THE WORLD BANK

IMPACT EVALUATION

Evaluating Impact: Turning Promises into Evidence

The Impact of Outpatient Insurance on Medical Expenditures in Guangdong Province

Group 5
Beijing, China
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1. Background

- The central government highlighted the importance of outpatient care.
- To lower private and public medical expenditures and improve the quality of care, the government plans to introduce health insurance for outpatient care.
- Foshan County in Guangdong province plans to start implementation of (mandatory) outpatient insurance in January 2010.

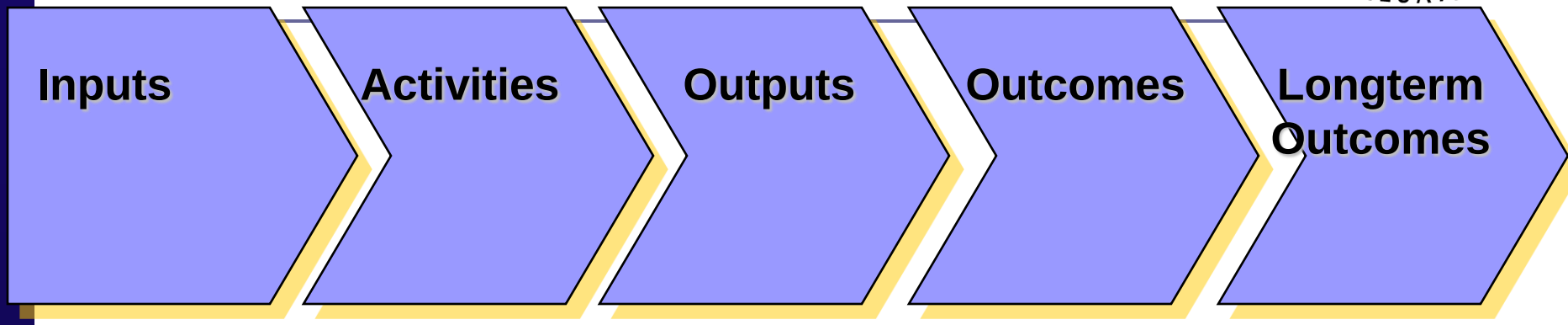
Social Economic Background

- Foshan population has approximately 5 million individuals
- We approximate average individual income to be around 30,000rmb in 2009
- Average individual medical expenditure is approximately 520rmb in 2009

Policy Design

- Insurance participants have access to partial reimbursement for outpatient expenditure
- Annual individual contribution = 40rmb
- Annual government contribution = 50rmb
- Reimbursement depends on the official status of hospital
- Community Health Service Institutions (CHSI) qualifies for 50% reimbursement
- Each community has one CHSI.
- We focus our evaluation on the impact of outpatient insurance at CHSI.

2. Results Chain



Inputs	Activities	Outputs	Outcomes	Longterm Outcomes
•Fees •Personnel •Material	•Finalize insurance scheme •Undertake public enrollment campaign •Hire evaluation team •Train evaluators •Collect baseline data	•Detailed insurance scheme •Population reached by enrollment campaign •Insured population •Improved quality of health care	•Lower hh medical expenditures •Lower per capita medical expenditures •Lower hospitalization rates. •Higher hh utilization of medical services	• Improved health in population • Better health insurance

3. Primary Research Questions

- What is the impact of outpatient clinic insurance on medical expenditures?

4. Outcome Indicators

- Biweekly rate of going to the hospital
- Average daily number of patients at outpatient clinic
- Average prescription cost per person per visit
- Average daily outpatient clinic expenditures
- Average daily inpatient hospital expenditures
- Hospitalization rate
- Average private expenditures per patient

5. Identification Strategy/Method

We consider three scenarios:

1) Random sampling, randomized treatment
2) Non random sampling, randomized treatment
3) Random sampling, non-randomized treatment

1. Random Sampling, Randomized Treatment

- Randomly sample 100 out of 200 communities from Foshan
- Collect baseline data for sampled communities
- Randomly assign 50 of the 100 sampled communities to receive outpatient clinic insurance scheme
- Collect data after intervention
- Take first difference of post-intervention data to estimate the impact of intervention
- Take second difference with baseline data to check that the randomized experiment was conducted properly (then the results should be the same)

2 Non Random Sample, Randomized Treatment

- Collect data after intervention from the treatment and control communities
- Estimate the impact of the treatment. The Effect of the Treatment on the Treated
- Go back and try to find data collected by the government on the communities not in our sample, to ascertain external validity of the estimated results

3. Random Sampling, Non Random Treatment

- Two methods
- 1) Difference in Differences. This cannot deal with biases caused by some unobserved variables.
- 2) Estimate the Intention to Treat. Compare the sample that was not selected to participate in treatment or control, with all communities that were sampled (regardless of whether they were actually treated).

6. Sample and data

- Use existing data to conduct power calculation to determine household level sample size
- Baseline household survey and follow up household surveys for utilization rates and medical expenditures
- Hospital level data on prescription costs, hospital expenses, patient payments

7. Time Frame/Work Plan

- October 2009:
  - Hire evaluators and sampling team
  - Train evaluators, discuss evaluation with hospitals
  - Power calculation
- December 2009:
  - Collect baseline data, check randomization
- January 2010:
  - Implement insurance
- January 2010 – January 2011
  - Collect quarterly hospital level data.
- July 2010:
  - Mid-term impact evaluation, check compliance.
- January 2011:
  - Final impact evaluation
  - Policy report for government.

8. Sources of Financing

- City government