The Oregon Health Plan Lottery: A Randomized Controlled Trial of Medicaid Eligibility and Coverage

Matthew Carlson co-Principal Investigator
carlsonm@pdx.edu
503-725-9554

Principal Investigator: Jeanene Smith, MD, MPH, Office for Oregon Health Policy and Research

Bill Wright, co-Principal Investigator, Providence Health Systems Center for Outcomes Research and Education (CORE)

Heidi Allen, Project Manager, Providence Health Systems, CORE

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In April 2008, Oregon’s Medicaid agency re-opened the Oregon Health Plan Standard Program, which had been effectively closed since 2004, to approximately 10,000 uninsured adults with incomes below 100% of federal poverty level. Using a lottery, individuals are randomly selected from a waiting list of nearly 100,000 uninsured individuals to receive an OHP application packet. The OHP lottery provides a unique opportunity to conduct the first-ever randomized controlled trial of public health insurance. The key advantage of a randomized study is that it can move beyond associational evidence to make causal assessments about the impacts of providing coverage to low-income populations. This study recruits and longitudinally follows two distinct groups of people: those randomized by the lottery into OHP coverage, and those who were not randomized into coverage. Outcomes will be assessed at baseline and across two follow-up surveys, conducted at six and twelve months post-baseline. Specific measures will include insurance coverage patterns, access to care, patterns of healthcare utilization, household financial strain, medical debt, and self-reported physical and mental health status. The project’s principal aim is to move beyond the limitations inherent in observational studies of the effects of uninsurance by assessing the causal impacts of providing health insurance in a low income population.

Abundant literature demonstrates that, relative to those with insurance, the uninsured have substantially worse access to care, lower utilization of primary and preventive health services, higher utilization of emergency services and hospitalizations (particularly for ambulatory care sensitive conditions), more unmet health care needs, poorer health, and increased risk of mortality from preventable and treatable diseases. (Ayanian et al., 2000; Hadley, 2002; 2007; IOM, 2003; 2004; Nawar et al., 2007; Strunk and Cunningham, 2002). Recent research conducted in Oregon on the effects of loss of Medicaid coverage also demonstrated that the negative consequences associated with becoming uninsured including poor access to health care and medications, financial strain, and even negative health consequences can occur.
relatively quickly, within a few months of becoming uninsured. (Carlson et al., 2006; Solotaroff et al., 2005; Wright et al., 2005; Wright et al., 2005b) However, existing studies on the effects of coverage have one very important limitation in common: they are all observational. As the recent Institute of Medicine’s report put it (2004, p.38):

Isolating and measuring the independent effect of having or lacking insurance is an analytic challenge because virtually all studies are observational and many characteristics that vary with health insurance status, including income, education, race and ethnicity, and health behaviors also affect individual health outcomes.

Observational research has made it clear that poor outcomes are associated with lack of coverage. However, researchers and policymakers have been left to wonder whether lack of coverage causes those outcomes, or whether poor outcomes and lack of coverage are both influenced by other root causes. (IOM, 2004) Low education or low income, for example, might influence both health insurance and health status independently. (Adler et al., 1993)

Moving beyond associational evidence to draw conclusions about the causal effects of coverage would require a randomized study of health insurance, something that presents extraordinary technical and ethical difficulties. Only one randomized study of insurance, the RAND health insurance experiment, has ever been conducted, and even in that landmark study, ethical concerns precluded randomizing people into a no coverage group. Furthermore, controversy exists about the interpretation of the RAND results for low-income populations. Although the overall finding for the RAND study was that cost-sharing reduced use of services without compromising health outcomes, a subset analysis suggested the poor, sick patients might be placed at greater risk. (Gruber, 2006)

Although designing a randomized study with a no-insurance control group would normally raise serious ethical concerns, recent circumstances in Oregon have created a rare opportunity to do just that. Beginning in late March or Early April, 2008, the Oregon Health Plan (OHP) lottery has been randomly selecting from an existing waiting list of 100,000 low income adults a total of 2000 individuals per month to receive a Medicaid application. The process essentially creates two randomly selected groups: one that has access to coverage and another, similar group that does not. The proposed study uses the OHP Lottery to answer several critical policy questions within the architecture of a randomized controlled trial of Medicaid eligibility and coverage. **The principal aim of this study is to assess the causal effects of providing coverage to low income individuals.** Prior research has established that coverage is associated with better outcomes, but the critical policy-relevant question is whether expanding coverage for low income individuals actually causes better outcomes and, if so, the magnitude of those effects across various population subgroups. This study represents the first and perhaps only opportunity to use randomization as a tool for testing the causal impacts of public insurance coverage.