Long-Term Trends in Medicaid Spending by the States

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ABSTRACT

After remaining relatively stable between 2004 and 2010, Medicaid spending as a proportion of overall state expenditure has been rising in the current decade. This trend may be expected to continue in the states participating in Medicaid expansion as the federal share of spending on newly eligible beneficiaries falls from 100 percent in 2016 to 90 percent by 2020. The Medicaid spending increase is largely the result of greater enrollment and appears to be displacing spending on other state priorities such as education and transportation. However, I did not find strong evidence that Medicaid spending is directly leading to greater borrowing by states. After 2020, increased nursing home utilization by the Baby Boomer generation should place further upward pressure on state Medicaid expenditures.

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Is Medicaid crowding out other categories of state spending? Given the rapid growth of the program, Medicaid crowd-out has been a concern for state budget officials and policy researchers. As the States Project noted in 2012, "Medicaid costs have escalated owing to increased enrollment and rising health care costs, threatening to 'crowd out' other state priorities like education and infrastructure."[1]

To measure this crowd-out effect, I gathered state spending and debt data from the National Association of State Budget Officers (NASBO), the Bureau of the Census, and Comprehensive Annual Financial Reports (CAFRs) prepared by the states themselves. The dataset and visualizations accompanying this report cover state fiscal year (FY) 2000 through FY 2014. I also consider some longer time series of actual and projected data.

RAPID GROWTH AT THE FEDERAL LEVEL

Medicaid is a shared responsibility of the federal and state governments.[2] The federal contribution varies over time and between states. Figure 1 shows actual federal Medicaid spending in nominal dollars for federal FY 2000 through FY 2014[3] and Congressional Budget Office (CBO) baseline projections from 2015 through 2025. Over this period, federal spending on the Medicaid program is expected to quintuple. By looking at Medicaid spending as a share of nominal GDP, I can adjust for the effects of inflation and economic growth to get a better measure of the fiscal burden the program imposes. Over the entire quarter century, federal spending on Medicaid as a share of GDP rises by 84 percent, from 1.16 percent to 2.14 percent, as shown in figure 2. However, most of the growth

1. The States Project, *The State of the States 2012*, http://www.thestatesproject.org/wp-content/uploads/2012/Full_Report.pdf.
2. The District Columbia and a number of US territories also participate in the program but are beyond the scope of this report.
3. Federal fiscal years begin on October 1 and end on September 30.

FIGURE 1. FEDERAL MEDICAID SPENDING IN BILLIONS OF DOLLARS

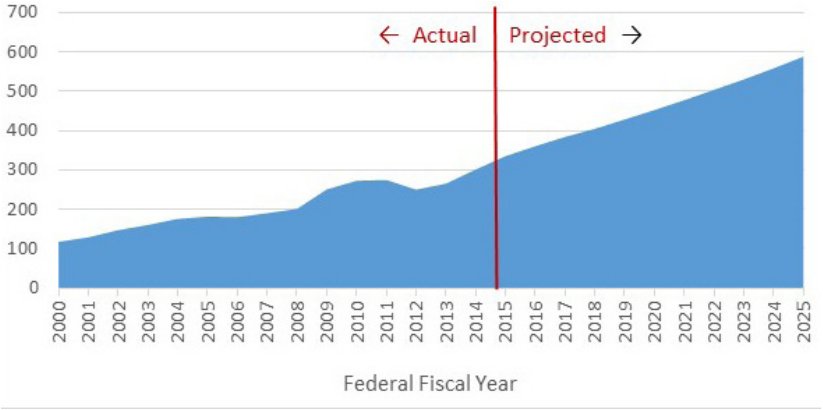
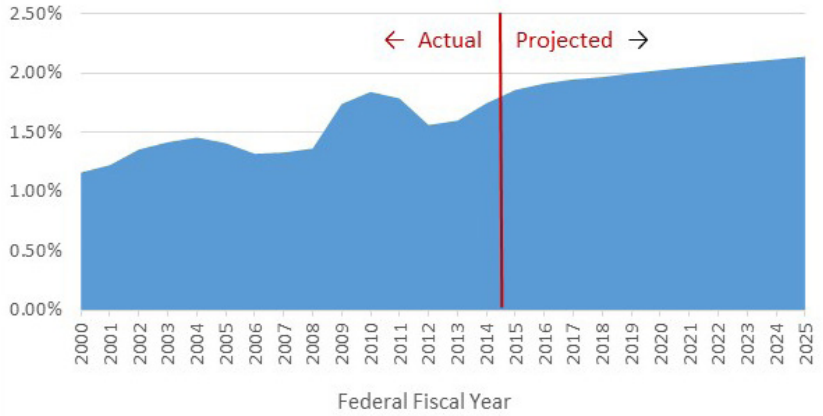


