Appendix

This appendix is supplemental to a Commonwealth Fund blog post: Leighton Ku and Erin Brantley, "The Economic and Employment Consequences of Phasing Down Medicaid Enrollment After the Public Health Emergency Ends," *To the Point* (blog), Commonwealth Fund, Mar. 14, 2022, https://www.commonwealthfund.org/blog/2022/what-are-economic-and-employment-consequences-phasing-down-medicaid-enrollment-after.

The first part of this appendix presents five tables with state-by-state estimates of projected changes in Medicaid enrollment, federal and state health insurance funding levels, employment levels, and gross state product after the COVID-19 Public Health Emergency (PHE) expires. The second part of the appendix summarizes the methodology for these analyses.

Our estimates, originally produced in October 2021, assume that the PHE expires in January 2022 and the temporary 6.2 percentage federal medical assistance percentage (FMAP) expires after March 2022. We used an Urban Institute estimate that Medicaid caseloads could fall by almost 15 million in six to 12 months after the PHE ends, depending on the pace of redeterminations.

In November 2021, the U.S. House of Representatives passed the Build Back Better (BBB) bill.¹ The bill sought to slow the pace of enrollment reductions, adding eligibility redetermination rules and requiring states to process no more than one-twelfth of their caseloads in every month. It would have allowed states to begin disenrolling beneficiaries after April 2022, regardless of the end of the PHE. To help states, the House BBB bill offered 3.1 percentage points to FMAP from April to June 2022 and 1.5 percentage points from July to September, compared to standard rates. The Senate Finance Committee revealed its version of the bill, somewhat different, in December 2021.² But the bill has stalled in the Senate. If the Senate eventually passes a version of BBB, it is likely to be quite different from earlier versions. The fate of these provisions remains uncertain and current law continues to pertain for the time being.

Since the Secretary of Health and Human Services has recently extended the PHE through April 16, 2022, the estimates presented in this report are off cycle by at least three months and are likely to be underestimates, since caseloads will continue to grow between January and April 2022. The Secretary could choose to extend the PHE beyond April 16, depending on his assessment of the status of the COVID pandemic at that time, but for now we assume it ends in April and Medicaid disenrollment can begin in May 2022.

Like the Urban Institute, we assumed that the end of the PHE would mean that Medicaid caseloads would gradually return to near prepandemic levels, shedding about 14 million enrollees. (Our estimate varies slightly from theirs because we account for Medicaid expansions in Missouri and Oklahoma in October, which the Urban Institute did not include.)

We acknowledge that the actual reduction could be higher or lower. Some analysts worry that requiring redetermination of all Medicaid enrollees places almost all Medicaid enrollees — more than 70 million — at risk and will lead to higher losses if states fail to conduct thorough redeterminations of Medicaid eligibility (e.g., terminate beneficiaries without a complete review

of their current status or are unable to locate enrollees). For example, a recent report found that Texas has substantially cut the number of its Medicaid eligibility staff, which could lead to major problems when the PHE ends and the eligibility of all beneficiaries needs to be redetermined.³ On the other hand, it is plausible that, because of the threat of COVID and the high cost of health care, many who might have lost coverage under normal circumstances will make additional efforts to retain their coverage in the coming year, so that many of those who gained coverage during the PHE remain enrolled. Given the uncertainties in state administrative procedures and beneficiary behavior, our scenarios should be viewed as illustrative, rather than firm predictions.

Our analyses contrast two scenarios:

- 1. **Six-Month Phasedown.** States return to roughly prepandemic caseloads six months after the PHE ends. The temporary 6.2 percentage point increase in the federal matching rate (FMAP) provided by the Families First Coronavirus Response Act ends completely at the end of the quarter when the PHE expires. This is comparable to current law and the primary scenario in the Urban Institute report. Our estimates in this report assumed the reductions begin in January, so enrollment declines sharply from January to June 2022. The recent PHE extension means that it would be delayed by at least three months.
- 2. **Twelve-Month Phasedown with 3.1 Percent FMAP Reduction.** States take 12 months to return to prepandemic caseload levels after the PHE ends. The estimates reported were based on an assumption this would occur between January and December 2022, although the recent PHE extension means these changes would be delayed. To help states with the transition, we assume states continue to receive a 3.1 percentage point FMAP increase relative to normal levels throughout 2022, reducing incentives for disenrollment. This is similar, but not identical, to the provisions of Section 30741 in the House version of the BBB and the Senate version, Sec. 122231(b).

