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MEDICAID ENROLLMENT AND CAPITATION RATES: EVIDENCE FROM MEDICARE PART D

By Laura D. Quinby and Gal Wettstein*

Introduction

Medicaid is one of the most expensive items in a state's budget, averaging 29 percent of total expenditures.[1] Because the federal government matches a portion of state Medicaid spending, a number of recent proposals to limit the growth of federal spending would replace the current matching arrangement with a fixed transfer per enrollee.[2] This new financing structure, known as capitation, would likely affect the number of people that states are willing to enroll in Medicaid, so determining the appropriate amount of the payment requires estimates of how states would react to different levels of capitated payments. However, little empirical evidence exists on this question.[3]

This *brief,* based on a recent paper, provides some insight into the issue by isolating a setting within Medicaid where the opposite of capitated federal transfers exists: the Medicare Part D "clawback."[4] The clawback provision requires states to pay the federal government a lump sum for each Medicare-eligible individual who is also enrolled in Medicaid (known as a "dual-eligible"). The dual-eligible population includes people over age 65 and younger individuals with disabilities; this study focuses on the over-65 group because they comprise the majority of dual-eligibles. Importantly for the analysis, the amount of the clawback payment varies by state and is determined by a rigid formula that does not reflect changes in the cost of providing services to dual-eligibles in that state.

The discussion proceeds as follows. The first section provides background on the clawback policy. The second section describes the methodology. The third section presents the results. The final section concludes that a $100 increase in a state's per-capita clawback payment decreases the fraction of elderly dual-eligibles enrolled in Medicaid by 2 percentage points. Of course, the magnitude of this result is setting-dependent; the clawback currently exists alongside a federal match, and eliminating that match could affect the response to changes in capitation. While the analysis does not show what would happen were the federal match eliminated and replaced by a per-capita transfer, it does show that states would respond to changes in the generosity of capitated transfers by adjusting Medicaid enrollment.

* Laura D. Quinby and Gal Wettstein are research economists at the Center for Retirement Research at Boston College.
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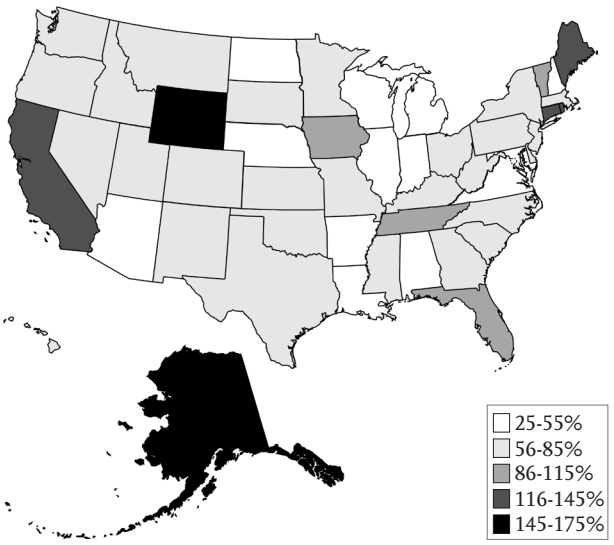
Background

Medicaid is a means-tested health insurance program, administered at the state level. The federal government establishes minimum coverage standards for participation; and one group that must be covered is low-income individuals over age 65.[5] However, states have the ability to expand eligibility and they also administer the enrollment process, so enrollment rates vary widely across states. Figure 1 shows this variation among the low-income elderly population in 2005 (the year before the clawback policy went into effect). The average enrollment rate was 73 percent, ranging from 31 percent (in New Hampshire) to 170 percent (in Alaska). The rate can exceed 100 percent, because it is based on the minimum federal eligibility criteria, which states can expand.

Figure 1. Share of Low-Income Individuals Ages 65 and Older in Medicaid in 2005, by State



Source: Authors' estimates from the U.S. Census Bureau, *Current Population Survey* (CPS) (2005).