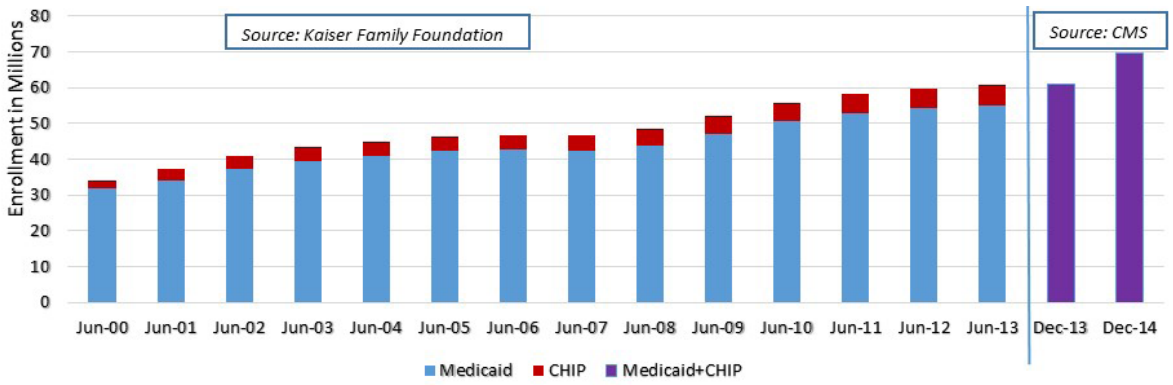
FIGURE 2. FEDERAL MEDICAID SPENDING AS A PERCENTAGE OF GDP



occurs before 2004 and after 2013, which is when Medicaid expansion under the Patient Protection and Affordable Care Act (ACA) takes effect. During the 10-year period ending with 2013, federal Medicaid spending as a percentage of GDP rose only modestly, from 1.46 percent to 1.60 percent.

Increased Medicaid spending appears to be largely driven by enrollment growth. Tracking and projecting Medicaid enrollment can be challenging because beneficiaries frequently enroll in and leave programs. At various times, the Centers for Medicare and Medicaid Services (CMS) has presented enrollment levels on a monthly and annualized basis. The annual figures are higher because they include individuals enrolled in the program for at least 1 of the 12 months in a given year. CBO estimates that monthly enrollment figures

FIGURE 3. MEDICAID AND CHIP ENROLLMENT, 2000–2014



are typically about 80 percent of the annual enrollment level.[4] Further, CMS sometimes reports Medicaid enrollment figures that include participants in the separate, but closely aligned, Children's Health Insurance Program (CHIP).

According to data compiled by Health Management Associates for the Kaiser Commission on Medicaid and the Uninsured (KCMU),[5] monthly Medicaid enrollment rose from 31.7 million in June 2000 to 55.0 million in June 2013. The cumulative increase in Medicaid beneficiaries over this period of time was 73 percent compared with an increase in the overall US population of 12 percent.[6] Despite the absence of a nationwide Medicaid expansion during this period, Medicaid enrollees as a share of the population rose from 11 percent to 17 percent.

