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# Federal Funding Insulated State Budgets From Increased Spending Related To Medicaid Expansion

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**ABSTRACT** As states weigh whether to expand Medicaid under the Affordable Care Act (ACA) and Medicaid reform remains a priority for some federal lawmakers, fiscal considerations loom large. As part of the ACA's expansion of eligibility for Medicaid, the federal government paid for 100 percent of the costs for newly eligible Medicaid enrollees for the period 2014–16. In 2017 states will pay some of the costs for new enrollees, with each participating state's share rising to 10 percent by 2020. States continue to pay their traditional Medicaid share (roughly 25–50 percent, depending on the state) for previously eligible enrollees. We used data for fiscal years 2010–15 from the National Association of State Budget Officers and a difference-in-differences framework to assess the effects of the expansion's first two fiscal years. We found that the expansion led to an 11.7 percent increase in overall spending on Medicaid, which was accompanied by a 12.2 percent increase in spending from federal funds. There were no significant increases in spending from state funds as a result of the expansion, nor any significant reductions in spending on education or other programs. States' advance budget projections were also reasonably accurate in the aggregate, with no significant differences between the projected levels of federal, state, and Medicaid spending and the actual expenses as measured at the end of the fiscal year.

**T**he expansion of eligibility for Medicaid under the Affordable Care Act (ACA) has been a subject of intense political debate and economic analysis. Thus far, thirty-one states and the District of Columbia have elected to expand coverage under the law, which included generous federal funding: 100 percent of the costs for newly eligible adults through 2016, eventually declining to 90 percent by 2020.<sup>1</sup> However, other aspects of the ACA could potentially have increased state spending on Medicaid even during the period when the federal government covered 100 percent of the costs of the expansion population. Several features of the law have increased

enrollment among children and adults who were already eligible for Medicaid before 2014.<sup>2,3</sup> This so-called woodwork effect or welcome mat effect leaves states responsible for a larger share of costs: States are reimbursed for these beneficiaries at the traditional federal match rate, which currently ranges from 50 percent to 74 percent depending on the state. This has raised concerns that Medicaid expansion might be more costly to states than originally anticipated.<sup>4</sup>

There have also been concerns about whether inaccurate state projections of the costs of Medicaid expansion could lead to major budget shortfalls,<sup>5</sup> which could force states to cut spending in other areas—including education and

transportation.<sup>6</sup> As some leading federal policy makers continue to support changes to Medicaid funding, such as replacing the current match rate with a block grant or per capita allotment system,<sup>7</sup> understanding the impact of the Medicaid expansion on state budgets thus far has important implications.

Since the implementation of the ACA's Medicaid expansion, there have been several targeted analyses of its impact on state budgets. One study that analyzed budget reports in eleven expansion states demonstrated savings in state Medicaid spending, as some previous categories of eligibility (such as "medically needy" individuals) were moved into the new ACA expansion group that received an enhanced match rate, while states simultaneously reduced their spending on programs for the uninsured.<sup>8</sup> Other studies examined several expansion states and found increased enrollment as a result of the welcome mat effect, with modest increases in state costs, but they also found offsetting savings from reduced spending on state programs for the uninsured and for behavioral health.<sup>9,10</sup> Several states have also published their own reports, with variations on these general findings.<sup>1</sup> However, to our knowledge, until now there has been no systematic quantitative analysis of these budgetary effects across all states, particularly comparing the experiences of expansion versus nonexpansion states.

The objective of our study was to analyze state budget reports for fiscal years 2010–15, to assess the impacts of states' Medicaid expansion decisions on total spending, spending on Medicaid and other categories, and the source of funds (federal versus state). We also compared differences between states' budget projections at the outset of each fiscal year versus the year-end actual amounts to assess the projections' accuracy.