Low-income seniors also qualify for the federal Medicare program, making them "dual-eligibles."[6] Unlike Medicaid, which has long covered prescription drugs, Medicare did not include such coverage until 2006. At that point, Medicare Part D extended prescription drug insurance to all Medicare beneficiaries, including the dual-eligibles.

Although Part D is funded by the federal government, some of its cost is reallocated to the states through the clawback.[7] The rationale for the clawback is that, when Part D launched in 2006, dual-eligibles were automatically enrolled in a Part D plan, shifting the cost of their insurance from Medicaid to Medicare. The consequence of this shift was a transfer of the cost of dual-eligible drug insurance from states to the federal government.

The clawback requires states to repay the federal government a fixed amount per enrollee. Hence, it mirrors federal capitation proposals under which states would *receive* a fixed payment per enrollee. The key assumption in the analysis is, therefore, that the effect of a $100 payment from the states to the federal government would be equal, but opposite, to the effect of a $100 transfer from the federal government.

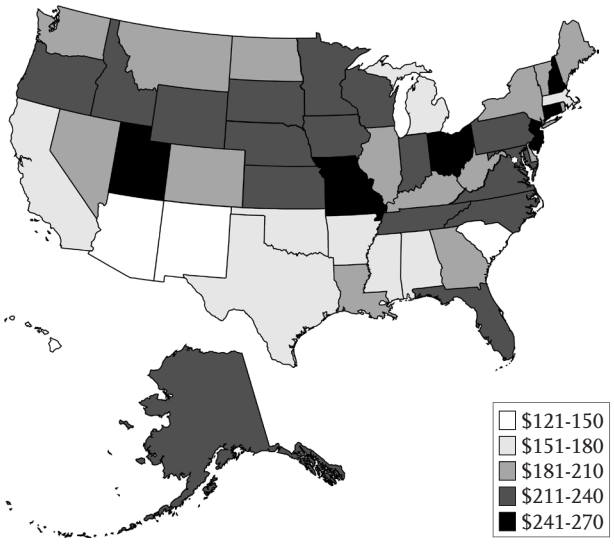
Clawback payments, totaling $9.3 billion in 2016, are based on each state's prescription drug spending per dual-eligible in 2003, indexed by national drug spending.[8] The analysis relies on this predetermined price of enrolling a dual-eligible, which varies across states, to estimate how states adjust enrollment in response to changes in per-capita costs.

Medicaid finance also has a matching structure: for every dollar that states spend on Medicaid enrollees, the federal government provides a match that is determined by the Federal Medical Assistance Percentage (FMAP), which varies from a floor of 50 percent to a cap of 83 percent.[9] In contrast, the clawback is a lump sum per enrolled dual-eligible, with the size of the transfer determined by the formula:[10]

*Clawback = [State Per Capita 2003 Drug Cost for Dual Eligibles * Other Factors] * Number of Enrolled Dual Eligibles*

For this analysis, the important feature of the clawback formula is that the state's payment equals a dollar amount to be paid for each dual-eligible enrollee, which can be interpreted as a "price" per dual-eligible. Furthermore, the price per dual-eligible is partially determined by a fixed element, the per dual-eligible drug cost in the state in 2003. Figure 2 (on the next page) shows how drug spending on dual-eligibles varied across states in 2003: from a minimum of $123 per month in Arizona to $262 per month in New Jersey, with a mean of $203. This cross-state variation in the fixed component of the price forms the basis for the empirical strategy used in this study.

Figure 2. Monthly Drug Spending per Dual-Eligible in 2003, by State



Source: Kaiser Family Foundation (2005).

Methodology

The empirical analysis relies on a "before-and-after" comparison. Drug spending per dual-eligible in 2003 may be associated with Medicaid enrollment due to state-specific economic, public health, and political factors. Assuming these factors do not change systematically after 2006 (when the clawback went into effect), any change in the association between drug spending per dual-eligible in 2003 and enrollment can be attributed to the clawback.