By December 2013, Medicaid enrollment had risen slightly to 55.4 million, while CHIP had a total of 5.7 million enrollees, according to KCMU data. The total of 61.1 million beneficiaries in December 2013 increased to 69.6 million by December 2014, according to CMS.[7]

Monthly enrollment figures gathered from Kaiser Family Foundation and CMS reports are shown in figure 3.

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4. Congressional Budget Office, *The Budget and Economic Outlook: 2015 to 2025*, January 26, 2015. CBO GDP data and spending projections referenced herein are taken from this CBO report.
5. Kaiser Family Foundation, "Medicaid Enrollment: June 2011 Data Snapshot," June 2012; Kaiser Family Foundation, "Medicaid Enrollment: June 2013 Data Snapshot," January 2014; Kaiser Family Foundation, "Medicaid Enrollment: December 2013 Data Snapshot," June 2014.
6. These numbers are based on US Bureau of the Census data viewable on Google's Public Data portal: https://www.google.com/publicdata/explore?ds=kf7tgg1uo9ude_&met_y=population&idim=country:US&hl=en&dl=en.
7. Centers for Medicare and Medicaid Services, *Medicaid & CHIP October 2014 Applications, Eligibility Determinations and Enrollment Report*, December 18, 2014. There is no breakout between Medicaid and CHIP. The CMS report shows a further increase to 70.0 million enrollees in January 2015.

A recent KCMU report projects 13.2 percent Medicaid enrollment growth in FY 2015.[8] Looking forward, CBO projects a further substantial enrollment increase in FY 2016, followed by a flattening trend in subsequent years.[9] By 2025, CBO expects the program to have a total of 78 million enrollees.

A MORE COMPLEX PICTURE AT THE STATE LEVEL

Figure 4 shows aggregate Medicaid spending by states as reported in the 2013 Medicaid Actuarial Report,[10] and figure 5 converts the nominal spending level into a percentage of GDP. Over the entire 2000 to 2025 period, I observe substantial growth, but the growth rate is slower than that for federal Medicaid spending.

These variations are explained by the Great Recession and changes in federal funding that occurred in response. Historically, the federal government has provided states with Medicaid funding on a sliding scale based on their per capita income: affluent states get a 50 percent match while poorer states receive somewhat more (up to 83 percent).[11] The state-specific matching rate is known as the FMAP (Federal Medicaid Assistance Percentage) and is published in the *Federal Register*.

Figure 6 shows a simple average of state FMAP rates gathered over time from the *Federal Register*. Since states have differing Medicaid caseloads and per-beneficiary expenses, this simple average is not the same as the overall state share of Medicaid spending, but it is a reasonably close approximation that illustrates the relevant dynamics.

The average FMAP rate shows a very slight declining trend until the beginning of federal FY 2009, when it begins a sharp ascent. The rate returns to its trend line at the end of FY 2011. This temporary bump in federal matching rates was authorized by the American Recovery and Reinvestment Act (ARRA) and extended by subsequent legislation. Lawmakers who authored the ARRA were concerned that the recession would create fiscal distress at the state level, so they employed a temporary FMAP increase to reduce state budgetary pressures.

Returning to the data in figure 5, I find that state Medicaid spending as a

8. Robin Rudowitz et al., "Implementing the ACA: Medicaid Spending & Enrollment Growth for FY 2014 and FY 2015" (Issue Brief: Kaiser Family Foundation, Menlo Park, CA, October 2014).
9. Congressional Budget Office, "Detail of Spending and Enrollment for the Children's Health Insurance Program for CBO's April 2014 Baseline," July 10, 2014.
10. This report only projects costs to 2022. I applied rates of increase from the most recent CBO budget outlook to estimate levels for 2023 to 2025.
11. Congressional Research Service, *Medicaid's Federal Medical Assistance Percentage (FMAP), FY2014*, CRS Report R42941, January 30, 2013.

