Grading Medicaid: Fiscal Federalism and Social Insurance in the United States

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Background

Social insurance programs are sometimes centralized, with all design and policy decisions made at the national level, and sometimes de-centralized, with some level of local autonomy. In the United States, the Medicare program and the Social Security Disability Insurance (SSDI) program are examples of national social insurance programs with little local autonomy, while the Medicaid program and state unemployment insurance programs are examples of social insurance programs with varying levels of local (i.e. state) autonomy. Social insurance programs in other countries also exhibit varying levels of centralization.

Despite significant variation in the level of centralization of social insurance programs around the world, little is known about the trade-offs involved with more versus less local autonomy. In this paper, we study these trade-offs in the context of social health insurance programs in the United States. Specifically, we compare the two largest health insurance programs in the country: the Medicare program (targeted at elderly populations and SSDI beneficiaries) and the Medicaid program (targeted at lowincome populations and SSI beneficiaries). We first ask how these two programs causally differ from each other in terms of costs (fiscal spending) and benefits (health) for a given person. We then focus on heterogeneity across states *within* the decentralized Medicaid program. We ask whether causal differences in spending and outcomes across states reflect different levels of program efficiency or states making trade-offs of spending vs. health to reflect state preferences and priorities. Specifically, we ask whether states that spend more achieve better outcomes (trading off spending and health) or similar/worse outcomes (different levels of program efficiency) relative to states that spend less. Using this analysis, we assess the trade-offs of centralization of social health insurance programs in the United States.

Data

We use linked Medicaid and Medicare administrative claims and enrollment data from the Centers for Medicare and Medicaid Services (CMS). Enrollment data include demographics such as age, gender, and birth date as well as eligibility codes that we use to determine which Medicaid and Medicare enrollees are eligible due to disability. We observe this information for the universe of Medicaid and Medicare enrollees.

The claims data include information on health care utilization and spending for a subset of enrollees. For individuals enrolled in Medicare, we observe all spending and utilization covered by the Medicare program for individuals not enrolled in a private Medicare Advantage (MA) plan. This information is only available for individuals enrolled in the traditional fee-for-service arm of the program. We observe no spending or utilization information for anyone enrolled in MA. For individuals enrolled in Medicaid, we also observe all spending and utilization covered by the Medicaid program for individuals not enrolled in a private Medicaid managed care (MMC) plan. However, we also observe some information for individuals enrolled in MMC. Specifically, for the universe of MMC enrollees, we observe individual Medicaid program spending, consisting of premium payments to managed care plans plus the cost of any services paid directly by the fee-for-service arm of the Medicaid program. This implies that of the universe of Medicaid and Medicare beneficiaries, the only beneficiaries for whom we cannot calculate total fiscal spending (fee-for-service payments plus premium payments to private plans) are those enrolled in an MA plan.

Beyond fiscal spending information, in some states we also observe full health care utilization data for individuals enrolled in MMC (we observe full health care utilization data for any individual enrolled in the FFS arm of Medicaid). Specifically, in New York and Texas the claims data files include high-quality utilization data for individuals enrolled in private MMC plans.

We use this data to construct monthly, quarterly, and annual measures of fiscal spending for all non-MA Medicare and/or Medicaid enrollees. This includes the universe of Medicaid enrollees and all non-MA Medicare enrollees. We also use the data to construct monthly, quarterly, and annual measures of emergency department visits and avoidable hospitalizations for individuals enrolled in Traditional FFS Medicare, Traditional FFS Medicaid, and in MMC in New York and Texas. Our Medicaid data cover 2007-2012, while our Medicare data cover 2008-2012.

We link death dates for our population from the Social Security Death Index. The Death Index includes death dates for all individuals enrolled in Social Security programs, including SSI and SSDI (our study population). We use these death dates to measure mortality rates for our population consistently across states and programs.

Study Design

Part 1: Medicaid vs. Medicare

To estimate causal differences between the Medicaid and Medicare programs, we use a novel yet straightforward identification strategy. We identify a (treatment) group of Medicaid enrollees who exogenously transition to Medicare at age 65, and we compare that group to one of several (control) groups of program beneficiaries who experience no coverage transition at age 65. Treatment and control group members consist of individuals enrolled in disability insurance programs (SSI and/or SSDI), with the particular disability program in which the individual is enrolled determining (1) which health insurance program(s) (Medicaid and/or Medicare) she is enrolled in and (2) whether there is any change in coverage at age 65. We compare changes in spending and health outcomes for the group that experiences a transition from Medicaid to Medicare at age 65 (SSI only at age 63) to changes in spending and health outcomes for the group that experiences in spending and health outcomes for the group that experiences at age 65.¹

Part 2: Within-Medicaid Heterogeneity across States

To estimate causal differences across state Medicaid programs, we use a border discontinuity approach, assessing how Medicaid program spending and health outcomes differ for disabled Medicaid beneficiaries living within a few miles of each other but on different sides of state borders. We augment the border discontinuity strategy by performing a similar comparison for disabled Medicare beneficiaries not contemporaneously enrolled in the Medicaid program, allowing us to difference out any remaining geographic variation in unobservables across the state borders. Using this method, we generate estimates of differences in spending and health outcomes for all contiguous pairs of states in the country. We also generate a summary measure of the portion of the overall difference in spending and outcomes for each state pair that is

¹ These groups consist of (1) individuals enrolled in both the SSI and SSDI programs at age 63 and thus dually eligible for Medicaid and Medicare both pre-65 and post-65, (2) individuals enrolled in only the SSDI program at age 63 and thus only eligible for Medicare both pre-65 and post-65, and (3) individuals enrolled in only the SSI program at age 63 but not eligible for Medicare due to insufficient work history.

causal, i.e. the portion that remains when we (1) zoom in on the border and (2) difference out cross-border variation observed in the disabled Medicare cohort.

Preliminary Results (spending only, no health outcomes)

Using data from five large states (New York, Texas, Georgia, Washington, and North Carolina), we estimate that individual-level quarterly spending increases by about \$1,300 (relative to the control group) at the time that individuals transition from Medicaid to Medicare (age 65). The increase occurs immediately at the time of transition and persists during the 2 years following Medicare enrollment. During the third year, the increase declines some but spending still remains considerably higher than what it would have been had the individuals remained in Medicaid. ED visits, on the other hand, decline sharply after the transition to Medicare.

Our estimate of the spending increase is economically significant, amounting to a 30% increase over the baseline spending level of the treatment group. We interpret this effect as evidence that it costs about 30% more to insure an average SSI beneficiary through the Medicare program vs. through the Medicaid program. The drop in ED visits at the time of the transition, however, indicates that the lower spending in Medicaid comes with higher ED use, potentially indicating lower quality of care and worse health outcomes.

Moving to heterogeneity across state Medicaid programs, preliminary analyses indicate that state policies play an important role in the overall geographic variation in Medicaid spending. Spending levels often change discontinuously at state borders for disabled Medicaid beneficiaries but not for disabled Medicare beneficiaries (where state Medicaid policies should have no effect).