## Study Data And Methods

**DATA** Our primary data came from the annual State Expenditure Reports released by the National Association of State Budget Officers (NASBO). NASBO is an independent, nonpartisan professional organization whose membership comprises the heads of state finance departments, state chief budget officers, and their deputies. The State Expenditure Reports, which were first issued in 1987, collect state-provided figures for fiscal year spending and report spending along two distinct dimensions: the category of services the funds were spent on and the source (federal or state) of funds used for that spending. For clarity, we refer below to these two dimensions as the category and the source of

spending.

NASBO data include information about the following categories of spending: Medicaid, elementary or secondary education, higher education, public assistance, transportation, corrections, and "all other." The reports also describe the following sources of spending: federal funds, state general revenues, other state sources, and bonds.

Finally, each report includes actual spending figures for the previous fiscal year, as well as each state's projected spending figures for the upcoming fiscal year. Published information on actual spending is now current through the end of fiscal year 2015.<sup>11</sup> Of note, in forty-six states, the fiscal year begins on July 1, which means that our data extend through mid-2015 for most states (eighteen months into the ACA's Medicaid expansion, which began January 2014).<sup>12</sup>

Secondary data used in our analysis included unemployment rates and per capita income from the Bureau of Labor Statistics and information on Medicaid expansion status and eligibility criteria from previous research, the Henry J. Kaiser Family Foundation, and the Centers for Medicare and Medicaid Services.<sup>2,13–16</sup>

**DATA ANALYSIS** Our analytical approach was a difference-in-differences model. In this approach, we compared changes before and after 2014 in Medicaid expansion states to the analogous changes occurring over the same time period in nonexpansion states. Each observation was at the state level, with one observation per fiscal year—yielding a sample of 300 state-year observations (the District of Columbia is not included in the NASBO data). Each observation was given equal weight in the analysis, regardless of state size.

We had two sets of outcomes. First, we examined total spending and source of spending (federal funds, state funds, and bonds), and in sensitivity analyses, we examined state general revenue and other state funds separately. Second, we examined categories of spending, including Medicaid and the six other categories in the NASBO data outlined above. For descriptive purposes, we present summary statistics and exhibits using percentages of the total state budget or per capita spending, based on state population totals from the American Community Survey. Our primary regression models that evaluated the expansion effects used the logarithm of spending to address the skewed distribution of the outcomes. This means that our regression results provided estimates of the relative change in each outcome.

Our main model was a simple difference-in-differences approach that controlled directly for the year, state, annual state unemployment

rate, and per capita income. The variable of interest was an indicator variable equal to 1 for states that had expanded Medicaid under the ACA at some point during that fiscal year and equal to 0 otherwise. Nineteen states expanded Medicaid during fiscal year 2014, and three more did so during fiscal year 2015. States that expanded Medicaid after the end of the fiscal year on June 30, 2015, were treated as nonexpansion states. We treated the five states that partially expanded Medicaid in 2011–13 as not having fully expanded until 2014, since those early expansions were much smaller in scope than the 2014 ACA version.<sup>17</sup>

In an additional set of models, we tested whether the budget changes we detected were linked not only to the presence of Medicaid expansion, but also to the size of that expansion. In this model we replaced the binary indicator for “Medicaid expansion” with a measure of the estimated percentage of a standardized population of nonelderly people who would have become newly eligible for Medicaid in each state. This measure is based on an analysis of data from the American Community Survey and previously published research on the Medicaid expansion.<sup>2</sup> This “newly eligible” variable was equal to 0 percent in all nonexpansion states and 0 percent in expansion states before 2014, and it reached a maximum of 19.7 percent in Arkansas for 2014–15.

Lastly, we analyzed not only the actual spending data but also the projected spending amounts from the beginning of each fiscal year. In this analysis, each state-year combination was present twice—with an actual data point and a projected data point. We specified the model as described above but added an interaction term for each covariate with an indicator for projected data. This let us directly compare the anticipated budgetary impacts of Medicaid expansion and the actual impacts.