FIGURE 4. STATE MEDICAID SPENDING IN BILLIONS OF DOLLARS

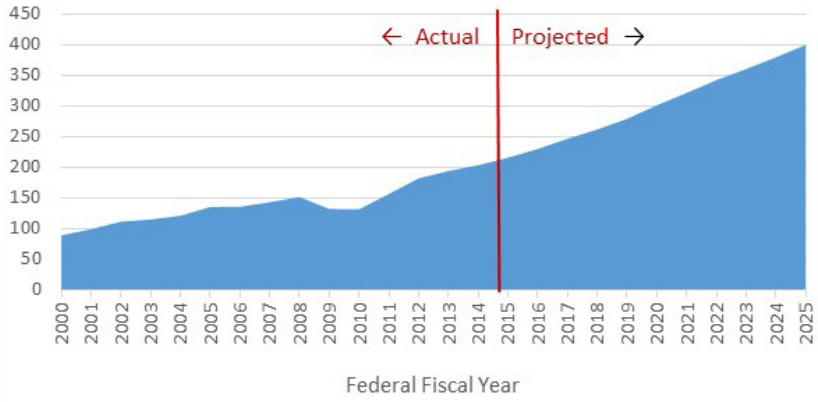


FIGURE 5. STATE MEDICAID SPENDING AS A PERCENTAGE OF GDP

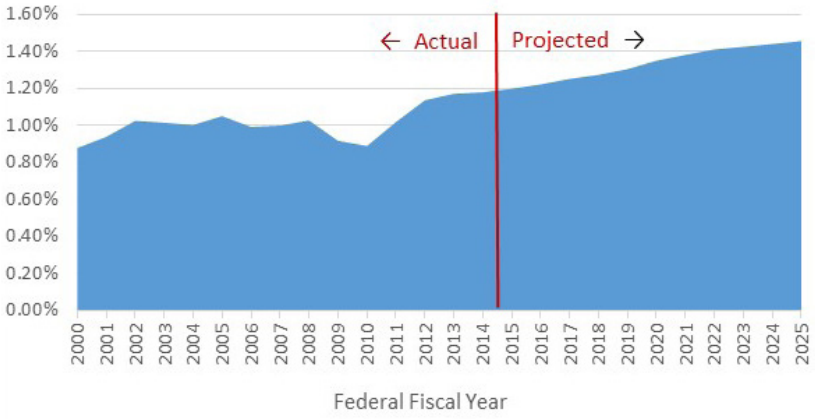
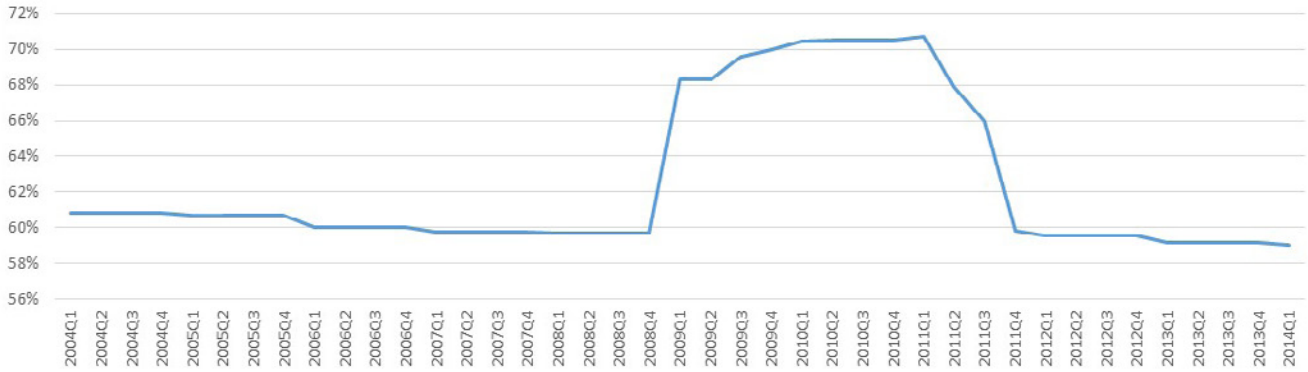


FIGURE 6. AVERAGE FEDERAL MEDICAID ASSISTANCE PERCENTAGE, FY 2004–FY 2013



percentage of GDP rose during the first few years of the century, was virtually flat between 2004 and 2008, dropped sharply in federal FY 2009, and then rose even more sharply in FY 2011 and FY 2012. The changes coincide with the FMAP increases under ARRA and their phaseout.

