The role and interpretation of pilot studies in impact evaluation research

Shagun Sabarwal
J-PAL South Asia at IFMR
3ie Delhi Seminar Series
October, 2016
I. Motivation
   For the seminar and the project

II. Pilot activities
    Methods and findings

III. Conclusion
    Implications for research
Motivation

For the seminar and the project
Design and implementation of evaluation

Evaluation Design

- Intervention
- Target Group
- Outcomes
- Random Assignment
- Sample Selection
- Survey Design

Theory of Change

Evaluation Question (Causal Hypothesis)

Implementation

- Monitoring
- Data Collection
- Data Analysis
- Results

Pilot
Our approach

• We began with a series of health policy dialogues with different state governments, Punjab being one of them

• GoP emphasized need for improvement in MCH indicating the need for looking into more supply side
Policy Challenge in Punjab

- Punjab state leads India on many social, economic and human development outcomes

- Despite this, Punjab needs improvement in important maternal and child health outcomes
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Punjab (Rural) (%)</td>
</tr>
<tr>
<td>Any antenatal care visit (ANC)</td>
<td>80.3</td>
</tr>
<tr>
<td>At least 3 ANC visits</td>
<td>55.4</td>
</tr>
<tr>
<td>Pregnant women blood tested</td>
<td>58.5</td>
</tr>
<tr>
<td>Pregnant women abdomen examined</td>
<td>42.4</td>
</tr>
<tr>
<td>Received all 3 doses of DPT vaccine</td>
<td>82.2</td>
</tr>
<tr>
<td>Fully immunised</td>
<td>67.2</td>
</tr>
</tbody>
</table>

Source: DLHS - IV
Team

Principal investigators
• Seema Jayachandran (Northwestern University)
• Simone Schaner (Dartmouth University)
• Shagun Sabarwal (J-PAL SA)

Research staff
• Vrinda Kapoor, Research Associate
• Vrinda Kapur, Research Manager
Study design

Full Sample: XX staff nurses at YY PHCs

- Soft Skills Training
  - Patient Feedback
    - No Monetary Incentive (Z PHCs)
    - Monetary Incentive (Z PHCs)
  - No Patient Feedback (Z PHCs)
- No Soft Skills Training
  - Patient Feedback
    - No Monetary Incentive (Z PHCs)
    - Monetary Incentive (Z PHCs)
  - No Patient Feedback (Z PHCs)
Pilot activities

Methods and findings
Pilot activities

Qualitative scoping work and needs assessment (October 2015 – December 2015)

Patient Feedback Mechanism (January 2016 – May 2016)
Phase 1: Qualitative scoping study

The aim of this phase was to study

- Utilisation of health care services
- Roles and responsibilities of an ANM
- Challenges faced by the ANMs
- Feedback of the community on the services of an ANM
- How the ANM fares against other health workers
Methods

• Qualitative methods including focus group discussions and one-on-one interviews

• Participants included ANMs and beneficiary women from the community

• “Shadowed” ANMs to observe their time allocation and interactions with patients

• Covered 5 (out of 7) blocks in Sangrur

• Covered 27 sub-centres like Balian, Mahorane, Sakrodi etc.
Findings

Roles and responsibilities of an ANM

• Record keeping of all eligible couples
• Ante-natal care (ANC)
• Post-natal care (PNC)
• Routine immunisation

Lack of clarity on ANM roles/responsibility among key stakeholders
Provision of important services

- Regular routine immunisation
- Provision of other services lagging behind
- ANMs provide less case to women far from the SC, richer households

ANMs under provide services like PNC, family planning counselling
Division of work: Desk versus field work

• Desk work includes maintaining registers and draft the death and birth certificates

• Field activities include visiting newly married women to educate them about family planning methods, motivating pregnant women to get ANC check-ups done

ANMs are burdened by the desk work and do not find time to go into the field
Need for soft skills

• ANMs realise that patience, empathy and communication skills are important qualities for an ANM to have

• Interviews with beneficiaries, however, did not highlight this gap as most women thought their interactions with the ANMs were positive

Need for a soft skills training did not come out as being a salient problem
Phase 2: Patient Feedback Mechanism

The aim of this phase was

- To conduct phone interviews to assess the feasibility of collecting patient feedback on ANM's performance

- To understand the process of delivering the feedback collected from the patients back to the ANMs
Methods

• Included
  – calling patients to get feedback on the ANM,
  – aggregating the responses to calculate average satisfaction for each nurse,
  – and giving feedback to the nurse on her performance across different dimensions

• Use MCTS data to access beneficiary phone numbers
Components of the survey instrument

- Call details
- Demographics
- Details of healthcare services used previously
- PNC check-ups
- Rating the ANM on different dimensions
Low contact rates using MCTS data

Percentage of contact rates

- No contact: 67%
- Contacted, didn’t consent: 19%
- Contacted, consented, but didn’t complete the survey: 13%
- Contacted, completed survey: 1%

Difficult to reach people over phone using MCTS data
Reasons for call not going through

- Phone was switched off: 18%
- Phone was not reachable: 11%
- Nobody picked up the phone: 5%
- ANM/ASHA number: 3%
- False information: 63%
Collecting contact information at point of delivery more promising

Percentage of contact rates

- **No contact**: 74%
- **Contacted, no consent**: 13%
- **Contacted, consented, but didn’t complete survey**: 10%
- **Contacted, completed survey**: 3%

**Drawback**: this method of data collection likely difficult to scale, costly
ANM report card (template)

Patient rankings

- Comfortable to talk to (Max score = 4)
- Make efforts to listen to patients (Max score = 3)
- Patient satisfaction (Max score = 4)
- Technically knowledgeable (Max score = 4)
- Total score (Max score = 4)

*Average score*

*Your score*

*Average for all ANMs*

**Ranking based on all ANMs in sample**: You are ranked number ‘X’ out of ‘Y’ ANMs
Conclusion

Implications for research
Conclusion: How did the pilot change our decision?

Phase I

- Highlighted that the problem we anticipated (lack of soft skills) did not exist
- Based on this we decided to drop the soft skills training from the study after discussions with GoP
- Revealed a new problem that could effect the performance: lack of clarity on roles among ANMs and beneficiaries
- Decided to replace the soft skills arms with an information arm
Conclusion: How did the pilot change our decision?

Phase II

• Highlighted a huge implementation challenge in contacting the beneficiaries using the MCTS data
• Indicated that non-response was not much of an issue since person-to-person method yielded good response
• Red flag: huge potential of us running into low sample size and low power issues
• Ultimate decision: not to move forward with the full scale RCT
Conclusion: Caution in interpreting and recommending based on pilot findings

- By itself the pilot revealed several important policy lessons
- We were in regular touch with the Government and did in-person meetings with the Government and shared report
- Cautious in not inferring any causal relationship
- Descriptive and qualitative work itself revealed important patterns
- While communicating emphasised that results might not generalise and are not based on a representative data
Conclusion: Measurement

- Likert scale difficult to use
- Completely open ended did not work
- Getting the right field staff a challenge in the area
Recommendations

• A well-designed and thorough pilot is a critical component and should be a mandatory first step for impact evaluations
• Might be considered ‘unsexy’ from research perspective but is vital for course correction
• Brings the context to the researchers
• Allows window for incorporating suggestions from partners