Again, we note that the extension of PHE means that, in reality, Medicaid caseload reductions cannot begin until May 2022, about three months after the period used in our estimates. That is, updated estimates would be similar to those presented here but would be offset by at least three months. Losses also would be somewhat larger because caseloads will continue to grow between January and April 2022. But the general direction of changes and consequences would be similar to those presented in our tables.

Our estimates do not account for other related changes that were contained in BBB and might be contained in future legislation. Other provisions, such as increasing eligibility and subsidies for the health insurance marketplaces to aid low-income residents of states that did not expand Medicaid or extending provisions related to the health insurance marketplace premiums made by the American Rescue Plan, also would enhance health insurance coverage. These changes would also bolster state and local economies and employment. But analysis of those policies is beyond the scope of this project.

	December 2021	Reduction After 6	Reduction After 12	Federal Funding	State Funding
	Enrollment (thou.)	Months (thou.)	Months (thou.)	Change (\$ mil.)	Change (\$ mil.)
US Total	76,540	-14,720	-14,410	-\$69,027	-\$5,321
Alabama	940	-140	-130	-\$671	\$141
Alaska	210	-30	-30	-\$142	-\$14
Arizona	2,130	-410	-400	-\$1,781	\$36
Arkansas	900	-130	-130	-\$678	\$97
California	10,740	-1,390	-1,340	-\$5,471	\$188
Colorado	1,310	-330	-320	-\$1,200	-\$364
Connecticut	880	-140	-130	-\$781	-\$57
Delaware	210	-40	-40	-\$184	-\$9
Dist. Columbia	170	-20	-20	-\$213	\$43
Florida	4,050	-1,040	-1,020	-\$4,620	-\$731
Georgia	2,170	-530	-530	-\$2,294	-\$155
Hawaii	300	-70	-70	-\$279	-\$69
Idaho	440	-110	-110	-\$478	-\$32
Illinois	2,820	-670	-660	-\$1,628	-\$593
Indiana	1,670	-440	-440	-\$2,127	-\$266
Iowa	640	-90	-90	-\$492	\$45
Kansas	350	-40	-40	-\$219	\$59
Kentucky	1,610	-430	-420	-\$2,153	-\$151
Louisiana	1,560	-290	-280	-\$1,296	-\$20
Maine	350	-60	-60	-\$338	-\$1
Maryland	1,220	-190	-190	-\$1,003	-\$100
Massachusetts	1,690	-290	-280	-\$1,337	-\$188
Michigan	2,560	-520	-510	-\$2,760	-\$171
Minnesota	1,330	-340	-340	-\$1,939	-\$639
Mississippi	680	-120	-110	-\$811	\$130
Missouri	1,250	-150	-150	-\$1,276	\$335
Montana	270	-60	-60	-\$348	-\$18
Nebraska	320	-60	-60	-\$252	-\$10
Nevada	820	-230	-230	-\$652	-\$147
New Hampshire	260	-70	-70	-\$193	-\$85
New Jersey	1,660	-320	-310	-\$1,132	-\$231
New Mexico	810	-120	-120	-\$722	\$67
New York	6,590	-1,110	-1,080	-\$4,826	-\$589
North Carolina	2,130	-420	-420	-\$2,565	\$64
North Dakota	100	-30	-30	-\$118	-\$52
Ohio	2,700	-440	-420	-\$2,318	\$110
Oklahoma	920	-170	-170	-\$1,110	\$35
Oregon	1,050	-220	-220	-\$1,014	-\$126
Pennsyivania	2,710	-440	-430	-\$2,314	-\$191
Rhode Island	300	-60	-50	-\$246	-\$22
South Carolina	1,000	-170	-170	-\$822	\$106
South Dakota	120	-20	-20	-\$111	-\$33
Tennessee	1,350	-180	-170	-\$944	\$253
Texas	5,330	-1,330	-1,310	-\$7,772	-\$1,123
Ucan	020	-210	-200	-\$1,094	-\$163
Virginia	1/0	-30	-30	-\$257	-\$41
virginia Washington	1,000	-350	-340	-\$1,449	-\$342
wasnington	1,800	-280	-280	-\$1,002	-\$66
west virginia	540	-90	-90	-\$489	\$59 ¢255
wisconsin	1,130	-290	-280	-\$982	-\$255
wyoming	60	-10	-10	-\$128	-\$36