STATE SPENDING BY CATEGORY

Next I consider the impact of Medicaid on the allocation of state spending using data from NASBO. While it would be attractive to use audited data from CAFRs, many states do not explicitly identify Medicaid spending. More generally, CAFRs across states do not use consistent expenditure categories. This is remedied by the annual NASBO state expenditure report, which is available online for all years back to 1987.[12]

I reviewed actual expenditures by category for the period from 2000 to 2013 and projected spending for 2014. Figure 7 shows the distribution of all state expenditures reported by NASBO in state FY 2000, while figure 8 shows the distribution in FY 2014. Medicaid spending as a percentage of the total increased from 19.1 percent to 25.8 percent. Looking at the annual data, I find that virtually the entire increase in the percentage of Medicaid spending occurred before FY 2005 and after FY 2010.

Excluding federal funds, the increase is slightly smaller—from 11.0 percent to 14.8 percent—as shown in figures 9 and 10, respectively. The percentage of own-source funds states spent on Medicaid actually fell slightly between FY 2004 and FY 2010, and then increased rapidly through FY 2013 as the FMAP declined. The yearly progression is shown in figure 11.

NASBO's federal fund Medicaid expenditure amounts differ somewhat from the Medicaid actuarial data reported earlier. This is attributable in part to different fiscal years and to the fact that NASBO does not include data from US territories and the District of Columbia. Also, Connecticut's data do not include the federal Medicaid share—all Medicaid spending in that state is presented as own-source.

Between 2000 and 2014, I find that the share of expenditures devoted to transportation, public assistance, K–12 education, higher education, and corrections all declined somewhat. Thus, there is some evidence that Medicaid is placing pressure on education and infrastructure spending.

