Improving Service Delivery: Health and Education

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Effective Service Delivery

- Key problems in providing services to the poor:
  - Discrimination
  - Targeting
  - Absenteeism
  - Corruption
  - Maintenance of program

- Several projects that use randomized evaluation techniques to:
  - Understand scope of problem
  - Shed light on solutions
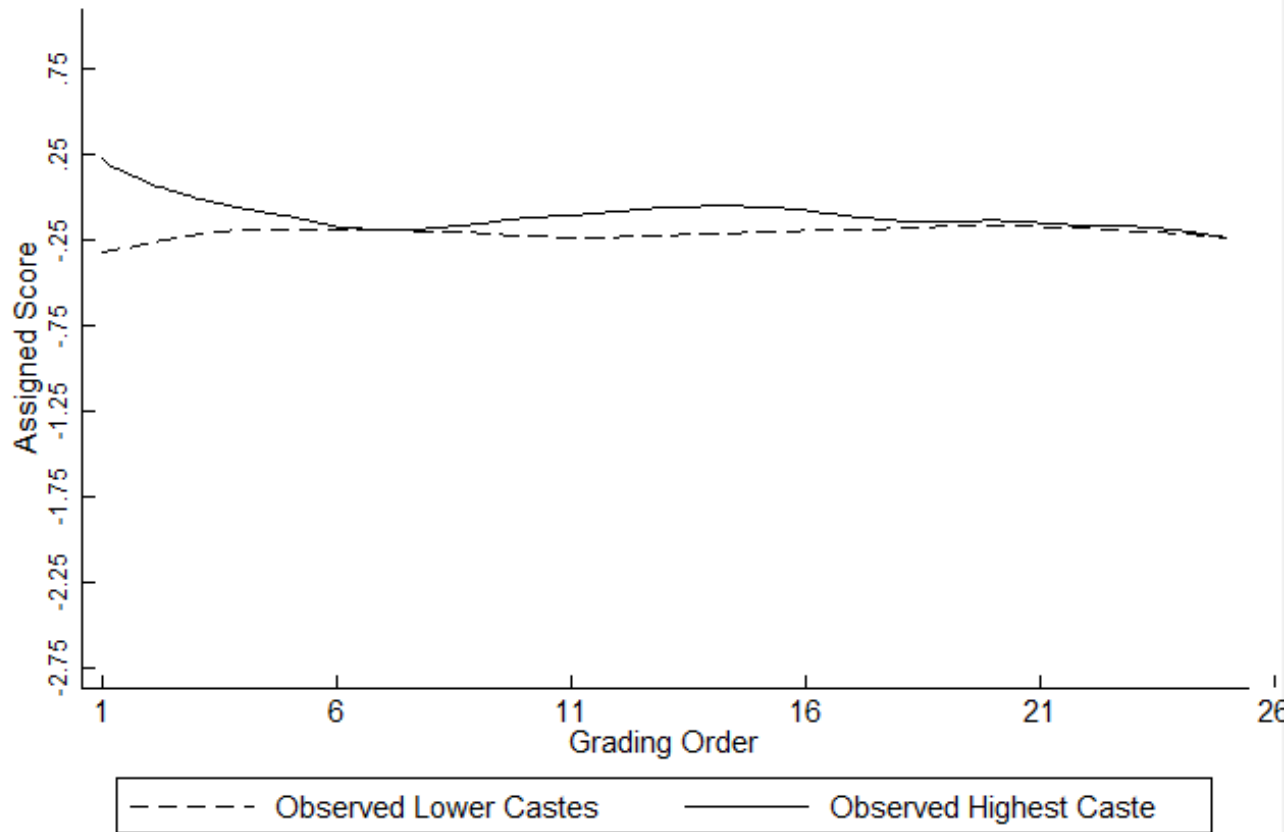 - Provide guidance on open questions

DISCRIMINATION

1. Discrimination

- Large differences in outcomes for:
  - Bertrand, Hanna, and Mullainathan (2008) document huge differences in engineering college entrance exam scores in India
- Do individuals get lower quality services due to their caste?
  - Hard to understand whether children who belong to minority groups perform worse in school due to discrimination or due to other characteristics that may be associated with a disadvantaged background

