IMPACT EVALUATION OVERVIEW

Why, What, and How

Strategic Impact Evaluation Fund, World Bank
Strong growth in impact evaluations

Example: International Impact Evaluation Initiative (3ie) database
Impact Evaluations: Overview

- Why
- What
- How
We need more than programs
we need programs that work
Scale Promising Programs

Example: Mozambique Pre-School
Or Cut Non-Performing Programs

D.A.R.E Program (USA)

• Federal US program created to prevent drug use, gang membership, and violent behavior
• Police officers visit 5\textsuperscript{th} and 6\textsuperscript{th} grade classrooms to educate students

Evaluations show no significant impact → funding reduced
(GAO, 2003; Weiss, 2003; West and O’Neil, 2004)
Sustain Successful Programs

Example: Mexico PROGRESA
Conditional Cash Transfer (CCT) Programs

Countries implementing CCT programs in

1997
Conditional Cash Transfer (CCT) Programs

Countries implementing CCT programs in

2011
Improve Existing Programs

Example: Zambia medicine supplies to clinics
Using provider performance incentives to increase HIV testing and counseling services in Rwanda.


Abstract

Paying for performance provides financial rewards to medical care providers for improvements in performance measured by utilization and quality of care indicators. In 2006, Rwanda began a pay for performance scheme to improve health services delivery, including HIV/AIDS services. Using a prospective quasi-experimental design, this study examines the scheme's impact on individual and couples HIV testing. We find a positive impact of pay for performance on HIV testing among married individuals (10.2 percentage points increase). Paying for performance also increased testing by both partners by 14.7 percentage point among discordant couples in which only one of the partners is an AIDS patient.

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KEYWORDS: Africa; Couple testing; HIV testing and counseling; Health human resources; Performance-based financing

PMID: 25554976 [PubMed - in process]
Impact of implementing performance-based financing on childhood malnutrition in Rwanda.


Abstract

BACKGROUND: Malnutrition remains a serious concern in Rwanda, particularly among children under-5 years. Performance-based financing (PBF), an innovative health systems financing strategy, has been implemented at the national level since 2008. This study aimed to assess the impact of PBF and other factors associated with the prevalence of three classifications of malnutrition (stunting, wasting and underweight) in children under-5 years in Rwanda.

METHODS: The study is a cross-sectional study comprising of 713 children under five years old from 557 households, whose anthropometric measurements (height, weight and age) had been obtained as part of the 2008 Rwanda General Health and HIV household survey. Z-scores for height-for-age, weight-for-age, weight-for-height, and body mass index-for-age were analyzed according to the World Health Organization 2006 Child Growth Standards. Random intercept logistic regression models were used to regress each anthropometric measure (WAZ, HAZ and WHZ) against child, maternal and household characteristics.

RESULTS: Child participants ranged in age from 0 to 60 months, 20.2% of children were under 12 months and 5.1% were HIV positive. The prevalence of wasting was 8.8%; of stunting was 58.4%; and of underweight status was 20.7%. Maternal emotional and social wellbeing was protective of wasting in children under-5 years of age. Living in districts implementing PBF was protective of wasting (Adjusted Odds Ratio: 0.43; 95% confidence interval: 0.19-0.97). Living in a district with PBF was not found to be associated with either stunting or underweight status among children under-5.

CONCLUSIONS: PBF may have a protective association with particular forms of malnutrition among children under-5 years in Rwanda. These findings warrant further investigation in relation to the impact of implementing innovative financing schemes on health outcomes.

Impact Evaluation

- Why
- What
- How
Our Toolbox: Monitoring and Evaluation Methods

1. Needs Assessment
   - Analysis of Beneficiary Needs
     1. Why are we doing the project?
     2. Who is the target population?
     3. Why do we think this approach will work in this context?

2. Process Evaluation
   - Analysis of Program Implementation
     1. Services being delivered?
     2. Clients satisfied?
     3. Services reaching target population?

3. Impact Evaluation
   - Measures How Much the Program Impacts Beneficiaries
     1. People washing their hands more?
     2. Diarrhea gone down?
     3. Health of mothers and children improved?
     4. Less poverty?
How to Go from Program to Results?