12. National Association of State Budget Officers, "State Expenditure Report: Archives."

FIGURE 7. TOTAL STATE SPENDING, 2000

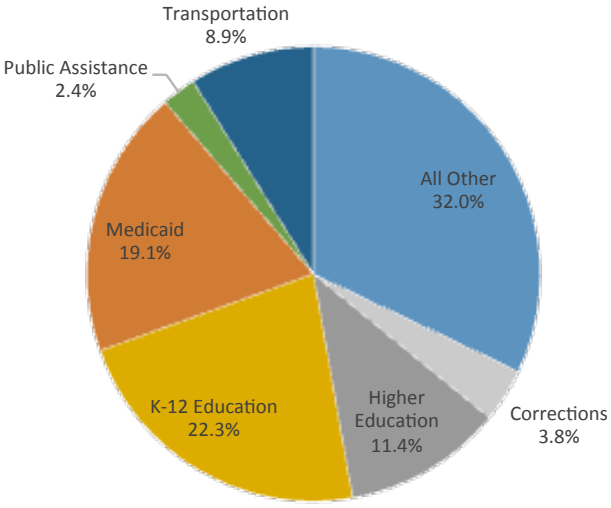


FIGURE 8. TOTAL STATE SPENDING, 2014

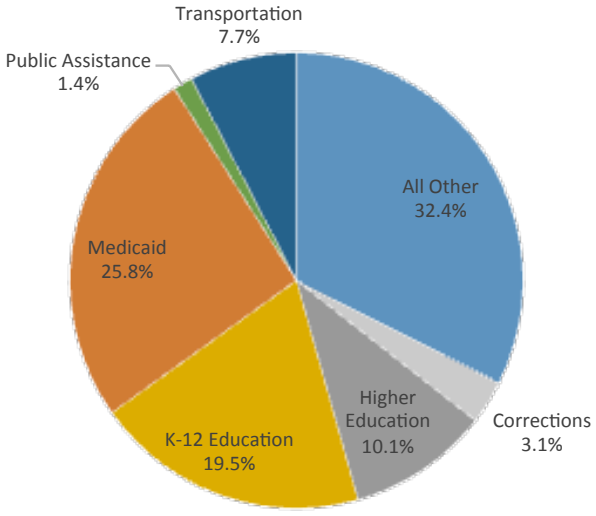


FIGURE 9. STATE SPENDING EXCLUDING FEDERAL FUNDS, 2000

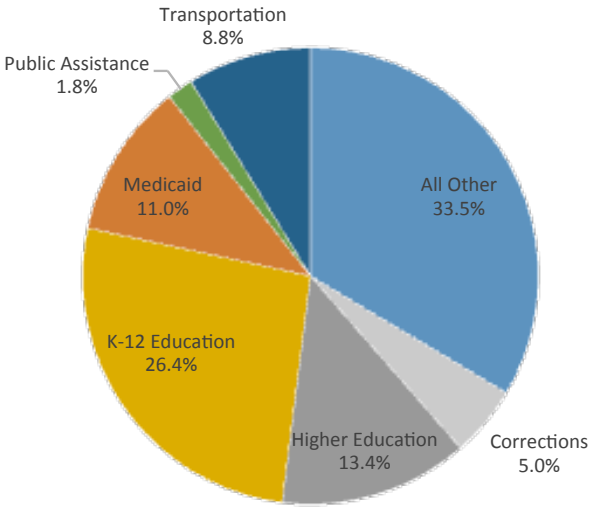


FIGURE 10. STATE SPENDING EXCLUDING FEDERAL FUNDS, 2014

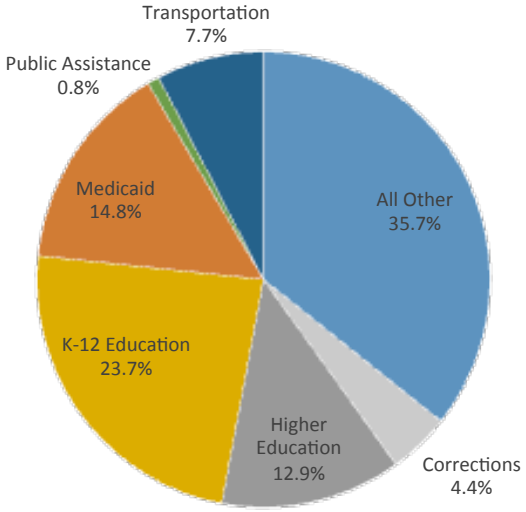
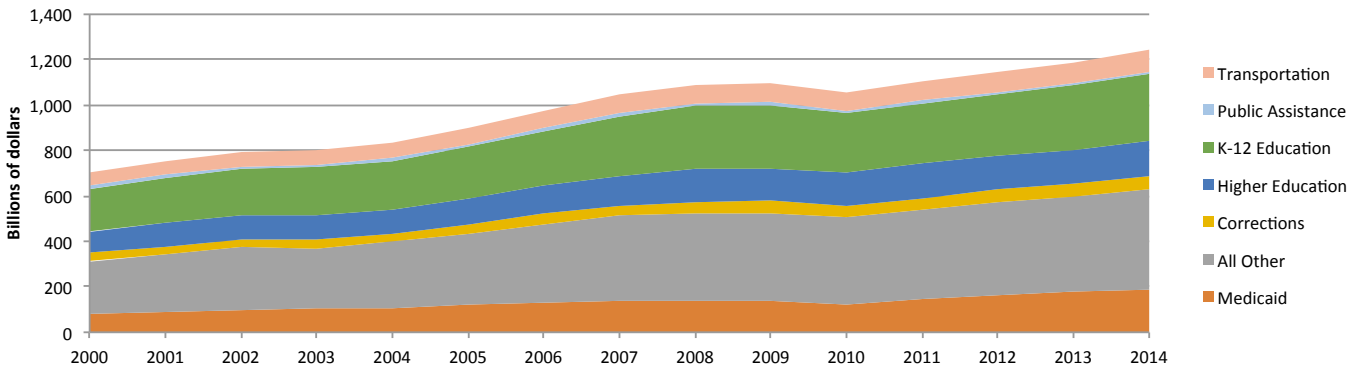


FIGURE 11. STATE SPENDING EXCLUDING FEDERAL FUNDS, 2000–2014



MEDICAID AND THE GROWTH OF DEBT

I also investigated whether the growth of Medicaid may be increasing state indebtedness, despite balanced budget requirements in virtually all states. To do this, I obtained CAFRs for all 50 states and recorded long-term obligations for both governmental and business-type activities. Owing to data availability, I limited the scope of data collection to the 10 fiscal years ending with 2013.

