning national totals to the CBO annual estimates.[15] States have some flexibility in applying for these funds and gradually rising matching rates are required of states, so actual use of funds might be lower than amounts projected.

Changes related to health spending were translated into inputs for consumer demand for hospital care, ambulatory care, long-term care, pharmaceuticals, or insurance administration, using data from the 2014 Medical Expenditure Panel Survey. Changes in Medicaid and Medicare Disproportionate Share Hospital (DSH) payments were allocated to hospital care.

A variety of other state allocation methods were used for all remaining provisions:

5. Penalty payments for individuals and employers were allocated in proportion to the number of uninsured in each state, using the 2015 ACS.

6. Safety net funding for nonexpansion states. This was based on the 19 nonexpansion states (as of May 2017) and the number of people below 135 percent of the federal poverty level, according to the 2015 ACS.

7. Repeal of Medicaid DSH payment reductions. Based on projected Medicaid DSH reductions for 2018.[16]

8. Medicare DSH reductions. These were modeled for changes in the hospital sector, allocated based on

Urban Institute estimates of the number of uninsured people in each state, after the partial ACA repeal.[17]

9. Elimination of the Prevention and Public Health Fund. This was based on the fiscal year 2016 state allocations.[18]

The effect of tax repeal changes were based on the PI+ tax module, treating the changes as consumer/personal or business tax changes for the relevant type of tax change:

10. Repeal of tax on high-cost health insurance premiums (i.e., the Cadillac tax). Modeled as changes in sales taxes on net health insurance costs for businesses.

11. Repeal of net investment tax. Modeled as a personal tax, allocated to states based on the top quintile of income in the 2015 ACS. Consumption adjusted due to high income.

12. Changes related to health savings accounts. Modeled as changes in personal taxes by consumption (Section 208) or population (Sections 216 and 217).

13. Changes in health savings account and flexible spending account limits. Modeled as changes in personal taxes among the employed.

14. Adjustment of the medical deduction threshold. Modeled as a personal tax, allocated to states based on the top quintile of income in the 2015 ACS. Consumption adjusted due to high income.

15. Repeal of medical device taxes. Based on consumer taxes on therapeutic appliances and devices.

16. Repeal of elimination of deduction for expenses related to Part D subsidy. Modeled based on business tax based on the production cost of insurance carriers.

17. Repeal of the Medicare tax increase for high-income people. Modeled as a personal tax increase, allocated to states based on the top quintile of income in the 2015 ACS. Later changes in the AHCA shifted the date of this change to 2023. Consumption adjusted due to high income.

18. Repeal of tax on prescription medications. Modeled as business tax on pharmaceutical and other medical products (a category of the chemical manufacturing industry), allocated by retail prescription drug fills at pharmacies in 2016.[19]

19. Repeal of health insurance tax. Modeled as a business tax on insurance carriers, allocated by direct net insurance premiums written in each state, based on National Association of Insurance Commissioners data for 2014.[20]

20. Repeal of tanning tax. Modeled as sales tax on personal services.

21. Remuneration from certain insurers. Modeled as business tax based on production costs of insurance carriers.

22. Effect of other revenues and outlays. Modeled as personal taxes and allocated by state population.

NOTES TO STUDY METHODS

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[13] L. Ku, E. Steinmetz, E. Brantley et al., *The Economic and Employment Consequences of Repealing Federal Health Reform: A 50 State Analysis* (Milken Institute School of Public Health, George Washington University, Jan. 2017).

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