Data analysis was conducted using Stata, version 14.0. Difference-in-differences models used robust standard errors clustered at the state level.

**LIMITATIONS** This study had several limitations. First, NASBO state budget data are voluntarily reported by states and do not undergo any official audit or independent review. Thus, they may be subject to reporting error, strategic response, or definitional differences across states. Nonetheless, the data are cited regularly by policy makers and independent analysts such as the Congressional Budget Office, which offers support for their validity.<sup>18,19</sup> Moreover, our use of state fixed effects should have minimized the bias from any stable differences in how states reported their expenditures, and the use of log

## Some of the original state budget concerns voiced regarding Medicaid expansion have not yet materialized.

models limited the influence of any outliers in the data. In our view, the data represent a unique and timely source of information on state budgets, with benefits that outweigh these particular limitations.

Second, the spending categories in the data were broad enough that they may have obscured important policy-relevant offsets related to Medicaid expansion. The possibilities include reduced spending for one category of eligibility in the program partially supplanted by the newly eligible adult category, or offsets in specific state-funded services such as those related to mental health. For those sorts of changes, more detailed analyses of individual state budgets of the kind discussed above may be more appropriate.<sup>8,10</sup>

Third, as with any difference-in-differences model, our approach assumed that, absent an intervention (in this case, the Medicaid expansion), trends in outcomes would have been similar in both groups (in this case, the expansion and nonexpansion states). One potential threat to this assumption is the sharp increase in federal funding to states under the American Recovery and Reinvestment Act of 2009 (sometimes referred to as the “stimulus package”) in fiscal years 2009–10 and the subsequent decline in 2011.<sup>11</sup> While this volatility may have introduced additional imprecision into our estimates, stimulus money went to expansion and nonexpansion states alike, which means that it was unlikely to bias our analysis. Furthermore, we directly tested whether spending trends by funding source and category were diverging before 2014 based on expansion status, and the results of this analysis support our general approach. However, it is still possible that other time-varying omitted variables affected our results. We adjusted for both state-year unemployment rates and per capita incomes to address one of the most likely potential threats to our model: differential economic growth across states.

Finally, our results reflect the first two fiscal

years of the Medicaid expansion, which captured only the first eighteen months after the expansion was implemented. Previous research and government statistics indicate that Medicaid enrollment continued to grow in late 2015 and 2016,<sup>20,21</sup> which means that our results likely underestimate the budgetary implications of the expansion as of early 2017. Moreover, the financing of the expansion changed in 2017, with the state responsibility for the costs for newly eligible adults rising from 0 percent to 5 percent (and slated to reach 10 percent by 2020, if there is no legislative change before then). Future research will be necessary to assess these budget effects as state Medicaid spending increases.

## Study Results

We found that patterns of funding sources and categories of spending were similar in expansion and nonexpansion states during 2010–13, before expansion. State general revenues accounted for 36–38 percent of spending, other state funds accounted for another 28–30 percent, and federal funds accounted for 35 percent in nonexpansion states and 30 percent in expansion states (Exhibit 1). Medicaid was the largest category (approximately 22 percent) of overall spending—which includes matching federal funds—in both groups of states.

Before 2014 the trends in unadjusted per capita spending for the three largest categories of spending were quite similar in expansion and nonexpansion states (Exhibit 2), which offers support for our difference-in-differences approach. We formally tested these trends in growth in Appendix Exhibit A1, described at more length below.<sup>22</sup> Starting in 2014, spending for Medicaid increased substantially in expansion states, while there were no obvious differential changes in educational spending. Transportation spending in expansion states was slightly smaller than in nonexpansion states before 2014, but by 2015 it had surpassed that spending in nonexpansion states.