Between FY 2004 and FY 2013, total long-term obligations increased from $524 billion to $941 billion in current dollars. As an approximate share of GDP, this represented an increase from 4.3 percent to 5.6 percent.[13] To provide some perspective, the federal (public) debt-to-GDP ratio increased from 35.5 percent to 72.3 percent during this period. It should also be noted that a portion of the increase in state long-term obligations between FY 2004 and FY 2013 was caused by an accounting standard change. Government Accounting Standards Board Statement No. 45 required state governments to report other postemployment benefit (OPEB) obligations as a liability starting in 2007. In FY 2013, states reported $96 million in OPEB obligations, which accounted for almost one-quarter of the increase in long-term obligations from 2004.

The Bureau of the Census also reports state debt data using a broader definition than that employed in audited state financial reports. Data are available back to 2000 (and before). The Census data show that the state debt-to-GDP ratio rose from 5.4 percent in 2000 to 7.5 percent in 2010. It then fell in each of the following years, dropping to 6.9 percent in 2013. A further reduction

13. GDP figures used in this calculation are taken from CBO and are thus based on federal fiscal years. In most cases, these don't coincide with state fiscal years.

in 2014 appears likely based on my review of that year's state CAFRs available as of this writing.

The recent decline in state debt relative to GDP is occurring at a time of increased Medicaid spending. Consequently, it does not appear that the growth of the Medicaid program is driving increased borrowing by states.

LOOKING FORWARD

Actual FY 2014 data will become available in coming months. This will allow me to accurately gauge the initial impact of the ACA on Medicaid spending. For now, I can consider the ACA's effects in a general way.

Implementation of the ACA has two distinct impacts on state Medicaid spending. First, because the ACA expands Medicaid eligibility, more individuals are enrolling in the program. This effect is only occurring in states that have accepted the Medicaid expansion. As of this writing, 28 of the 50 states have expanded Medicaid eligibility. Those states will not incur additional expenditures for Medicaid expansion until January 1, 2017, because under the ACA the federal government covers the full cost of expansion in calendar years 2014–2016. After that, the federal contribution to the cost of covering the newly eligible enrollees will drop to 95 percent in 2017, 94 percent in 2018, 93 percent in 2019, and 90 percent in 2020 and thereafter.[14]

The second impact involves increased enrollment among individuals who were already eligible for Medicaid before the ACA took effect. This "woodwork effect" arises from increased awareness of the Medicaid program as a result of ACA public outreach. Many new enrollees are learning of their eligibility when they sign onto HealthCare.gov or a state exchange and are directed to a state Medicaid program based on their income. The woodwork effect is affecting both expansion and nonexpansion states.[15]

According to CBO estimates, about three-quarters of new Medicaid and CHIP enrollees in 2014 were newly eligible, while the rest of the increase was owing to the woodwork effect.[16] The latter impact should produce substantial increases in state Medicaid costs in FY 2014 and especially FY 2015. The KCMU report projects state Medicaid spending growth of 5.2 percent in FY 2015. I can expect to see a slowing of Medicaid cost escalation in FY 2016 and

14. Centers for Medicare and Medicaid Services, "Medicaid and CHIP FAQS: Newly Eligible and Expansion State FMAP," February 2013.
15. Phil Galewitz, "ACA's 'Woodworking' Effect Playing Out as 91,000 People Eligible for Medicaid Learn They Can Get Coverage," *Kaiser Health News*, November 14, 2013.
16. Congressional Budget Office, *The Budget and Economic Outlook: 2015 to 2025*, January 2015.

then further increases—mostly in expansion states—starting in FY 2017 as the federal matching rate gradually declines.