In practice, this before-and-after comparison is done in the following regression equation:

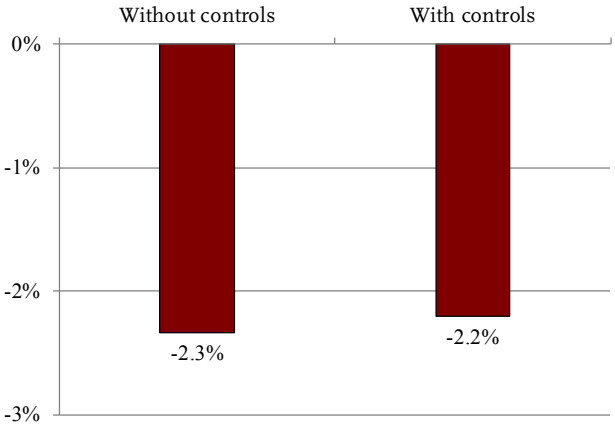
$$Fraction\ Enrolled = f(Price\ in\ 2003,\ Post\ 2006,\ Price\ in\ 2003 * Post\ 2006)$$

In each state and year, the dependent variable measures the fraction of individuals jointly eligible for Medicaid and Medicare who are actually enrolled in Medicaid, calculated from the U.S. Census Bureau's *Current Population Survey*.[11] *Price in 2003* reflects the natural log of 2003 per-capita spending on drugs for dual-eligibles, as documented by the Kaiser Commission on Medicaid and the Uninsured (2005). Values vary across states, but are constant over time. This variable controls for the relationship between 2003 drug spending and enrollment that existed before the clawback went into effect; it is assumed to remain constant over the analysis period. If higher clawback payments caused state governments to reduce the enrollment of dual-eligibles, then the interaction of *Post 2006* and *Price in 2003* should have a negative effect. Additional regression analysis also controls for state demographic and economic conditions, such as state fixed effects, year fixed effects, the age structure of the state in each year, personal income per capita, and the FMAP.

Results

The key question is whether states react to the size of clawback payments by adjusting the fraction of dual-eligibles enrolled in Medicaid. Figure 3 presents the estimated effect of a 10-percent increase in 2003 drug spending per dual-eligible on enrollment after 2006.[12] The first bar does not include any control variables, while the second controls for state fixed effects, year fixed effects, and other variables measuring state economic and demographic conditions. The results indicate that the clawback caused a 2.2- to 2.3-percentage-point reduction in the fraction of dual-eligibles enrolled for every 10-percent increase in drug spending per dual-eligible in 2003 (see Figure 3).

Figure 3. Effect of a 10-Percent Increase in 2003 Drug Spending per Dual-Eligible on the Fraction of Elderly Dual-Eligibles in Medicaid After Part D



Note: These estimates are statistically significant at the 5-percent level.
Sources: Authors' estimates from the CPS (2000-2018); and the Kaiser Commission on Medicaid and the Uninsured (2005).

The results in the figure relate a state's 2003 drug spending to Medicaid enrollment. However, 2003 drug spending is not interesting for policy in its own right; it only matters through its relationship to actual clawback payments. Consequently, the final step of the analysis estimates how a $100 increase in per-capita clawback payments would reduce enrollment.[13]

To obtain the relationship between clawback costs and enrollment, the analysis must first determine how a 10-percent increase in 2003 drug spending per dual-eligible affects a state's clawback costs. Regression results (not shown) yield the following result:

Effect of a 10-percent increase in 2003 drug spending per capita on clawback payments per capita = $119

Since Figure 3 revealed that a similar 10-percent increase in 2003 drug spending per capita decreased enrollment by 2.3 percentage points, the relationship between clawback and enrollment must reflect the following equation:

Effect of a $119-increase in clawback payments per capita on enrollment = -2.3 percentage points

This effect can then be rescaled as:

*Effect of $100 increase in clawback payments per capita on enrollment = -2.3/119 * 100 = -2 percentage points*

This final estimate implies that a $100 increase in clawback payments per dual-eligible leads to a 2-percentage-point decline in the fraction of elderly dual-eligibles enrolled in Medicaid.

