

UNDERSTANDING MEDICAID EXPANSION: THE EFFECTS OF INSURING LOW-INCOME ADULTS

The Oregon Health Insurance Experiment found that covering low-income uninsured adults with Medicaid increased health care use—including primary care, hospital admissions, prescription medications, and emergency room visits—improved economic security and self-reported health, and reduced depression over the first two years. There was no detectable impact on physical health measures.

Featuring an evaluation by Katherine Baicker and Amy Finkelstein



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IN THE FIRST ONE TO TWO YEARS

Medicaid increased the use of health care services. It increased hospital admissions, emergency department visits, outpatient visits, prescription drug use, and use of preventive care, such as mammograms and cholesterol screenings.

Medicaid reduced depression rates and improved self-reported health, but had no measurable effect on physical health. Physical health measures included blood pressure, cholesterol, and glycated hemoglobin.

Medicaid decreased financial strain. It reduced medical debts sent to collection agencies, lowered the likelihood of borrowing money or skipping other bill payments to cover medical expenses, and virtually eliminated catastrophic out-of-pocket medical expenditures. It had no measurable effect on employment or earnings.

In the very short term, expanded Medicaid eligibility for adults increased Medicaid enrollment of their already-eligible children. These effects dissipated over the two-year study period.

In the very short term, Medicaid increased voter turnout. These effects dissipated over the two-year study period.

The Affordable Care Act, passed in 2010, greatly increased health insurance coverage in the United States, but many Americans remain uninsured. Understanding the effects of health insurance on the health care use, health, and economic security of adults without insurance is central to debates around the value of expanding health insurance coverage in the United States.

Yet considerable uncertainty exists about these effects. For example, expanding health insurance might decrease emergency room use by increasing access to physician office visits that replace emergency department care. Alternatively, it might increase emergency department use by lowering the cost of those visits for patients. Insurance may or may not improve people's health depending on whether it increases access to care, and whether access is a primary driver of health at all. It can be difficult to estimate the impacts of health insurance because people who are insured tend to differ from people who are uninsured in ways that may directly affect the outcomes of interest.

In 2008, the state of Oregon expanded Medicaid—the public health insurance program in the United States for low-income adults and children—to a limited number of low-income, uninsured adults ages 19-64 years old who were selected from a waitlist by lottery. This provided a rare opportunity for researchers to use the random selection of lottery winners to better examine and understand the effects of extending Medicaid to people who had been previously uninsured.



EVALUATION

The state of Oregon offered a Medicaid expansion program for low-income, uninsured, and adults without a disability aged 19–64 years old who were not eligible for other public health insurance. In 2008, this program, which had been closed to new enrollment since 2004 due to budgetary constraints, had the capacity to enroll new adults. Correctly anticipating excess demand for the available new enrollment slots, the state used a lottery to randomly select individuals from a list of those who signed up for the lottery in early 2008. Lottery winners and members of their households were able to apply for Medicaid. Applicants then enrolled if they met the eligibility requirements.

The Oregon Health Insurance Experiment consists of a series of studies in which a team of researchers used the lottery’s random assignment to study the impact of Medicaid coverage on low-income adults. Of the about 75,000 individuals who signed up for the lottery, the state randomly selected about 30,000 winners between March and September 2008. About two years later, the state was able to offer Medicaid to the remaining individuals who had signed up for the lottery and not yet been selected, and the experiment ended. It was the first randomized evaluation of the impact of Medicaid.

Researchers estimated the effects of expanding Medicaid coverage by comparing the outcomes of those selected by the lottery to those who were not selected using a combination of administrative and survey data. Administrative data included hospital discharge records, emergency department records, Medicaid enrollment, and credit reports and voting records. Researchers conducted a mail survey of all members of the intervention group and a similar number of individuals in the comparison group about one year after the lottery. About two years after the lottery, researchers conducted more detailed in-person interviews and clinical health exams for a subset of individuals in the intervention and comparison groups. Researchers also undertook a series of in-depth, open-ended interviews with some of the participants in the lottery.