 Table A-1. Changes in Non-elderly Medicaid Enrollment and Federal and State Insurance Funding If Medicaid

 Enrollment Phases Down Over 6 Months, Assuming a 6.2% FMAP Reduction After March 2022 (Scenario 1)

 Table A-2. Changes in Employment and Gross State Product if Medicaid Enrollment Phases Down Over
 6 Months, Assuming a 6.2% FMAP Reduction After March 2022 (Scenario 1)

	Health & Social						
	Total Employment	Assistance	All Other	Gross State Product			
	(thou.)	Employment (thou.)	Employment (thou.)	(mil \$)			
US Total	-1,441.3	-640.4	-800.9	-\$150,141			
Alabama	-13.7	-4.4	-9.3	-\$1,322			
Alaska	-1.5	-0.8	-0.8	-\$230			
Arizona	-36.4	-15.3	-21.1	-\$3,457			
Arkansas	-11.8	-4.9	-7.0	-\$1,089			
California	-125.3	-51.4	-73.9	-\$14,983			
Colorado	-25.2	-12.2	-13.0	-\$2,635			
Connecticut	-20.2	-9.0	-11.2	-\$2,352			
Delaware	-4.1	-1.7	-2.4	-\$535			
Dist. Columbia	-4.3	-1.7	-2.6	-\$655			
Florida	-97.2	-44.3	-52.9	-\$8,883			
Georgia	-42.7	-17.6	-25.1	-\$4,352			
Hawaii	-4.8	-2.4	-2.4	-\$574			
Idaho	-7.8	-3.7	-4.1	-\$723			
Illinois	-42.4	-19.4	-22.9	-\$4,768			
Indiana	-33.3	-16.0	-17.3	-\$3,358			
lowa	-10.9	-4.2	-6.7	-\$1,190			
Kansas	-8.2	-2.4	-5.7	-\$874			
Kentucky	-25.6	-13.2	-12.4	-\$2.427			
Louisiana	-24.8	-11.3	-13.5	-\$2.514			
Maine	-6.9	-3.1	-3.8	-\$663			
Maryland	-24.1	-11.0	-13.1	-\$2,499			
Massachusetts	-39.2	-17.5	-21.7	-\$4,589			
Michigan	-49.4	-23.0	-26.4	-\$4.870			
Minnesota	-35.5	-20.2	-15.3	-\$3.639			
Mississippi	-12.1	-4.6	-7.5	-\$1,035			
Missouri	-25.2	-8.8	-16.4	-\$2,405			
Montana	-4.8	-2.3	-2.5	-\$518			
Nebraska	-5.9	-2.3	-3.6	-\$664			
Nevada	-11.6	-5.0	-6.6	-\$1.174			
New Hampshire	-5.8	-2.4	-3.4	-\$651			
New Jersey	-39.5	-15.7	-23.8	-\$4.442			
New Mexico	-10.6	-5.1	-5.5	-\$987			
New York	-115.3	-58.3	-57.0	-\$13.871			
North Carolina	-43.3	-18.0	-25.3	-\$4,172			
North Dakota	-2.5	-1.3	-1.1	-\$335			
Ohio	-51.5	-21.0	-30.5	-\$5.234			
Oklahoma	-17.3	-7.5	-9.8	-\$1.621			
Oregon	-17.2	-8.5	-8.7	-\$1,748			
Pennsylvania	-57.2	-26.4	-30.8	-\$5.908			
Rhode Island	-5.5	-2.6	-2.9	-\$540			
South Carolina	-15.2	-5.1	-10.1	-\$1.469			
South Dakota	-2.5	-1.1	-1.3	-\$302			
Tennessee	-29.2	-8.8	-20.4	-\$3.086			
Texas	-169.3	-76.8	-92.5	-\$16.605			
Utah	-22.3	-10.3	-12.0	-\$2,068			
Vermont	-4.2	-7 3	-19	-\$381			
Virginia	-29.0	-13.7	-15 3	-\$3.074			
Washington	19 9		-11.6	-\$2.651			
West Virginia	-60	-3.0	-30	-\$607			
Wisconsin	-20.4	_0 5	-10.8	-\$2 158			
Wyoming	-1 7	-0.6	_1 1	_\$2,130			
w young	-1./	-0.0	-1.1	-7210			

