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## The Effects of Medicaid Coverage — Learning from the Oregon Experiment

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There has been much debate, especially in light of the health insurance expansions in the Affordable Care Act and the current fiscal crisis, about the costs and benefits of Medicaid. Some have argued that Medicaid doesn't deliver much in the way of real benefits, either because it pays providers so little that beneficiaries have trouble gaining access to care, or because the low-income uninsured already have reasonable access to care through clinics, uncompensated care, emergency departments, and out-of-pocket spending. Others have argued that providing Medicaid coverage to the uninsured would reduce total health care spending by improving health and reducing inefficient use of hospitals and emergency rooms. Ultimately, the costs and benefits of Medicaid are empirical questions.

One might think that these questions would have been settled with data long ago, but they are notoriously difficult to resolve.<sup>1,2</sup> Comparisons of the insured and the uninsured can yield misleading results, because the two groups differ in many ways (such as income and baseline health) that are difficult to control for fully and that affect the outcomes of interest, such as health and the use of health care. For example, if less healthy people are more likely to find a way to obtain Medicaid, one might perversely conclude from comparing the health of those with and without Medicaid that Medicaid is bad for one's health.

Working with a team of researchers, we have taken advantage of an unprecedented opportunity to gauge the effects of Medicaid coverage on low-income, previously uninsured adults, using the gold standard of medical and scientific research: a randomized, controlled trial. In 2008, Oregon used a lottery to allocate a limited number of Medicaid spots for low-income adults (19 to 64 years of age) to people on a waiting list for Medicaid. Those selected by random lottery draw won the opportunity to apply for Medicaid. In total, about 30,000 people were selected from the 90,000 on the waiting list. Approximately 10,000 of those selected ended up being enrolled in Medicaid; not everyone who was selected successfully filled out the required application and met the eligibility criteria.

The lottery provides an opportunity to estimate the causal effects of being allowed to apply for Medicaid (intention to treat). It also allows us to estimate the causal effects of being enrolled in Medicaid relative to being uninsured (the effects of "treatment on the treated," which we focus on below), under the assumption that selection by the lottery to be able to apply for Medicaid affects the outcomes we studied only through its role in increasing insurance coverage.

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The study discussed in the article was conducted by the authors along with Sarah Taub-man, Bill Wright, Heidi Allen, Mira Bernstein, Jonathan Gruber, Joseph Newhouse, and the Oregon Health Study Group.

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We now have evidence of the effects of the first year of Medicaid coverage after the lottery.<sup>3</sup> These results are based on administrative data from hospital discharges, credit reports, and death records, in addition to mail surveys we conducted. We found that Medicaid coverage increases the use of health care. In particular, it raises the probability of using outpatient care by 35%, of using prescription drugs by 15%, and of hospital admission by 30%. We did not detect a statistically significant change in emergency room utilization, although our estimates were imprecise. Overall, we estimate that the increased health care use from enrollment in Medicaid translates into about a 25% increase in total annual health care expenditures.

That Medicaid increases health care use makes economic sense, since insurance reduces the price of care for the insured (in this program, there are no copayments). The increase in health care use is associated with more consistent primary care: people with Medicaid coverage were 70% more likely to report having a regular place of care and 55% more likely to report having a usual doctor; Medicaid coverage also increased the use of preventive care such as mammograms (by 60%) and cholesterol monitoring (by 20%). Although it's possible that improved efficiency of care delivery could reduce overall spending, that does not appear to have happened in Oregon, at least in the short run.

What benefits accrue along with this increase in spending? We examined two potential benefits: financial protection and improved health and well-being. The financial protection aspects of insurance are too often overlooked in academic and public policy discussions. Just as fire insurance is designed not to prevent fires but to help financially when fire creates catastrophic financial losses, a key purpose of health insurance is to reduce the financial risk posed by catastrophic medical expenditures.

We found that Medicaid improves financial security. Medicaid reduces by 40% the probability that people report having to borrow money or skip payment on other bills because of medical expenses. Although it does not appear to reduce their risk of bankruptcy (at least in the first year), it decreases by 25% the probability that they will have unpaid medical bills that are sent to a collection agency. This effect benefits not only the insured but, since the vast majority of bills sent to a collection agency are never paid, also those who may ultimately help to finance this unpaid care, including health care providers and the public sector.

We also found that being covered by Medicaid improves self-reported health as compared with being uninsured. Medicaid enrollees are 25% more likely to indicate that they're in good, very good, or excellent health (vs. fair or poor health). They are 25% less likely to screen positive for depression. They are even 30% more likely to report that they are pretty happy or very happy (vs. not too happy).

It's hard to tell from the current data whether objective, physical health has improved. The evidence we have to date suggests that at least some of the improvements in self-reported health probably reflect a more general sense of improved well-being and reduced stress; for example, the improvements in self-reported health start to show up after only a month of insurance coverage and before health care use has started to increase. Of course, our findings of increased health care use and increased access to care suggest that physical health may also have improved or will improve. We will know more when we have data from the second year, when we collected information on physical health measures such as blood pressure, obesity, cholesterol, and blood sugar control. (Currently our only objective health measure is mortality, on which we were unable to detect an effect.) Whether it was health or general well-being (or both) that improved, both represent potentially important benefits of Medicaid, along with the reductions in financial strain.

There are, of course, limits to the lessons that can be drawn from this experiment. For example, the results are naturally specific to the study's population, insurance plan, and health care environment. Coverage by private insurance, in different settings, or of people with very different characteristics than those who enrolled in Oregon's Medicaid program might have very different effects. Moreover, the Oregon lottery insured only 10,000 adults. The system-level effects of insuring millions of people at once, including strain on the provider network and any changes in the delivery of care, might be quite different. In addition, our current results cover only the effects of the first year of insurance coverage. The long-run costs and benefits of Medicaid coverage may well be different.

That said, we believe that these results provide the best evidence to date on the effects of Medicaid expansions. Our results cast considerable doubt on both the optimistic view that Medicaid can reduce health care spending, at least in the short run, and the pessimistic view that Medicaid coverage won't make a difference to the uninsured. We expect ongoing data collection to provide even more information about the longer-run costs and benefits of Medicaid coverage.

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