Intervention Group

(Selected by the lottery)
29,834 individuals

Became eligible to apply for Medicaid, which provided comprehensive medical benefits—including prescription drugs, physician services, and major hospital benefits—with no patient cost-sharing and a low (or zero) monthly premium

Comparison Group

(Not selected by the lottery)
45,088 individuals

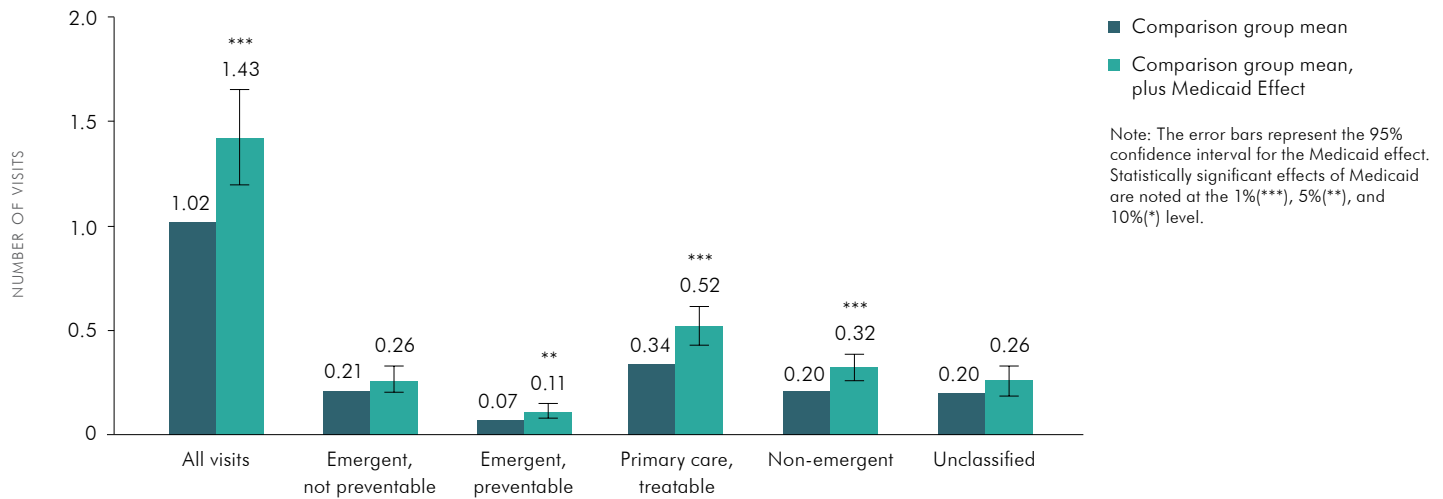
Continued with status quo.

UNDERSTANDING THE RESULTS

The state of Oregon maintained low barriers for lottery sign up and did not screen for Medicaid eligibility at lottery sign-up. Only about 60 percent of those who won the lottery filled out the paperwork to receive Medicaid coverage, and, among this group, only about half met the eligibility requirements. The researchers estimate the impact of Medicaid coverage, not just the impact of winning the lottery. They begin by comparing the individuals who won the lottery to the individuals who signed up for the lottery but were not selected (the comparison group). Because only about one quarter of lottery winners actually ended up on Medicaid and virtually none of the comparison group did, the effect of Medicaid coverage is found by multiplying the comparison of outcomes between those who won and those who lost the lottery by approximately four.

RESULTS

Figure 1. Effect on emergency-department use



Medicaid increased the use of health care services.

Specifically, Medicaid increased hospital admissions by 2.1 percentage points (a 30 percent increase relative to the control group¹). It also increased the number of emergency department visits per person by 0.4 visits (a 40 percent increase), including increases in visits to the emergency department for conditions considered likely to be non-emergent and treatable by primary care (Figure 1). The increase in hospital admissions and emergency room visits was immediate, and persistent over the two years of the experiment. Medicaid also increased outpatient visits and prescription drug use.

Medicaid increased the use of recommended preventive care services as well. For example, Medicaid caused a 60 percent increase in the likelihood of mammograms for women over forty years of age (the recommended age for screening at the time of the experiment). Medicaid increased the use of prescription medications related to a number of chronic health conditions, with some of the largest effects seen in prescription medications for mental health and diabetes. Medicaid also increased the use of covered dental services and reduced the prevalence of unmet dental needs. Self-reported access to and quality of care also increased with Medicaid coverage.

Medicaid reduced rates of depression and improved self-reported health, but had no statistically significant effect on measured physical health outcomes.