	December 2021	Reduction After 6	Reduction After 12	Federal Funding	State Funding
	Enrollment (thou.)	Months (thou.)	Months (thou.)	Change (\$ mil.)	Change (\$ mil.)
US Total	76,540	-7,175	-14,350	-\$44,166	-\$1,926
Alabama	940	-65	-130	-\$415	\$127
Alaska	210	-15	-30	-\$74	-\$1
Arizona	2,130	-200	-400	-\$1,078	\$87
Arkansas	900	-65	-130	-\$387	\$100
California	10,740	-670	-1,340	-\$3,191	\$428
Colorado	1,310	-160	-320	-\$776	-\$222
Connecticut	880	-65	-130	-\$491	-\$2
Delaware	210	-20	-40	-\$100	\$2
Dist. Columbia	170	-10	-20	-\$125	\$48
Florida	4,050	-510	-1,020	-\$3,088	-\$366
Georgia	2,170	-265	-530	-\$1,513	-\$27
Hawaii	300	-35	-70	-\$167	-\$46
Idaho	440	-55	-110	-\$311	-\$17
Illinois	2,820	-330	-660	-\$1,039	-\$346
Indiana	1,670	-220	-440	-\$1,365	-\$134
Iowa	640	-45	-90	-\$291	\$49
Kansas	350	-20	-40	-\$141	\$49
Kentucky	1,610	-210	-420	-\$1,372	-\$81
Louisiana	1,560	-140	-280	-\$773	\$34
Maine	350	-30	-60	-\$207	\$24
Maryland	1,220	-95	-190	-\$611	-\$22
Massachusetts	1,690	-140	-280	-\$848	-\$56
Michigan	2,560	-255	-510	-\$1,717	-\$33
Minnesota	1,330	-170	-340	-\$1,289	-\$397
Mississippi	680	-55	-110	-\$506	\$128
Missouri	1,250	-75	-150	-\$1,484	-\$301
Montana	270	-30	-60	-\$200	\$4
Nebraska	320	-30	-60	-\$167	-\$1
Nevada	820	-115	-230	-\$408	-\$84
New Hampshire	260	-35	-70	-\$126	-\$44
New Jersey	1,660	-155	-310	-\$709	-\$112
New Mexico	810	-60	-120	-\$417	\$76
New York	6,590	-540	-1,080	-\$2,963	-\$220
North Carolina	2,130	-210	-420	-\$1,652	\$151
North Dakota	100	-15	-30	-\$79	-\$21
Ohio	2,700	-210	-420	-\$1,409	\$173
Oklahoma	920	-55	-110	-\$705	-\$148
Oregon	1,050	-110	-220	-\$625	-\$67
Pennsylvania	2,710	-215	-430	-\$1,435	-\$17
Rhode Island	300	-25	-50	-\$161	-\$1
South Carolina	1,000	-85	-170	-\$507	\$105
South Dakota	120	-10	-20	-\$62	-\$23
Tennessee	1,350	-85	-170	-\$576	\$243
Texas	5,330	-655	-1,310	-\$5,173	-\$541
Utah	620	-100	-200	-\$736	-\$100
Vermont	170	-15	-30	-\$170	-\$25
Virginia	1,600	-170	-340	-\$915	-\$204
Washington	1,800	-140	-280	-\$572	\$13
West Virginia	540	-45	-90	-\$296	\$50
Wisconsin	1,130	-140	-280	-\$659	-\$137
Wyoming	60	-5	-10	-\$85	-\$24