In our regression analysis of the Medicaid expansion's impact on source and category of spending, we found that expansion led to significant increases in total spending (5.8 percent) and in spending using federal funds (12.2 percent) (Exhibit 3). The change in spending using state funds (2.4 percent) was not significant. In terms of the category of spending, we found that expansion produced a large and significant increase (11.7 percent) in overall Medicaid expenditures, as expected. We found no significant reductions in spending on other categories and some suggestive evidence of increased spending after expansion on transportation

### EXHIBIT 1

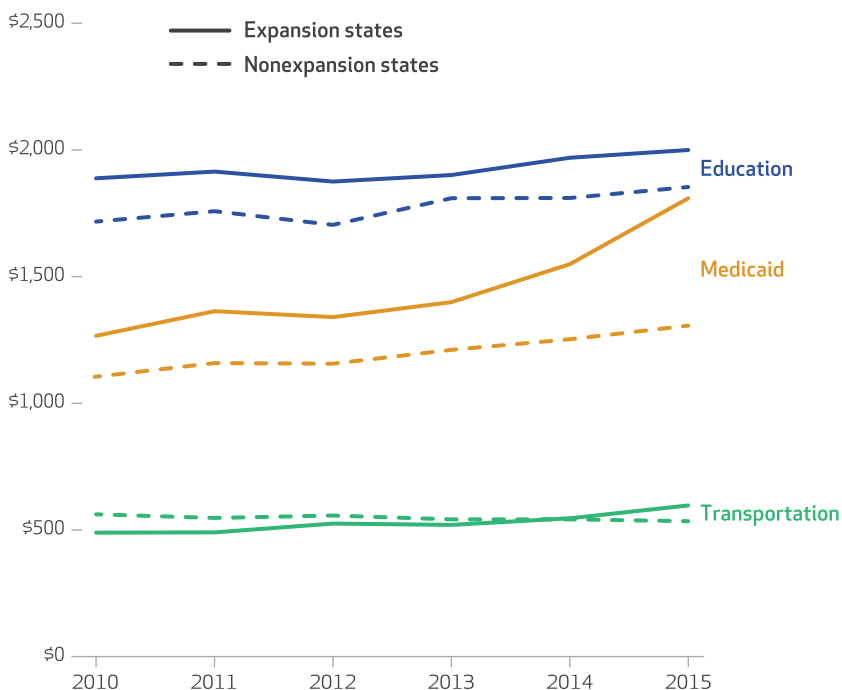
State budget sources and categories of spending in fiscal years 2010–2013, by Medicaid expansion status

Spending source/category	Nonexpansion states	Expansion states
<b>SOURCE OF SPENDING</b>		
State general revenue	36.1%	37.9%
Federal funds	34.6	29.9
Other state funds	28.0	29.9
Bonds	1.3	2.3
<b>CATEGORY OF SPENDING</b>		
Medicaid	21.8%	22.0%
K–12 education	18.7	20.0
Higher education	13.3	10.4
Transportation	9.0	8.1
Corrections	2.9	2.8
Public assistance	0.8	1.4
Other	33.6	35.3

**SOURCE** Authors' analysis of State Expenditure Reports from the National Association of State Budget Officers. **NOTES** "Medicaid expansion status" refers to whether or not a state expanded eligibility for Medicaid under the Affordable Care Act by fiscal year 2015; the Medicaid expansions began in January 2014. Percentages may not sum to 100 because of rounding.

### EXHIBIT 2

State per capita spending on major spending categories in fiscal years 2010–15, by Medicaid expansion status



**SOURCE** Authors' analysis of State Expenditure Reports from the National Association of State Budget Officers, combined with information on each state's annual population from the American Community Survey. **NOTES** "Medicaid expansion status" refers to whether or not a state expanded eligibility for Medicaid under the Affordable Care Act by fiscal year 2015. "Education" here is the total of K–12 education and higher education. All outcomes are measured in nominal dollars per capita.

