The Oregon Health Insurance Experiment and the Value of Randomized Evaluation

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The importance of empirical evidence for social policy

- Policy makers at all levels of government and in the private sector are constantly proposing or considering new policies.
- How can they know which programs work? Which ones work best?
- Often decision makers are hampered by a lack of rigorous evidence on the impact of policies.
Randomized evaluations can provide clear answers

- Key point: Without knowing why two groups differ, hard to know what to attribute those differences to
  - More doctors associated with more deaths (17th century Russia)

- Needless to say, such comparisons can be very problematic
Randomized evaluations can provide clear answers

- Randomized evaluations can measure the **causal** impact of a program.
- A lottery decides who gets what intervention(s)

- **By construction**, the treatment group and the control group will have the same characteristics on average
  - Observable: income level, gender, age etc.
  - Unobservable: health, motivation, ability, initiative, social networks, etc.
- This allows for causal inference
Oregon Health Insurance Experiment

- Randomly assign Medicaid to some low-income, uninsured adults
  - By construction, the insured and uninsured are on average identical, except for whether or not they have insurance

- Unprecedented opportunity to bring rigors of randomized trials to pressing domestic social policy question
  - First RCT to study the impact of Medicaid for the uninsured
Probability of Hospitalization

Hospital Discharge Data

Percent

All | Via Emergency Department | Not Via Emergency Department
--- | --- | ---
Control Mean | Implied Insurance Estimate | CI for Insurance Effect

Outcomes measured over an approximately one year period.
Preventive Care

Mail Survey Data

- **Blood Cholesterol (Ever Tested)**
- **Blood Sugar/Diabetes (Ever Tested)**
- **Mammogram Women >=40 (Last 12 Months)**
- **Pap smear All Women (Last 12 Months)**

- **Control Mean**
- **Implied Insurance Estimate**
- **CI for Insurance Effect**
Financial strain (Survey)

Mail Survey Data

- Any out-of-pocket medical expenses (Last 6 months)
- Outstanding medical expenses (Current)
- Borrowed money/skipped bills for Med. Expenses (Last 6 months)
- Refused treatment due to medical debt (Last 6 months)

Legend:
- Control Mean
- Implied Insurance Estimate
- CI for Insurance Effect
Physical Health (Survey)

Inperson Survey Data

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percent</th>
<th>Error Bars</th>
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<tbody>
<tr>
<td>Elevated blood pressure</td>
<td></td>
<td></td>
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<tr>
<td>High total cholesterol</td>
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<tr>
<td>Low HDL cholesterol</td>
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<tr>
<td>High Hemoglobin A1c</td>
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<tr>
<td>Screen positive for depression</td>
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</tbody>
</table>

Legend:
- **Control Mean**
- **Control Mean plus Medicaid Effect**
- **CI for Medicaid Effect**
Post-Lottery Diagnosis (Dx) and Medication (Rx)

![Inperson Survey Data Graph]

- Dx Hypertension
- Rx Hypertension
- Dx High cholesterol
- Rx High cholesterol
- Dx Diabetes
- Rx Diabetes
- Dx Depression
- Rx Depression

Legend:
- Control Mean
- Control Mean plus Medicaid Effect
- CI for Medicaid Effect
Summary: Two years later, Medicaid:

- Increases health care use
  - Including preventive care
- Reduces financial hardship
  - Out-of-pocket catastrophic medical expenditures virtually eliminated
- Improves mental health
  - 30% ↓ in observed rates of depression
- No significant effect on physical health measures
  - Blood pressure, cholesterol, or glycated hemoglobin
  - Although increases diagnosis and medication for diabetes
- No significant effect on employment or earnings
- More information (and new results) on study website: www.nber.org/oregon
“Medicaid is worthless or worse than no insurance”
- Not true: Increases in utilization, perceived access and quality, reductions in financial strain, and improvement in self-reported health

“Health insurance expansion saves money”
- Not true in short run: increases in health care use
- In long run, remains to be seen: increases in preventive care and improvements in self-reported health
5 Things the Oregon Medicaid Study Tells Us About American Health Care

Does The Oregon Health Study Show That People Are Better Off With Only Catastrophic Coverage?  

Here’s what the Oregon Medicaid study really said

A war over Medicaid

How to Use the Oregon Medicaid Study to Your Ideological Advantage

Medicaid Access Increases Use of Care, Study Finds

Spending on Medicaid doesn’t actually help the poor

Is health insurance an antidepressant?  
New findings show that wider coverage has one clear effect on the population, and it’s not one that anyone is talking about.

Four Reasons Why The Oregon Medicaid Results Are Even Worse Than They Look

Oregon’s Lesson to the Nation: Medicaid Works
Building on the success of MIT’s J-PAL

- MIT’s Abdul Latif Jameel Poverty Action Lab (J-PAL)
  - International thought leader in advancing the science and practice of randomized evaluations and disseminating resulting policy lessons
  - 430+ on-going and completed RCTs in 55 countries
  - Network of 91 affiliated professors at universities around the world
  - Over ~4,000 people trained in use of RCTs
  - 130 million people reached by policies found to be effective by J-PAL
  - Currently in Africa, Europe, Latin America, South Asia, and Southeast Asia
  - Newest regional office: North America!
Applying J-PAL’s model to North America

J-PAL has had tremendous success in generating evidence—and helping to build a whole movement for evidence-based policy—in the international development field.

The approach:
- A. Build a network of top academics
- B. Implement a three-part model:
  - 1. Research
  - 2. Policy outreach
  - 3. Capacity building
J-PAL North America’s Health Care Delivery Initiative

- U.S. Health Care Delivery Initiative (HCDI)
  - Encourages randomized evaluations of strategies to make health care delivery in the U.S. more efficient and more effective
  - More information at http://www.povertyactionlab.org/HCDI

- Getting involved in the research
  - If you are a practitioner interested in partnering with academics to conduct evaluations, please contact us. (hcdi@povertyactionlab.org)
  - Matchmaking conference next fall to connect researchers and entrepreneurial health care practitioners.
The J-PAL NA Team

- **Scientific Directors**
  - Amy Finkelstein (MIT) and Lawrence Katz (Harvard)

- **Deputy Director**
  - Mary Ann Bates (mbates@mit.edu)

- **www.povertyactionlab.org/north-america**