 Table A-3. Changes in Non-elderly Medicaid Enrollment and Federal and State Insurance Funding If Medicaid

 Enrollment Phases Down Over 12 Months, Assuming a 3.1% FMAP Reduction After March 2022 (Scenario 2)

 Table A-4 Changes in Employment and Gross State Product if Medicaid Enrollment Phases Down Over

 12 Months, Assuming a 3.1% FMAP Reduction After March 2022 (Scenario 2)

	Health & Social					
	Total Employment	Assistance	All Other	Gross State Product		
	(thou.)	Employment (thou.)	Employment (thou.)	(mil \$)		
US Total	-918.5	-398.4	-520.1	-\$95,754		
Alabama	-8.8	-2.6	-6.2	-\$845		
Alaska	-0.8	-0.4	-0.5	-\$128		
Arizona	-22.0	-8.8	-13.2	-\$2,099		
Arkansas	-7.6	-2.8	-4.8	-\$701		
California	-72.8	-27.5	-45.3	-\$8,911		
Colorado	-16.2	-7.7	-8.5	-\$1,696		
Connecticut	-12.6	-5.4	-7.2	-\$1,476		
Delaware	-2.4	-0.9	-1.5	-\$322		
Dist. Columbia	-2.7	-0.9	-1.8	-\$404		
Florida	-64.2	-28.6	-35.6	-\$5,875		
Georgia	-28.0	-11.1	-16.9	-\$2,851		
Hawaii	-2.9	-1.4	-1.4	-\$346		
Idaho	-5.0	-2.4	-2.6	-\$465		
Illinois	-27.9	-12.5	-15.4	-\$3,145		
Indiana	-21.5	-10.1	-11.4	-\$2.164		
lowa	-7.1	-2.6	-4.5	-\$777		
Kansas	-6.2	-1.9	-4.3	-\$654		
Kentucky	-16.4	-8.3	-8.1	-\$1.555		
Louisiana	-15.3	-6.6	-8.7	-\$1.557		
Maine	-4.3	-1.8	-2.5	-\$412		
Maryland	-14.8	-6.5	-8.4	-\$1 545		
Massachusetts	-24 5	-10.5	-14.0	-\$2,881		
Michigan	-31.0	-13.9	-17.1	-\$3,069		
Minnesota	-23.6	-13.3	-10.3	-\$2,419		
Mississinni	-79	-2.7	-5.2	-\$668		
Missouri	-23.0	-12.8	-10.2	-\$2 134		
Montana	-2.9	-1 3	-1.6	-\$309		
Nebraska	-4.0	-15	-2.5	-\$448		
Nevada	-73	-3.1	-4.2	-\$734		
New Hampshire	-3.7	-15	-2.2	-\$416		
New Jersey	-24 5	-9.6	-15.0	-\$2 767		
New Mexico	-6.3	-2.8	-3.6	-\$595		
New York	-70.8	-3/1.8	-36.0	-\$8.604		
North Carolina	-70.8	-10.9	-30.0	-\$2,607		
North Dakota	-1 7	-0.8	-0.9	-\$220		
Ohio	-32.0	-12.3	-19.7	-\$220		
Oklahoma	-32.0	-12.5	-13.7	-\$3,274		
Oregon	-10.5	-5.1	-5.3	-\$1,017		
Pennsylvania	-10.5	-5.1	-3.5	-\$1,007		
Pennsylvania Rhodo Island	-35.5	-16	-19.8	-\$3,087		
South Carolina	-9.7	-1.0	-6.7	-\$020		
South Dakota	-1.5	-0.7	-0.7	-\$939		
	-1.5	-0.7	-0.0	-3100 ¢1.0EE		
Toxac	-10.0	-5.1	-13.5	-31,955 \$10.0E6		
litab	-111.7	-49.5	-02.2	-310,950 \$1.264		
Vormont	-14.7	-0.8	-8.0	-31,304		
Virginia	-2.7	-1.4	-1.2	->243		
Virginia Wochington	-18.3	-6.5	-9.7	->1,940		
washington	-11.6	-4.4	-7.2	-\$1,5/9		
west virginia	-4.3	-1.8	-2.5	->433		
vvisconsin	-13.5	-6.1	-7.4	-\$1,428		
wyoming	-1.1	-0.6	-0.5	-\$141		