Medicaid increased the likelihood of self-reporting health as good, very good, or excellent (as opposed to fair or poor) by 13 percentage points (a 24 percent increase). Clinical exams conducted as part of the study on both intervention group and comparison individuals found that Medicaid

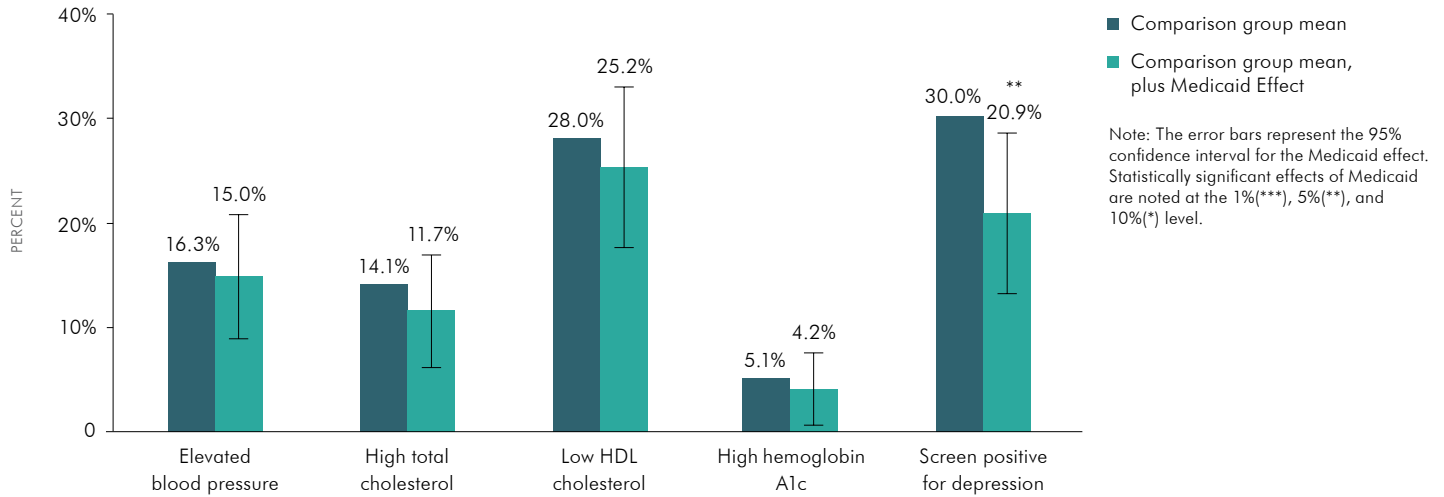
reduced rates of depression (Figure 2) by 9.1 percentage points (a 31 percent decrease). Medicaid also reduced the prevalence of untreated and undiagnosed depression, reduced self-reported unmet mental health care needs, and increased the use of prescription medications for mental health. Medicaid reduced the number of individuals with undiagnosed depression by 6.8 percentage points from a baseline of 14 percent (or almost 50 percent) and untreated depression 10.5 percentage points from a baseline of 16.6 percent (about 60 percent). It also reduced the share of respondents reporting unmet mental health care needs by 9.2 percentage points from a baseline of 24.4 percent (a decrease of almost 38 percent). Finally, Medicaid increased the use of medications for the treatment of mental health conditions by 8.8 percentage points (an increase of 42.5 percent) from a baseline of 20.7 percent.

The clinical exams conducted as part of the study indicated that Medicaid did not have a statistically significant effect on blood pressure, cholesterol, or glycated hemoglobin (Figure 2). However, Medicaid did increase the probability of a physician diagnosis of diabetes, as well as use of diabetes medication. Given limits in the sample size of diabetic people, the study was not able to rule out potential improvements in glycated hemoglobin (a measure of diabetes) of the size one would have expected to see with the increased medication use. On the other hand, the study was able to rule out declines in blood pressure that one would have expected to see based on prior quasi-experimental evaluations of the effects of Medicaid. There was also no evidence of an increase in the use of medication for high blood pressure.

¹ All reported percent changes indicate the percent increase or decrease caused by Medicaid relative to the comparison group.