Measuring Discrimination

- Recruited 120 teachers to grade exams
- <u>Randomized</u> child characteristics on cover sheets (Linden and Hanna, 2010)
  - Teachers gave exams that are assigned to be lower caste scores that are between 0.03 to 0.09 standard deviations lower than exams that are assigned to be high caste

The chart plots Assigned Score (y-axis, ranging from -2.75 to .75) against Grading Order (x-axis, 1 to 26), comparing "Observed Lower Castes" (dashed line) and "Observed Highest Caste" (solid line).

- Randomized order in which exams were graded by the teachers
- Most discrimination occurred at the start of the exam when teachers were unfamiliar with the testing instrument

Lessons and Questions

- ## Measured discrimination in grading:
  - Important since need to understand <u>magnitude</u> in order to understand whether anti-discrimination programs can work!
  - How would this estimate compare against other forms of discrimination in the classroom or the health center?

- ## Discrimination at start of the pile:
  - Can training programs that provide teachers with more experience with materials reduce discrimination more than programs that explicitly aim to reduce discrimination?

TARGETING THE POOR

2. Targeting the Poor

- Identifying the poor to provide targeted social service is a huge problem worldwide
  - Indonesia Cash Transfer Program: Using the common $2 PPP per day poverty threshold, 45 percent of the funds were mis-targeted to non-poor households and 47 percent of the poor were excluded from the program in 2005-2006

Can community targeting work?

- Data driven approach may be expensive and be ineffective tool to collect data
- Community approach may be captured by village elites

- Working with the government of Indonesia, we conducted an evaluation of data-driven targeting methods with community approaches to targeting

Goal of Evaluation

- Evaluation Challenge:
  - Community methods tend to be used in areas where there is low state capacity/low levels of elite capture.
  - What happens use community method in any type of neighborhood?
- Randomized community versus data driven approach in 640 villages across 3 provinces

Lessons and Open Questions

- Community approach had higher rates of mis-targeting of the poor ($2 per day) based on consumption data
  - However, community methods better at finding the very poor ($1 per day)
  - No differences in estimated poverty rate/poverty gaps under both types of programs
  - Community satisfaction **very** high under community methods

- Open Questions: How can you update the list?
  - Self-Targeting Systems
  - Hybrids: community updates the list?

SERVICE PROVIDER ABSENTEEISM

3. Service Provider Absenteeism

- Service provider absenteeism is widespread and unpredictable (Chaudhury, et al, 2006)
  - Healthcare workers in India are absent 43% of the time they should be at work
  - Teacher absenteeism varied by 15 percent in Maharashtra to 42 percent in Jharkhand

- Huge consequences for the poor:
  - Effectively fewer years of education
  - Most people spend lots of money to get uncertain quality healthcare from private sector
  - Basic services, such as immunizations, are not being delivered

Testing Different Programs

- Chen, Kremer, Glewwe, Moulin
  - Monitoring by Headmaster ineffective; Need to reduce discretion in monitoring

- Banerjee, Duflo and Glennerster
  - Pay was linked to absences
  - Attendance initially improved
  - Supervisor discretion undermined the incentive structure

Cameras in the Schools

- Evidence from a randomized trial in Rajasthan, India of cameras used for monitoring teacher presence linked to incentives in schools (Duflo, Hanna, Ryan)
- Randomized monitoring and incentives versus normal fixed salary contract

Cameras in the Schools

- Absence fell from 42% to **21%**
- Test scores increased dramatically
- Key Lessons:
  - Reducing <u>discretion</u> leads to high impact
  - Monitoring <u>must</u> be accompanied by financial incentives
- Current Collaboration with NRHM to test program in PHCs

Conclusion

- Providing services to the poor significant challenge
- Relatively new body of knowledge gained from randomized experiments is providing insights into improving service delivery, and is helping to shape the next set of questions helping to improve service delivery for health and education programs