**WASH PROGRAM**

- **Inputs:** people, money supplies
- **Activities:** Construction
- **Output:** Handwashing Facilities

**INTER-MEDIATE OUTCOMES**

- People wash hands
- Less germs on hands

**OUTCOMES**

- Lower diarrhea and infant mortality
- Improved child well-being
Example: does promoting hand-washing work?

From *Meena’s Three Wishes*, “Meena tackles the issues of hygiene and sanitation.” UNICEF
Impact of the program

Outcome: Children’s health

Before

After

Time

Intervention

Impact?

Treatment villages
What would have happened without the program?
Impact of the program

Control needs to be a good proxy for the counterfactual

**Outcome:** Children’s health

**Intervention**

- **Treatment villages**
- **Control villages**

**Actual Impact** = **Treatment - Control**

**Before** | **After**
--- | ---

**Time**
Non-random program selection leads to comparisons of apples and oranges
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Randomization creates the right comparison group to measure impact
Randomization creates the right comparison group to measure impact

Good so-called “Internal Validity”
Randomization creates the right comparison group to measure impact

“Internal Validity” still good

But less “External Validity”
Impact Evaluation

- Why
- What
- How

![Image of a group of women wearing traditional attire.](image-url)
Randomize when there are not enough resources to reach every village

Pre-School Program in Mozambique
- 76 communities identified to receive the program
- 30 randomly assigned to the treatment.
- 46 acted as the control.
- Government so impressed that it expanded it to 600 communities
...or randomize who receives the program first

Sanitation program in Indonesia
- 80 villages received the program in phase one.
- Remaining 80 villages in phase two
Quasi-experimental methods (require more assumptions)
Thank you!
Who wants to learn more about impact evaluations?
Part 2: Theory of Change
How to Go from Program to Impact
Not only ask “did the program work?” but also ask “why did the program work?”
Results Chain

- Inputs
- Activities
- Outputs
- Intermediate Outcomes
- Outcomes

Implementation (SUPPLY SIDE)
Results (DEMAND + SUPPLY)
Simplified Results Chain

Theory of Change
Theory of Change

Ask the right questions

• What is the program?

• What impact does this program hope to achieve?

• How does it expect to achieve this impact?
Sanitation Program in Azania
Providing Clean Water
Question 1: what is the program?
PROGRAM

INPUTS
People, money, supplies

ACTIVITIES
Construct facilities

OUTPUTS
Hand-washing facilities
Question 2: what impact does this program hope to achieve?
OUTCOMES

LOWER DIARRHEA
LOWER ANEMIA
LOWER INFANT MORTALITY
IMPROVE CHILD DEVELOPMENT
Question 3: how does this program expect to achieve this impact?
INTERMEDIATE OUTCOMES

People use and benefit from program

WASH HANDS

LESS GERMS ON HANDS
Full Results Chain

**PROGRAM**
- **Inputs:** people, money supplies
- **Activities:** Construction
- **Output:** Handwashing facilities

**INTERM. OUTCOME**
- People wash hands
- Less germs on hands

**OUTCOME**
- Lower diarrhea and anemia
- Lower infant mortality
- Improved child development
If we only measured infant mortality and there was no change, what does this tell us?
Program not implemented properly?

Program delays in supplying
People didn’t use it properly?

Subjects themselves
Or, did not reduce diarrhea, anemia, etc.?
Bottom Line

• Ask not only what, but why.

• And, measure it!
Other Example 1
Home Visits Parenting Early Stimulation Program

Let’s say that the program consist of home visits by community health workers who provide parents with information and techniques to promote greater stimulation of young children in the home environment.
Which one of the following is an intermediate outcomes of the program?

A. Community health workers visit homes
B. Parents have better knowledge on early stimulation techniques
C. Parents do more interactive play with their children
D. Children have higher scores on cognitive assessments
Other Example 2
Creating community preschools

Let’s say that the program consist of the creation of community preschools whereby the government provides the building and the materials, and the community is expected to provide a parent volunteer teacher
Which one of the following is an output of the program?

A. Community preschools are built
B. Community teachers are provided
C. Parents send their children to preschool
D. Children’s learning improves