



THE WORLD BANK



Evaluating Impact: Turning Promises into Evidence

Price control of essential drugs: Evaluating the impact on diabetes drugs

Team 1
Beijing, China
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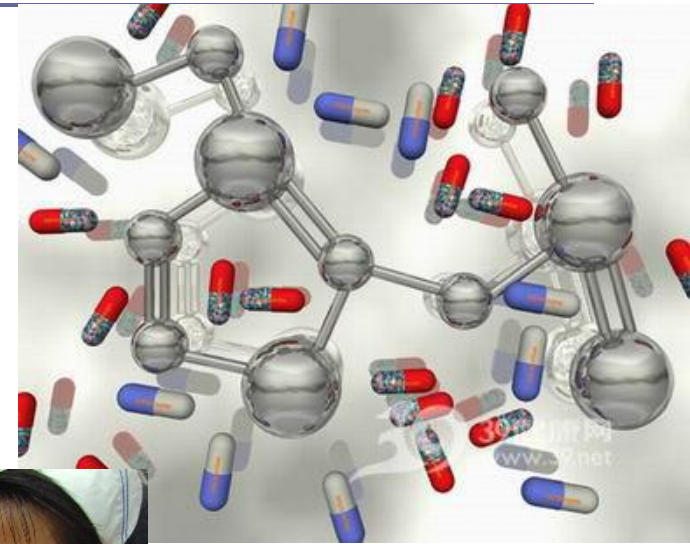
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Outline

- Background
- Results chain
- Primary research questions
- Outcome indicators
- Identification strategy
- Sample and data
- Timeframe/workplan
- Sources of financing

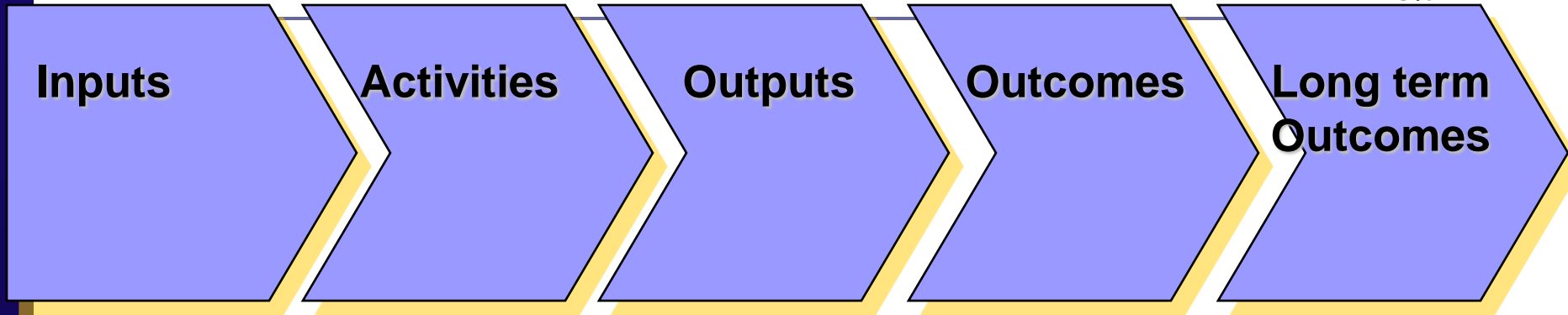


1. Background

- ❑ The central government has published a list of essential medicines
- ❑ The central government has determined the price ceilings for these drugs
- ❑ The central government is piloting the price control of essential drugs in one city
- ❑ Our evaluation focuses on the impact of the program on diabetes drugs specifically



2. Results Chain



- Human resources
- Budgeting for the price control intervention
- Definition of the roles of the various government departments involved in the intervention

- Investigate the cost of producing essential diabetes drugs (production and distribution)
- Audit prices of essential diabetes drugs
- Obtain stakeholder input

- Prices adjusted for essential diabetes drugs
- Markup of diabetes drugs is reduced

- Medical expenditure burden reduced for diabetics
- Sustainable diabetes drug production
- Improve mixture of diabetes drugs usage

- Long-term price control mechanism for diabetes drugs established
- Diabetes drugs availability / affordability



3. Primary Research Questions

- ❑ Has price control of diabetes drugs reduced the medical expenditure burden of diabetics?
- ❑ Has the intervention resulted in sustainable diabetes drug production?
- ❑ What is the impact of the intervention on diabetes drug usage?
- ❑ Has the intervention improved the availability and affordability of essential diabetes drugs?

4. Outcome Indicators

Variable
Annual per capita drug expenses for diabetics
Supply of diabetics drugs
Essential diabetes drug usage

5. Identification Strategy/Method

- In the pilot city, choose 6 districts with similar characteristics along the following dimensions:
 - Number of diabetics per 100 persons
 - Health expenditure allocation (number of hospital beds per 1000 persons)
 - Population age structure
 - Percentage with health insurance
 - Per capita GDP
- Randomly select three districts to be the experimental group and three districts to be the comparison group
- Period of observation: 1 year
- Evaluation method: difference-in-difference

6. Sample and Data

Variable	Data type	Data source
Dimensions of similarity between districts	Aggregate statistics	CDC data, social security data, statistical yearbooks on health and economic indicators
Annual per capita drug expenses for diabetics	Community health dossiers	Stratified random sample (stratified by census tracts) 5% of the diabetics from each census tract
	Household survey	Survey on the type and amount of diabetes drugs used. Price of the drugs comes from government price lists for diabetes drugs
Supply of diabetics drugs: The instances and amount of essential diabetes drugs out of stock	Health facility survey	Stratified random sample (stratified by type of facility) Tertiary 100%, secondary 30%, community 5%
Essential diabetes drug usage: Number of essential diabetes drugs per 100 prescriptions for diabetes	Sample of prescriptions	Random sample of 5% of diabetes prescriptions from each health facility. If under 300, sample all prescriptions from that facility

7. Time Frame/Work Plan

dates	Task
2009.11-12	Collect aggregate statistics for selecting treatment and control districts
from 2010.1.1	Intervention: price adjustment
2010.1-2	Collect baseline data for the year 2009
2010.1-12	Monitor prices
2011.1-2	Collect post intervention data for the year 2010
2011.3-6	Complete evaluation report
2011.6	Present policy recommendations to relevant government departments

8. Sources of Financing

- ▣ 1% of the program funding for the program “price control of essential drugs”

Clarifications

- **In the process of carrying out the actual evaluation, we expect some deviations from our original design in concert with realities on the ground**
- **We have been exposed to many evaluation methods in this workshop, but in areas where we can improve, we would greatly appreciate your feedback**



谢谢