## EXHIBIT 3

## Changes in state spending associated with the Medicaid expansion, FY 2010–15

Spending source/ category	Total change resulting from expansion		Change resulting from size of expansion	
	Percent change	p value	Change per 1% newly Medicaid eligible	p value
Total spending	5.8%	0.002	0.32%	0.048
<b>SOURCE OF SPENDING</b>				
Federal funds	12.2%	0.006	0.51%	0.016
Spending from bonds	34.9	0.21	1.12	0.54
State funds	2.4	0.24	0.17	0.32
State general revenue	2.9	0.35	-0.04	0.81
Other state funds	3.1	0.54	0.39	0.28
<b>CATEGORY OF SPENDING</b>				
Medicaid	11.7%	<0.001	0.86%	<0.001
K–12 education	-0.9	0.76	-0.08	0.70
Higher education	-5.0	0.25	-0.66	0.15
Transportation	8.0	0.062	0.42	0.20
Corrections	-0.4	0.88	-0.17	0.35
Public assistance	3.6	0.60	-0.21	0.67
Other	10.1	0.057	0.62	0.13

**SOURCE** Authors' analysis of State Expenditure Reports from the National Association of State Budget Officers. **NOTES** There were 300 state-year observations. The exhibit shows difference-in-differences estimates, which compared changes before and after 2014 (when the Medicaid expansions began) in states that expanded Medicaid to changes over the same period in states that did not. Changes resulting from the size of the expansion are based on the estimated percentage of nonelderly people who would have become eligible for Medicaid in each state, as described in the text. All models adjusted for state annual per capita income and unemployment rate, as well as year and state, and used the logarithm of spending as the outcome. Robust standard errors were clustered by state.

(8.0 percent) and “other” (10.1 percent).

We also assessed the budget effects based on the size of each state's Medicaid expansion. We found that the increase in total spending, spending using federal funds, and Medicaid spending tracked closely with the percentage of each state's population that became newly eligible for Medicaid. These estimates can be interpreted as the change in spending for each additional 1 percent of the nonelderly population becoming newly eligible for Medicaid. For instance, we found that each additional 1 percent in an expansion state was linked to 0.86 percent growth in state Medicaid spending. Using this more refined measure of expansion, we still did not see any significant change in spending using state funds (0.17 percent) or any significantly reduced spending on any non-Medicaid categories. However, using this measure, we no longer found any significant increases in spending on transportation or “other.”

Finally, we compared projected budget data with the actual results to assess the accuracy of the states' advance budget projections. We found that the projected effects at the beginning of the fiscal year and the actual effects did not differ significantly in any case (Exhibit 4). Differences

were also modest for nearly all measures (other than spending from bonds, for which the estimates were highly imprecise). For instance, the difference in the projected versus actual impact of expansion was just 0.8 percent for total spending.

Appendix Exhibit A1 presents an analysis of the trends in our spending outcomes before 2014.<sup>22</sup> We found no evidence of divergent trends between expansion and nonexpansion states in our key spending measures. For instance, the difference between the two groups of states in total spending per year was just 0.3 percent per year, which was not significant ( $p = 0.74$ ). Differential changes in state and federal funding levels, as well as in Medicaid spending, were similarly small and nonsignificant.

We did find that spending on higher education was declining in expansion states relative to nonexpansion states before 2014 (-7.7 percent per year;  $p = 0.002$ ). This trend would bias us toward finding a spurious reduction in spending on higher education after Medicaid expansion. While our estimated change in higher education spending (Exhibit 3) was consistent with this trend, that estimate was not significant.

## Discussion

In this study we analyzed official budget reports from all fifty states for fiscal years 2010–15 (a period that extended roughly 1.5 years into the ACA's Medicaid expansion). As expected, we found that expansion led to significant increases in spending on Medicaid—11.7 percent, on average, during FY 2010–15—but this occurred almost entirely based on increased spending using federal funds. We detected no significant changes in spending using state funds and no resulting changes in spending on education, transportation, or other state programs. Thus, while some politicians and analysts have voiced concerns that Medicaid expansion could lead to increased state spending as a result of the welcome mat effect or squeeze out competing spending for other priorities such as education, we found no evidence to support either of these concerns by 2015.

