SUMMARY:
THE OREGON HEALTH INSURANCE EXPERIMENT: EVIDENCE FROM THE FIRST YEAR

Amy Finkelstein, MIT and NBER; Sarah Taubman, NBER; Bill Wright, CORE; Mira Bernstein, NBER; Jonathan Gruber, MIT and NBER; Joseph P. Newhouse, Harvard and NBER; Heidi Allen, CORE; Katherine Baicker, Harvard and NBER; and the Oregon Health Study Group

This paper was published in the Quarterly Journal of Economics Vol. 127, no. 3, Aug 2012 and also appeared as NBER Working Paper 17190.

This study represents the first use of a randomized controlled design to evaluate the impact of insuring the uninsured in the United States. Although randomized controlled trials are the gold standard in medical and scientific studies, they are rarely possible in social policy research. In 2008, the state of Oregon drew names by lottery for its Medicaid program for low income, uninsured adults. About a year after random assignment, the results indicate that enrollment in Medicaid substantially increases health care use, reduces financial strain, and improves self-reported health and well-being. The study represents a collaborative effort between researchers and the state of Oregon.

Key Findings

Using a randomized controlled design, the study finds that for uninsured low-income adults, enrollment in Medicaid has the following effects after about one year:

- *Increased access to and use of health care*
  - Insurance increases the likelihood of using outpatient care by 35 percent, using prescription drugs by 15 percent, and being admitted to the hospital by 30 percent, but does not seem to have an effect on use of emergency departments.
  - Insurance increases the use of recommended preventive care such as mammograms by 60 percent and cholesterol monitoring by 20 percent.
  - Insurance increases the probability individuals report having a regular office or clinic for their primary care by 70 percent and the likelihood they report having a particular doctor that they usually see by 55 percent.
  - Overall, the increased health care use from enrollment in Medicaid translates into about a 25 percent increase in annual health care expenditures.

- *Increased financial security*
  - Insurance decreases the probability of having an unpaid medical bill sent to a collection agency by 25 percent – which also benefits health care providers since the vast majority of such debts are never paid.
  - Insurance decreases the probability individuals report having any out of pocket medical expenses by 35 percent.

- Insurance decreases the likelihood individuals report having to borrow money or skip payment on other bills because of medical expenses by 40 percent.

- *Improved health and well-being*
  - Insurance increases the probability that people report themselves in good to excellent health (compared with fair or poor health) by 25 percent.
  - Insurance decreases the probability that people report a decline in their health over the last six months by 40 percent.
  - Insurance increases the probability of not screening positive for depression by 10 percent.

- *No apparent reduction in private health insurance coverage for this group*
  - Those selected in the lottery were 25 percentage points more likely to be enrolled in Medicaid, but this public coverage did not crowd out private coverage: they were no less likely to be covered by private health insurance.

Methodological Highlights

This study uses a randomized controlled design – the gold standard for medical evidence – to evaluate the effects of insurance.

- Although there are many studies comparing health or health care use between the insured and uninsured, inferring the impact of health insurance from such comparisons is difficult because the insured and the uninsured may differ in many ways – such as income, employment, or initial health – that may themselves affect the outcomes being studied. This makes it difficult to discern the effects of insurance itself.

- Random assignment of health insurance to some but not others avoids such confounding factors (since the treatment and control groups are divided by chance, eliminating systematic differences between them). Such an experiment has never before been performed in the United States, however, as there would be ethical concerns with deliberately withholding available health insurance. The allocation of the limited number of spots available in Oregon's insurance program, however, created a natural circumstance that allowed researchers to take advantage of such a randomized design.

- The Oregon health insurance lottery provided the unique opportunity to gauge the effects of health insurance using the rigorous standards of a randomized controlled trial.
  - In early 2008, Oregon opened a waiting list for its Medicaid program for low-income adults that had previously been closed to new enrollment. Approximately 90,000 people signed up for the available 10,000 openings.

- The state drew names from this waiting list by lottery to fill the openings. The state deemed random selection by lottery the fairest way within federal guidelines to allocate its limited number of openings.
- This random selection allows researchers to gauge the many effects of health insurance itself, isolating it from the types of confounding factors that can plague observational studies.

- The study compiles rich data from many sources to examine a wide range of potential effects of insurance, including both primary data from surveys and administrative data such as hospital records.

Ongoing Research

The current study is part of a broader research program that will continue to yield insights into the effects of expanding public health insurance. Ongoing research will, among other things, incorporate measures of physical health including blood pressure, cholesterol, diabetic blood sugar control, and obesity. Outcomes will also be studied over a longer time horizon than the current analysis, which examines only the first year of Medicaid coverage.