RESULTS

Figure 2. Effect on clinical measures



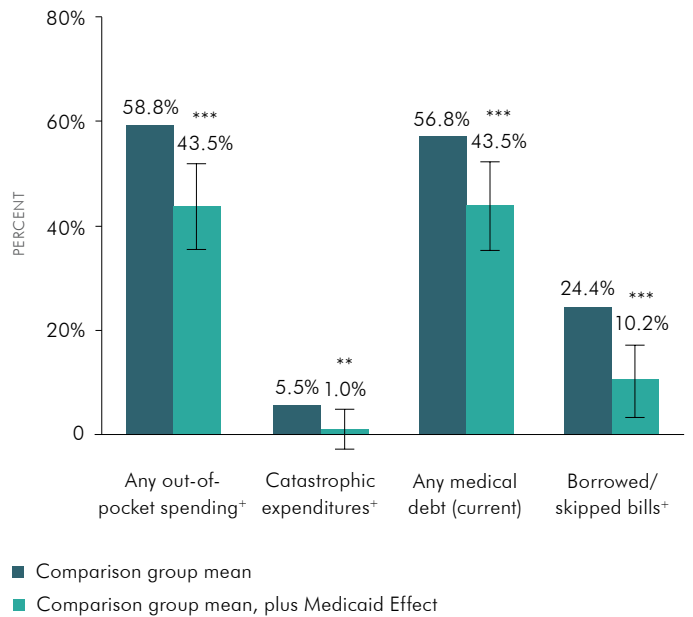
While long-run effects may differ from those found over this two-year study period, these physical health measures were chosen explicitly because clinical trials have shown there to be medications for these conditions that are effective within this time frame.

Medicaid diminished financial hardship. Medicaid reduced the likelihood of having any unpaid medical bills that were sent to collection agencies by 6.4 percentage points (a 23 percent decrease). It also reduced several other measures of financial hardship (Figure 3). Catastrophic out-of-pocket expenditures, defined as out-of-pocket medical expenditures in excess of 30 percent of household income, were nearly eliminated. However, it had no detectable effect on individuals' earnings or employment.

Medicaid increased voter turnout immediately but had no impact in subsequent years. Medicaid increased voter turnout in the 2008 November election by 2.5 percentage points from a baseline of 34 percent (a 7 percent increase). There was no evidence of increased turnout in subsequent state-wide and local elections after November 2008 nor in the statewide general election in November 2010.

The Medicaid expansion for adults initially increased Medicaid enrollment of their already-eligible children. For every nine adults who enrolled in Medicaid due to the lottery, about one child also enrolled. However, more children in the comparison group gradually enrolled in Medicaid over time, so that by one year after the lottery, there was no effect of adults winning the lottery on their children's enrollment.

Figure 3. Effect on financial hardship



⁺Last 12 months

Note: The error bars represent the 95% confidence interval for the Medicaid effect. Statistically significant effects of Medicaid are noted at the 1%(***), 5%(**), and 10%(*) level.

POLICY LESSONS

Medicaid can increase health care utilization across settings, including prescription drugs, physician office visits, preventive care, hospital visits, and emergency department visits for both emergent and nonemergent care. A common claim is that adults without insurance overburden emergency departments by seeking last-resort care there, and that expanding Medicaid would get these patients out of the emergency department and into primary care, improving health and reducing health care spending. However, this study found that for the first two years, Medicaid caused a sustained increase in emergency room visits as well as care in other settings, raising total spending on health care.

Medicaid can have measurable benefits for patients within the first one to two years, including reduced exposure to major financial expenses or medical debts, reduced rates of depression, and improved self-reported health. This study did not, however, find any statistically significant improvements in the measured physical health indicators. These findings challenge the claims from numerous commentators that Medicaid may not benefit the uninsured, because they already receive substantial amounts of charity care or because low rates of reimbursement can make it difficult for Medicaid patients to access medical care.

While further research is needed to understand the most effective and efficient means of providing health care and insurance, these results can help inform ongoing policy discussions regarding the costs and benefits of expanding Medicaid coverage to low-income, uninsured adults.

Featured evaluations: Allen, Heidi, Bill Wright, and Katherine Baicker, “Personal Narratives from Oregon’s Medicaid Expansion,” in *Medicaid: Politics, Policy, and Key Issues*, ed. Daniel Lanford (Nova Science Publishers, 2020), 16.

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