Given evidence that Medicaid enrollment among previously eligible people has increased under the ACA, how can we reconcile this fact with our finding that state spending did not increase? Our study design focused on the impact of state Medicaid expansion decisions instead of the impact of the ACA as a whole. While the welcome mat effect under the ACA likely has increased state spending on Medicaid, our results suggest that whether or not a state has chosen to expand Medicaid has had little impact

on this phenomenon. This is consistent with other research that demonstrated a prominent welcome mat effect in both expansion and non-expansion states.<sup>2</sup> In addition, the fact that many of the previously eligible people are likely to be children means that the overall budget implications are smaller, given that children are relatively inexpensive to insure.<sup>3</sup>

While Medicaid spending increased substantially in expansion states as expected, we did not see any spillover effects to suggest that Medicaid crowded out other state priorities in the budget. If anything, we found suggestive but inconsistent evidence that Medicaid expansion and the major increase in federal funds allowed expansion states to address other priorities, such as transportation (8 percent spending increase) and “other” (10 percent spending increase), which encompassed spending for public health programs, employee pensions, environmental programs, housing, and the Children’s Health Insurance Program (CHIP) in states that administered CHIP separately from Medicaid. However, these changes did not track closely with the size of a state’s Medicaid expansion, which makes it unclear how directly they were related to expansion.

Finally, we found that state budget projections in the aggregate were reasonably accurate at assessing likely changes in spending attributable to the Medicaid expansion. This belies some of the concerns about potentially large cost overruns in the program associated with the ACA’s expansion.<sup>4</sup> However, while in the aggregate the projections performed well, of course individual states’ experiences varied widely. In our data, the state-level discrepancy between projected and actual Medicaid spending in fiscal years 2013–15 ranged from –26 percent to 46 percent.

## Conclusion

We found that the first two fiscal years of the ACA’s Medicaid expansion led to large increases in federal spending on Medicaid, but expansion states did not experience any significant increase in state-funded expenditures, and there is no evidence that expansion crowded out funding for other state priorities. This is consistent with

### EXHIBIT 4

**Projected and actual changes in state spending associated with the Medicaid expansion, FY 2010–15**

Spending source/ category	Change resulting from expansion		Difference (actual minus projected)	p value for difference
	Projected	Actual		
Total spending	6.1%	6.9%	0.8%	0.64
<b>SOURCE OF SPENDING</b>				
Federal funds	17.0%	13.5%	–3.5%	0.42
Spending from bonds	0.1	31.8	31.7	0.18
State funds	1.0	3.6	2.6	0.30
State general revenue	3.3	3.5	0.2	0.90
Other state funds	0.5	4.3	3.8	0.43
<b>CATEGORY OF SPENDING</b>				
Medicaid	9.7%	12.6%	2.9%	0.31
K–12 education	–1.0	–1.0	0.0	0.98
Higher education	–10.1	–5.1	5.0	0.15
Transportation	12.3	9.4	–2.9	0.34
Corrections	1.1	–0.2	–1.3	0.75
Public assistance	2.5	3.8	1.3	0.93
Other	11.3	11.3	0.0	0.99

**SOURCE** Authors’ analysis of State Expenditure Reports from the National Association of State Budget Officers. **NOTES** For the projected and actual estimates, there were 540 state-year observations: Five states that reported the same amounts for projected and actual estimates in at least one year were excluded from the analysis. All models adjusted for state annual per capita income and unemployment rate, as well as year and state, and used the logarithm of spending as the outcome. Robust standard errors were clustered by state.

the intent of the ACA’s generous federal funding of the Medicaid expansion and indicates that enrollment of previously eligible people—for whom states receive only partial federal reimbursement—did not lead to higher state spending in expansion states, compared to non-expansion states.

