Causal Impact of Medicaid on Poverty: The Importance of Poverty Measures

Medicaid is key to the safety net for low-income households in the United States. However, prior research may have inaccurately estimated its antipoverty impact. Existing causal estimates have incorporated only poverty reductions due to lower out-of-pocket medical spending by households but not poverty reductions due to healthcare coverage meeting a basic household need (Sommers and Oellerich 2013, pg 817). This shortcoming is especially important for beneficiaries who would be uninsured in the absence of public coverage. On the other hand, estimates that do incorporate the poverty-reducing impact of Medicaid meeting the basic need of healthcare coverage have been non-causal, generally assuming that in the absence of Medicaid, households would have no other health insurance benefits to meet coverage needs (Remler, Korenman and Hyson 2017). To the extent that low-income individuals can gain access alternative insurance benefits, these non-causal estimates likely overstate the impact of Medicaid on poverty.

This paper combines the strengths of these prior two approaches to provide a more comprehensive estimate of the antipoverty impact of Medicaid: the causal impact of Medicaid on a measure of poverty that incorporates health insurance needs and benefits. Specifically, we follow Sommers and Oellerich (2013) and use propensity score matching to simulate counterfactual health insurance coverage and out-of-pocket spending on medical care and insurance from the distribution of otherwise similar individuals without Medicaid coverage in the 2016 Current Population Survey. We then measure poverty in the counterfactual no-Medicaid state using the Health Inclusive Poverty Measure (HIPM) developed in Korenman and Remler (2016).

We find that Medicaid prevented approximately 2.5% of the under-age-65 U.S. population from falling below the HIPM poverty level in 2015 (Figure 1). The magnitude of this impact is more than double the estimated 1.0 percentage point reduction in poverty using the Supplemental Poverty Measure (SPM), the measure used by Sommers and Oellerich, which incorporates poverty reduction due to reduced out-of-pocket medical spending. The magnitude of this impact is somewhat lower than the non-causal accounting estimate of Medicaid on health-inclusive poverty (3.9 percentage points).

If Medicaid were eliminated, former recipients would be distributed across different alternative forms of health coverage. Each of these coverage types, including being uninsured, have different implications for a household’s ability to meet its health coverage need. For those who would become uninsured in the absence of Medicaid coverage, the HIPM shows a much greater Medicaid poverty reduction impact of 6.4 percentage points compared to the 1.2 percentage point reduction measured by the SPM (Figure 2). These estimates imply that when healthcare needs and resources are included in the poverty measure, an additional two million individuals would fall into poverty as a result of becoming uninsured when they lose Medicaid compared to projections based on the SPM. Further, the HIPM estimate of the impact of Medicaid among those who transition to private non-group insurance is more than twice that of the SPM, 4.1 percentage points compared to 1.8 percentage points. In contrast among those transitioning to employer-sponsored insurance, the estimated HIPM impact is 1.4 percentage points compared to an estimated SPM impact of 0.8 percentage point.
How do estimates of Medicaid’s impact vary by race/ethnicity and other demographics? Do our estimates of racial, ethnic, and other demographic variation in the program’s impacts differ by the selected poverty measure? In our analysis, we find that the difference between Medicaid’s impact among African Americans and Hispanic Americans and its impact among Non-Hispanic White Americans is much larger when measured by the HIPM than the SPM (Figure 3). Specifically, we estimate that Medicaid reduces SPM poverty among Black, Hispanic and White Americans by 1.7, 1.7 and 0.6 percentage points, respectively, but reduces HIPM poverty by 4.1, 4.8 and 1.4 percentage points. The measure of poverty also affects how Medicaid’s impact varies by family structure. In particular, the HIPM shows much greater Medicaid impact on single parents, relative to other families, than the SPM (Figure 4).

Further Research

Our paper will also investigate several further questions. Medicaid’s impact on poverty likely varies by race/ethnicity and other demographic characteristics for two fundamental reasons. First, different groups could differ in their access to alternative insurance to Medicaid, leaving some groups more likely than others to be uninsured in the absence of Medicaid. Second, even conditional on their counterfactual insurance status, demographic groups could differ in income and non-health benefits, and consequently in the likelihood that their resources will fall below the poverty threshold in the absence of Medicaid. We will examine how much each of these factors drives the HIPM-SPM difference in disparities in the anti-poverty impact of Medicaid.

Finally, the study will explore the limitations to Sommers and Oellerich’s causal counterfactual estimation approach implemented here, especially in light of recent evidence from the ACA Medicaid expansion literature. Sensitivity analyses will investigate the realism of the counterfactual distribution of insurance status and out-of-pocket medical expenditures. For example, the study will examine the composition of health insurance status within families to identify potentially unrealistic insurance units within a household in which, for example, children hold a separate employer-based insurance policy.

References


Figure 1

Antipoverty Impact of Medicaid, By poverty measure and causality of estimate

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<tr>
<th></th>
<th>Baseline Causal HIPM</th>
<th>Baseline Causal SPM</th>
<th>Baseline Accounting HIPM</th>
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Figure 2

Causal Estimates of Medicaid Antipoverty Impacts, Differences between SPM and HIPM by Insurance

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<tr>
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<tr>
<td>Total</td>
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SPM - HIPM
Figure 3

Causal Estimates of Medicaid Antipoverty Impacts, by Racial Category

Race

Total Population

White

Black

Hispanic

Race

Causal Estimates of Medicaid Antipoverty Impact, by Parenthood status

All Parents

NonParents

Married Parents

Single Parents

SPM

HIPM