Conclusion

The prospect of replacing the current matching structure of Medicaid funding with a capitated payment from the federal government to the states has received increasing attention over the past few years. Determining the appropriate amount of the payment has proven difficult, since little evidence exists on how states would respond to various capitation levels. The analysis summarized here provides some insight into that question by isolating a setting within Medicaid where the opposite of capitated federal transfers exists: the Medicare Part D clawback.

The clawback provision requires states to pay the federal government a lump sum for each dual-eligible enrollee. The analysis finds that states enroll fewer elderly dual-eligibles in Medicaid when they must pay a larger per-capita fee to the federal government. In particular, for every $100 of clawback payments per dual-eligible enrollee, states reduce the fraction of elderly dual-eligibles enrolled by 2 percentage points. Of course, the magnitude of this result is setting-dependent; the clawback currently exists alongside a federal match, and eliminating that match could also affect behavior.

As the debate continues over the best way to fund Medicaid, federal and state policymakers who are considering capitation should consider how enrollment in Medicaid might be affected by the generosity of the federal transfer. While the analysis does not show the transitional effects of abolishing the federal match and replacing it with a per-capita transfer, it does show that states would respond to changes in the generosity of capitated transfers by adjusting Medicaid enrollment.

Endnotes

1 Medicaid and CHIP Payment Access Commission (2018).

2 For example, former Rep. Paul Ryan's *A Better Way* plan offered states the option of choosing a per-beneficiary financing method, while the House of Representatives-approved American Health Care Act of 2016 would have capped federal spending per capita. Similar proposals from the last few years include the Health Accessibility, Empowerment, and Liberty Act of 2016, proposed by Rep. Pete Sessions and Sen. Bill Cassidy; the Patient Freedom Act of 2017, proposed by Sens. Bill Cassidy and Susan Collins; and the House budget proposal "A Brighter American Future," proposed in 2018 by Rep. Steve Womack.

3 See Rosenbaum et al. (2016); Adler, Fiedler and Gronniger (2017); and Clemens and Ippolito (2018).

4 Quinby and Wettstein (2019).

5 Generally, eligibility for the full range of Medicaid benefits applies to individuals with income below the federal poverty line.

6 Younger adults may also qualify for both Medicaid and Medicare if they receive Social Security Disability Insurance benefits.

7 Part D is also financed by premiums paid by enrollees.

8 The clawback figure is from National Association of State Budget Officers (2018).

9 The FMAP is inversely proportional to the ratio of state average income to national average income. The formula is:

$$FMAP = 1 - 0.45 * \frac{State\ per\ capita\ income^2}{U.S.\ per\ capita\ income^2}$$

with a minimum of 50 percent and a maximum of 83 percent. In practice the upper bound has not generally been binding. In 2018, Mississippi had the highest FMAP at 76 percent.

10 The "other factors" in the formula are a national drug spending index, to account for increasing drug spending over time; a phase-down percentage determined by the Part D legislation, which provided an adjustment period for the federal government; a discount based on rebates from drug manufacturers to Medicare; and the FMAP.

11 The denominator includes residents who are ages 65 or above and have household income below the size-adjusted federal poverty line or are receiving Supplemental Security Income. This criterion is the minimum for full Medicaid eligibility at the federal level.

12 These estimates are based on the regression described in the Methodology section. Full regression outputs are available in Quinby and Wettstein (2019).

13 This estimate is essentially the ratio of the effect of 2003 drug spending per dual-eligible on enrollment and the effect of an increase in 2003 drug spending on clawback payments. In practice, it is estimated with a Two-Stage Least Squares regression. Full results are available in Quinby and Wettstein (2019).

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Contact Information

Center for Retirement Research
Boston College
Hovey House
140 Commonwealth Avenue
Chestnut Hill, MA 02467-3808
Phone: (617) 552-1762
Fax: (617) 552-0191
E-mail: crr@bc.edu
Website: https://crr.bc.edu

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