 Table A-5. Difference in Enrollments, Funding, Employment and Gross State Products Between Scenarios 1 and 2 (6 and 12 Month Reduction Scenarios) (Note: Caseload differences after 12 months are minimal.)

	Caseload Health &						
	Difference Federal State			Social			
	After 6	Funding	Funding	Total	Assistance	All Other	Gross State
	Months	Difference	Difference	Employment	Employment	Employment	Product (mil
	(thou.)	(\$ mil.)	(\$ mil.)	(thou.)	(thou.)	(thou.)	\$)
US Total	7,545	24,861	3,395	522.8	242.0	280.8	54,388
Alabama	75	256	-14	5.0	1.9	3.1	477
Alaska	15	68	13	0.7	0.4	0.3	101
Arizona	210	703	51	14.4	6.5	7.9	1,358
Arkansas	65	291	3	4.2	2.0	2.2	389
California	720	2,279	240	52.5	23.9	28.6	6,071
Colorado	170	425	141	9.0	4.4	4.6	939
Connecticut	75	289	55	7.6	3.6	4.0	876
Delaware	20	84	11	1.7	0.8	0.9	213
Dist. Columbia	10	88	4	1.7	0.8	0.9	251
Florida	530	1,532	365	33.0	15.7	17.3	3,009
Georgia	265	782	128	14.7	6.5	8.2	1,501
Hawaii	35	112	24	1.9	0.9	1.0	228
Idaho	55	168	16	2.8	1.3	1.4	259
Illinois	340	589	247	14.5	7.0	7.5	1,623
Indiana	220	763	131	11.8	6.0	5.9	1,194
Iowa	45	201	4	3.8	1.6	2.2	413
Kansas	20	78	-11	1.9	0.5	1.4	220
Kentucky	220	781	70	9.2	4.8	4.4	872
Louisiana	150	523	54	9.6	4.8	4.8	957
Maine	30	130	26	2.6	1.3	1.2	251
Maryland	95	391	79	9.3	4.5	4.8	955
Massachusetts	150	490	132	14.7	7.0	7.7	1,708
Michigan	265	1,043	138	18.4	9.1	9.3	1,801
Minnesota	170	651	242	11.9	6.9	4.9	1,220
Mississippi	65	304	-2	4.3	2.0	2.3	367
Missouri	75	-208	-636	2.2	-4.0	6.2	271
Montana	30	148	22	1.9	1.0	0.9	209
Nebraska	30	85	9	1.9	0.8	1.1	216
Nevada	115	244	63	4.4	1.9	2.4	440
New Hampshire	35	67	41	2.1	0.9	1.2	236
New Jersey	165	423	119	15.0	6.2	8.8	1,675
New Mexico	60	305	10	4.2	2.3	1.9	391
New York	570	1,862	369	44.5	23.5	21.0	5,267
North Carolina	210	913	87	15.4	7.1	8.3	1,480
North Dakota	15	39	31	0.8	0.5	0.3	115
Ohio	230	908	64	19.5	8.7	10.8	1,960
Okianoma	115	405	-183	6.5	1.8	4.7	605
Oregon Denneutronic	110	389	59	6.7	3.4	3.4	681
Pennsylvania Dhodo Telond	225	8/8	1/4	21.7	10.7	11.0	2,220
Riloue Island	35	85	21	2.0	1.0	1.0	195
South Carolina	85	314	-1	5.5	2.1	3.4	530
	10	49	10	1.0	0.5	0.5	116
Tevas	95	368	-10	10.6	3./	6.9	1,131
litab	6/5	2,599	582	57.6	27.3	30.3	5,649
Vermont	110	359	64	/.6	3.5	4.1	/04
Virginia	15	86	16	1.5	0.8	0.7	13/
Washington	140	533	138	10.7	5.1	5.6	1,134
West Virginia	140	430	/9	8.2	3.8	4.4	1,072
Wisconsin	45	193	-9	2.6	1.2	1.4	259
Wyoming	150	323	118	6.9	3.4	3.5	/30
	5	43	12	0.6	0.1	0.5	78