IMPACT OF POPULATION AGING

Social Security and Medicare are experiencing expenditure growth attributable to the retirement of Baby Boomers, those born between 1946 and 1964. As members of this large age group reach retirement age, they become eligible for benefits in numbers greatly exceeding older beneficiaries who pass away. This pronounced rise in Social Security and Medicare beneficiaries should continue until the youngest boomers reach full retirement age around 2030.

Demographic influences on Medicaid spending are less clear. Most Medicaid enrollees are children and adults below the age of 65. These population segments are not experiencing disproportionate growth. On the other hand, Medicaid does cover long-term care benefits, which are mostly used by senior citizens who lack the income or assets to cover the costs of living in a skilled nursing facility.

Elderly nursing home residents represent a relatively small percentage of Medicaid beneficiaries and costs. The 2013 Medicaid Actuarial report shows that less than 6 percent of current Medicaid beneficiaries are elderly (although their per-enrollee costs are significantly greater than those for children and younger adults).[17] According to 2012 data compiled by Truven Health Analytics, nursing home costs accounted for 12.5 percent of overall Medicaid spending (state and federal) in FY 2012.[18]

Also the peak years of nursing home admission and occupancy occur well after retirement. According to 2012 data compiled by the Center for Medicare and Medicaid Services, 15.2 percent of nursing home residents are aged 65 to 74, 27.1 percent are aged 75 to 84 and 35.0 percent are aged 85 to 94.[19] An older CDC study reports that the average age of nursing facility admission in 1997 was 82.6 years.[20]

The implication of these statistics is that any demographically driven increase in Medicaid long-term care costs is unlikely to occur until after 2020,

17. Department of Health and Human Services, *2013 Actuarial Report on the Financial Outlook for Medicaid*, 2013.
18. Centers for Medicare and Medicaid Services, Truven Health Analytics, "Medicaid Expenditures for Long-Term Services and Supports in FFY 2012," April 28, 2014.
19. Centers for Medicare and Medicaid Services, "Nursing Home Data Compendium 2013 Edition," 2013.
20. Centers for Disease Control and Prevention, "The Changing Profile of Nursing Home Residents: 1985–1997," March 2001.

when the oldest baby boomers are well into their 70s. Further, because long-term care costs are a relatively small portion of total Medicaid expenditures, the overall impact of this demographic affect will be much smaller than it is for Medicare and Social Security.

CONCLUSION

Medicaid crowd-out was generally not a factor in state budgets between 2004 and 2010. As supplemental federal matching assistance tapered off in 2011, state Medicaid spending accelerated. States are facing an additional bump in 2014 and 2015, as woodwork effects related to the implementation of ACA swell enrollment. Expansion states will face further pressure later in the decade as the FMAP for newly eligible beneficiaries gradually declines from 100 percent to 90 percent. Finally, all states can expect to see some increase in costs as baby boomers start to enter skilled nursing facilities in large numbers during the next decade. That being said, state Medicaid is not as vulnerable to demographic pressures as are Social Security and Medicare.

ABOUT THE AUTHOR

Marc D. Joffe, a former senior director at Moody's Analytics, is the principal consultant at Public Sector Credit Solutions, where he researches public finance issues. He has written two previous studies for the Mercatus Center at George Mason University: a simulation analysis of Illinois's budget and an overview of ideas for reducing medical cost inflation. He has also conducted studies for the California Policy Center, the Haas Institute for a Fair and Inclusive Society at University of California, Berkeley, and the Macdonald-Laurier Institute in Ottawa. Joffe's commentary has appeared in *Bloomberg View*, the *Guardian*, *Governing*, the *Fiscal Times*, and other publications. Earlier this year, Joffe's research on Virginia Medicaid expansion was published by the Thomas Jefferson Institute. He earned his MBA at New York University and his MPA at San Francisco State University.

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