As state and federal policy makers consider the future of the ACA and the potential restructuring of Medicaid financing more broadly,<sup>23</sup> our findings indicate that some of the original state budget concerns voiced regarding Medicaid expansion have not yet materialized. However, given states’ heavy reliance on the increase in federal funding, any substantial reduction in federal Medicaid support to states would undoubtedly undermine the coverage gains achieved to date and would likely put other state budgetary priorities at risk. ■

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## NOTES

- 1 Antonisse L, Garfield R, Rudowitz R, Artiga S. The effects of Medicaid expansion under the ACA: findings from a literature review [Internet]. Menlo Park (CA): Henry J. Kaiser Family Foundation; 2016 Jun 20 [cited 2017 Mar 3]. Available from: <http://kff.org/medicaid/issue-brief/the-effects-of-medicaid-expansion-under-the-aca-findings-from-a-literature-review/>
- 2 Freaun M, Gruber J, Sommers BD. Premium subsidies, the mandate, and Medicaid expansion: coverage effects of the Affordable Care Act [Internet]. Cambridge (MA): National Bureau of Economic Research; 2016 Apr [cited 2017 Mar 3]. (NBER Working Paper No. 22213). Available for download (fee required) from: <http://www.nber.org/papers/w22213>
- 3 Kenney GM, Haley JM, Pan CW, Lynch V, Buettgens M. Children's coverage climb continues: uninsurance and Medicaid/CHIP eligibility and participation under the ACA [Internet]. Washington (DC): Urban Institute; 2016 May 10 [cited 2017 Mar 3]. (Research Report). Available from: <http://www.urban.org/research/publication/childrens-coverage-climb-continues-uninsurance-and-medicaidchip-eligibility-and-participation-under-aca>
- 4 Alonso-Zaldívar R (Associated Press). Medicaid surge triggers cost concerns for states. *Boston Globe* [serial on the Internet]. 2014 May 27 [cited 2017 Mar 3]. Available from: <https://www.bostonglobe.com/news/nation/2014/05/26/medicaid-surge-triggers-cost-concerns-for-states/IPOJoELIXnZWbUZVXTMWJl/story.html>
- 5 Sommers BD, Swartz K, Epstein A. Policy makers should prepare for major uncertainties in Medicaid enrollment, costs, and needs for physicians under health reform. *Health Aff (Millwood)*. 2011; 30(11):2186–93.
- 6 Miller D. Growing Medicaid budgets squeezing out other priorities. Council of State Governments E-Newsletter [serial on the Internet]. January/February 2017 [cited 2017 Mar 24]. Available from: [http://www.csg.org/pubs/capitolideas/enews/issue86\\_3.aspx](http://www.csg.org/pubs/capitolideas/enews/issue86_3.aspx)
- 7 A Better Way. Health care [Internet]. Washington (DC): A Better Way; 2016 Jun 22 [cited 2017 Mar 3]. Available from: [http://abetterway.speaker.gov/\\_assets/pdf/ABetterWay-HealthCare-PolicyPaper.pdf](http://abetterway.speaker.gov/_assets/pdf/ABetterWay-HealthCare-PolicyPaper.pdf)
- 8 Bachrach D, Boozang P, Herring A, Reyneri D (Manatt Health). States expanding Medicaid see significant budget savings and revenue gains [Internet]. Princeton (NJ): Robert Wood Johnson Foundation; 2016 Mar [cited 2017 Mar 3]. Available from: <http://www.rwjf.org/en/library/research/2015/04/states-expanding-medicaid-see-significant-budget-savings-and-rev.html>
- 9 Dorn S, Francis N, Snyder L, Rudowitz R. The effects of the Medicaid expansion on state budgets: an early look in select states [Internet]. Menlo Park (CA): Henry J. Kaiser Family Foundation; 2015 Mar 11 [cited 2017 Mar 3]. Available from: <http://kff.org/medicaid/issue-brief/the-effects-of-the-medicaid-expansion-on-state-budgets-an-early-look-in-select-states/>