Methodology

We modeled the economic impacts of changes in Medicaid enrollment after the end of the Public Health Emergency (PHE) and subsequent shifts in some enrollees to Children's Health Insurance Program (CHIP) or marketplace plans. The Medicaid enrollment changes are primarily based on the Urban Institute's September 2021 analysis by Matthew Buettgens and Andrew Green.⁴ We had separately analyzed Medicaid caseload changes and also projected continued increases through December 2021, followed by reductions that could take six to 12 months to be completed. Our estimates were similar to the Urban Institute estimates, but varied slightly because we used Medicaid enrollment data from the Centers for Medicare and Medicaid Services, while they used a blend of state and federal data and because they excluded elderly beneficiaries. Since there is relatively little volatility in enrollment of elderly beneficiaries, large enrollment losses seem unlikely in this population. We concurred that given the pattern of relatively flat applications and rising caseloads since March 2020, it is reasonable to project straight-line reductions to roughly prepandemic levels after the Public Health Emergency ends, using a range of six- to 12-month periods for the change. We realize that actual levels will depend on individual state administrative actions and federal oversight and that redetermination operations could be flawed in some states, leading to greater reductions. After our review, we elected to use Buettgens and Green's estimates for the sake of consistency. We added estimates of changes in Medicaid caseloads in Oklahoma and Missouri, which began Medicaid expansions in July and October 2021, respectively, using preliminary estimates of their caseload changes. We also modified federal and state funding estimates for those two states, incorporating a 90 percent FMAP rate for the newly eligible enrollees and the 5 percent funding bonus provided under the American Rescue Plan.

The Urban Institute report provided detailed state estimates of Medicaid enrollment assuming a six-month decline, which we used in our first six-month reduction scenario (Scenario 1). We adjusted these estimates for Scenario 2, which assumes that the caseload reductions decline evenly over 12 months rather than six months. Our estimates of federal funding changes include not only changes in Medicaid funding levels but estimates of increases in federal premium tax credits under Affordable Care Act health insurance marketplaces for some who lose Medicaid coverage but are eligible for subsidies under the health insurance marketplaces. The American Rescue Plan broadened eligibility for premium tax credits and low-cost plans in 2022, although it is not yet clear whether these changes will be extended.⁵ We assume that some who lose Medicaid take-up tends to be lower than Medicaid take-up⁶ and transitioning from Medicaid to the marketplaces will require new paperwork, which will create additional participation barriers. The estimates also include take-up of CHIP coverage among some children who lose Medicaid coverage, also assuming some loss because of additional paperwork barriers and premium/cost-sharing requirements that exist in many CHIP programs.⁷

Some who lose Medicaid after the PHE ends could shift into private health insurance coverage through their jobs or their spouses (or other family members); we expect that very few will purchase nonsubsidized individual health insurance because of its high price. We do not include entries into private insurance coverage in our economic models because, unlike the federal funding used to pay for Medicaid coverage, the funds to pay for private insurance are already contained within state economies. That is, if a person gains employer-sponsored coverage that is

60 percent financed by the employer and 40 percent financed by the individual, the additional health payments must be offset by reductions in other employer or individual consumption: if employers spend more on health insurance, they would spend less on wages or other goods and if individuals spend more on health coverage, they would spend less on other consumer goods. Thus, increased spending for health services would be offset by less spending in other parts of the state economies, generating scant net gain in economic activity. In contrast, the gain or loss of federal Medicaid funds represents an external change to funding resources available to each state and would have a more direct impact on changes in resource inputs to the states.