- 10 Ayanian JZ, Ehrlich GM, Grimes DR, Levy H. Economic effects of Medicaid expansion in Michigan. *N Engl J Med*. 2017;376(5):407–10.
- 11 National Association of State Budget Officers. State expenditure report: examining fiscal 2014–2016 state spending [Internet]. Washington (DC): NASBO; 2016 [cited 2017 Mar 3]. Available for download from: <http://www.nasbo.org/mainsite/reports-data/state-expenditure-report>
- 12 The fiscal year begins April 1 in New York, September 1 in Texas, and on October 1 in Alabama and Michigan.
- 13 Heberlein M, Brooks T, Aiker J, Artiga S, Stephens J. Getting into gear for 2014: findings from a 50-state survey of eligibility, enrollment, renewal, and cost-sharing policies in Medicaid and CHIP, 2012–2013 [Internet]. Washington (DC): Kaiser Commission on Medicaid and the Uninsured; 2013 Jan [cited 2017 Mar 3]. Available from: <https://kaiserfamilyfoundation.files.wordpress.com/2013/05/8401.pdf>
- 14 Medicaid.gov. Medicaid and CHIP eligibility levels [Internet]. Baltimore (MD): Centers for Medicaid and Medicare Services; [cited 2016 Mar 30]. Available from: <https://www.medicaid.gov/medicaid-chip-program-information/downloads/medicaid-and-chip-eligibility-levels-table.pdf>
- 15 Henry J. Kaiser Family Foundation. Status of state action on the Medicaid expansion decision [Internet]. Menlo Park (CA): KFF; 2017 Jan 1 [cited 2017 Mar 3]. Available from: <http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/>
- 16 Bureau of Labor Statistics. State employment and unemployment archived news releases [Internet]. Washington (DC): BLS; [last modified 2017 Feb 15; cited 2017 Mar 30]. Available from: <https://www.bls.gov/bls/news-release/laus.htm>
- 17 Sommers BD, Arntson E, Kenney GM, Epstein AM. Lessons from early Medicaid expansions under health reform: interviews with Medicaid officials. *Medicare Medicaid Res Rev*. 2013;3(4):E1–23.
- 18 Congressional Budget Office. The budget and economic outlook: fiscal years 2005 to 2014 [Internet]. Washington (DC): CBO; 2004 Jan [cited 2017 Mar 3]. Available from: <https://www.cbo.gov/sites/default/files/108th-congress-2003-2004/reports/01-26-budgetoutlook-entirereport.pdf>
- 19 Congressional Budget Office. The impact of unauthorized immigrants on the budgets of state and local governments [Internet]. Washington (DC): CBO; 2007 Dec [cited 2017 Mar 3]. Available from: <https://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/87xx/doc8711/12-6-immigration.pdf>
- 20 Centers for Medicare and Medicaid Services. Medicaid and CHIP August 2016 application, eligibility, and enrollment data [Internet]. Baltimore (MD): CMS. Table 1A, Medicaid and CHIP: July and August 2016 monthly enrollment updated October 2016; [cited 2017 Mar 24]. Available from: <https://www.medicaid.gov/medicaid/program-information/downloads/updated-august-2016-enrollment-data.pdf>
- 21 Sommers BD, Blendon RJ, Orav EJ, Epstein AM. Changes in utilization and health among low-income adults after Medicaid expansion or expanded private insurance. *JAMA Intern Med*. 2016;176(10):1501–9.
- 22 To access the Appendix, click on the Appendix link in the box to the right of the article online.
- 23 Chatterjee P, Sommers BD. The economics of Medicaid reform and block grants. *JAMA Forum* [serial on the Internet]. 2017 Jan 27 [cited 2017 Mar 3]. Available from: <https://newsatjama.jama.com/2017/01/27/jama-forum-the-economics-of-medicaid-reform-and-block-grants/>