After we compute federal and state health care spending changes, we use these as inputs to resources in the PI+ (version 2.4) system of the Regional Economic Models Inc. (REMI) economic model. REMI PI+ is a dynamic economic modeling system, widely used by state and federal agencies, universities, and other analysts to estimate the employment and economic impact of policy changes.⁸ We and other researchers have used earlier versions of the REMI model in other health policy analyses.⁹

The principle of how changes in federal funding impact the broader economy is called the "multiplier" effect, represented in Figure A-1. Reductions in federal funding reduce health care spending, which in turn lowers income to health staff and purchases of vendor goods, and ultimately reduces purchases of consumer goods, like food, rent, and utilities, creating net losses to states' employment levels and economies. Although the funds first affect health care providers and staff, they trickle down to limit resources for other sectors, including retail, construction, finance, etc.

We used REMI's March 2021 forecast update¹⁰ which includes data from the U.S. Economic Outlook for 2020 to 2022 of the University of Michigan's Research Seminar in Quantitative Economics (Feb. 2021) and the Congressional Budget Office's Budget and Economic Outlook for 2021 to 2031 (Feb. 2021). The system computes baseline employment and economic



forecasts and then alternative forecasts based on the inputs introduced. The difference between the baseline and the alternatives are the estimated changes in employment and state economies.

We used the REMI PI+ model to project the economic and employment effects of the drop in Medicaid enrollment which will follow the end of the PHE. We estimated state-specific changes in federal and state health care spending, as shown in Tables A-1, A-3, and A-5. The declines in federal health care spending lead to lower inputs into health care in the states. In addition, we modeled the changes in state spending as shifts between general state government output and health care spending (e.g., if state spending on health care is projected to increase after the end of the PHE, we model this as an increase in health care spending and a decrease in general state government output). These state-level estimates were then applied as policy changes (i.e., inputs) to the economic baselines in the REMI PI+ model. The REMI PI+ system assumes a complex system of relationships in the national and state economies as illustrated below.¹¹



Notes

¹ Edwin Park et al., *Build Back Better Act: Health Coverage Provisions Explained* (Georgetown Center for Children and Families, Nov. 2021).

² Senate Finance Committee, "<u>Title XXII — Comprehensive Paid Leave Benefits. Sec. 2201. Entitlement</u> to Comprehensive Paid Leave Benefits," United States Senate, Dec. 11, 2021.

³ Jeremy Blackman, "<u>Texas Cut Medicaid Staffing During the Pandemic. Millions Are Now at Risk of Being Dropped from the Program</u>," *Houston Chronicle*, Jan. 25, 2022.

⁴ Matthew Buettgens and Andrew Green, <u>What Will Happen to Unprecedented High Medicaid</u> <u>Enrollment After the Public Health Emergency?</u> (Urban Institute, Sept. 2021).

⁵ Matthew Rae et al., <u>How the American Rescue Plan Act Affects Subsidies for Marketplace Shoppers and</u> <u>People Who Are Uninsured?</u> (Henry J. Kaiser Family Foundation, Mar. 2021).

⁶ Fredric Blavin et al., "<u>Medicaid Versus Marketplace Coverage for Near-Poor Adults: Effects on Out-of-Pocket Spending and Coverage</u>," *Health Affairs* 37, no 2 (Feb. 2018): 299–307.

⁷ Tricia Brooks et al., <u>Medicaid and CHIP Eligibility, Enrollment, and Cost Sharing Policies as of</u> January 2021: Findings from a 50-State Survey (Henry J. Kaiser Family Foundation, Mar. 2021).

⁸ REMI, "<u>PI+</u>," n.d.

⁹ John Z. Ayanian et al., "Economic Effects of Medicaid Expansion in Michigan," New England Journal of Medicine 376, no. 5 (Feb. 2, 2017): 407–10; Leighton Ku and Erin Brantley, <u>The Economic and</u> <u>Employment Effects of Medicaid Expansions Under the American Rescue Plan</u> (Commonwealth Fund, May 2021); and Leighton Ku et al., <u>The American Health Care Act: Economic and Employment</u> <u>Consequences for States</u> (Commonwealth Fund, June 2017).

¹⁰ REMI, "Forecast Updates," Mar. 2021.

¹¹ REMI, *Model Equations* (REMI, 2020).