

Workshop on Impact Evaluation of Public Health Programs: Introduction

NIE-SAATHII-Berkeley
Impact Evaluation Workshop

July 11-15, 2011 Chennai



NHRM Goals & Interventions

- Increase health service use and health-related community mobilization (ASHAs)
- Increase institutional deliveries (JSY) and child immunizations (camps)
- Improve drug supply
- Strengthen quality of services in CHCs (IPHS guidelines)

How do we know it's working?

- Cannot directly measure effectiveness through “sales” (no market for public health service delivery)
- Cannot simply measure program outputs (this tells how money was spent)

What is the most cost-effective approach?

Impact Evaluation

- Identifies links between a program or strategy, and its intended impacts on beneficiaries
- Reveals what's working, and how it works
- Uses methodologies adapted from clinical trials

What is Impact Evaluation?

IMPACT =

- portion of an outcome that can be attributed directly to a program or intervention
- difference between what happened with the program, and what would have happened without the program, for the same target group

Impact evaluation requires the identification of the ***counterfactual***.

Status Quo

- Pre/Post Comparison
- With/Without Comparison
- Cohorts or repeated cross-section

Simple Comparisons

BEFORE/AFTER

Collect data on individuals before and after intervention.
Is difference in outcome due to the project?

Problem: Many things change over time, including the project. ***Omitted Variables.***

WITH/WITHOUT (Apples & Oranges)

Compare people who enrolled in the program with those who did not?

Problem: Why did the enrollees decide to enroll?
Selection bias.

What is Impact Evaluation?

Measures the effect of a program or intervention on a beneficiary population...

... controlling for all other factors that might have affected the target population during the program period

Weather shock

Economic downturn

Disease outbreak

Elections

Factory closure

New MHFW policy

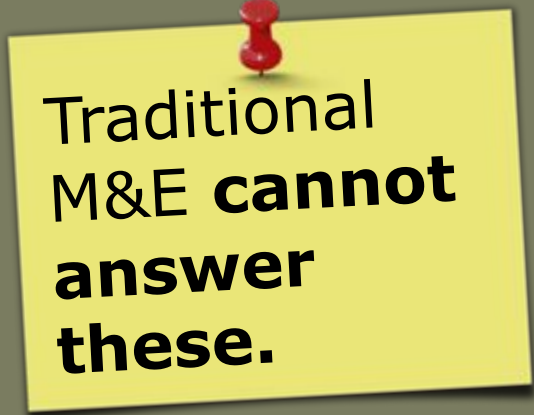
M&E vs. IE

- Monitoring & Process Evaluation

- Is program being implemented as efficiently as planned?
- Is program targeting the right population?
- Are outcomes moving in the right direction?

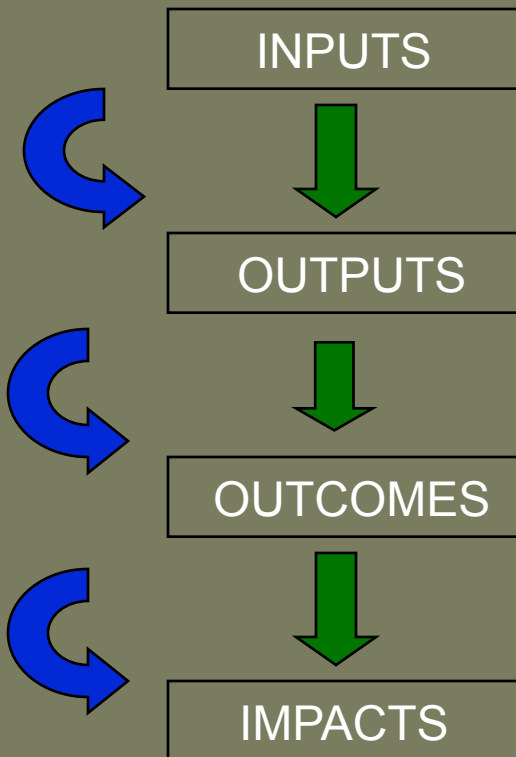
- Impact Evaluation:

- What was the effect of the program on outcomes?
- How do outcomes change under alternative program designs?
- Does the program impact people differently (e.g. females, poor, minorities)?
- Is the program cost-effective?



Traditional
M&E **cannot**
answer
these.

Results Chain



Behavior change communication

Changes in behavior and social norms

Increased use of services

Improved health outcomes

Program impacts confounded by local, national, global effects

M&E vs. IE

	Monitoring	Impact Evaluation
Frequency	Regular, Continuous	Periodic
Coverage	All programs	Selected programs, aspects
Data	Universal	Sample based
Depth of Information	Tracks implementation, looks at WHAT	Tailored, often to performance and impact/ WHY
Cost	Cost spread out	Can be high
Utility	Continuous program improvement, management	Major program decisions

M&E vs. IE

- Are women's empowerment groups being facilitated as planned? ➤ **M&E**
- Do women's empowerment groups increase routine vaccinations of participants' children? ➤ **IE**
- Are those near health clinics more likely to access services? ➤ **M&E**
- If we give incentives (i.e. a free set of cooking pots) to women who bring their children for routine immunization, is there greater childhood vaccination, relative to the level in communities without this intervention? ➤ **IE**

Why Impact Evaluation?

- If you need evidence that a program works

Does the program actually improve health outcomes?

Does it improve welfare for the people most in need?

- Accountability to civil society
 - Accountability to donors
 - Ability to target a limited budget
- If you want to improve the program over time
 - Results-based management
 - Cut ineffective components or programs
 - Cost-effectiveness
- If you want to scale up but need proof of concept

When to evaluate?

Evaluate impact when project is:

- Innovative
- Replicable/scalable
- Strategically relevant for reducing poverty
- Evaluation will fill knowledge gap
- Substantial policy impact

Use evaluation within a program to test alternatives and improve programs

Shifting the Program Design Paradigm

- From a project design based on “we know what’s best” ...
... To project design based on the notion that “we can learn what’s best in this context, and adapt to new knowledge as needed”

Works iteratively:

- Start with what the team knows, and what we need to learn to deliver on project objectives
- Translate into a feasible project design
- Figure out what questions can feasibly be addressed

**1. Needs
assessment**

2. Design program

**3. Create Log-frame &
success indicators**

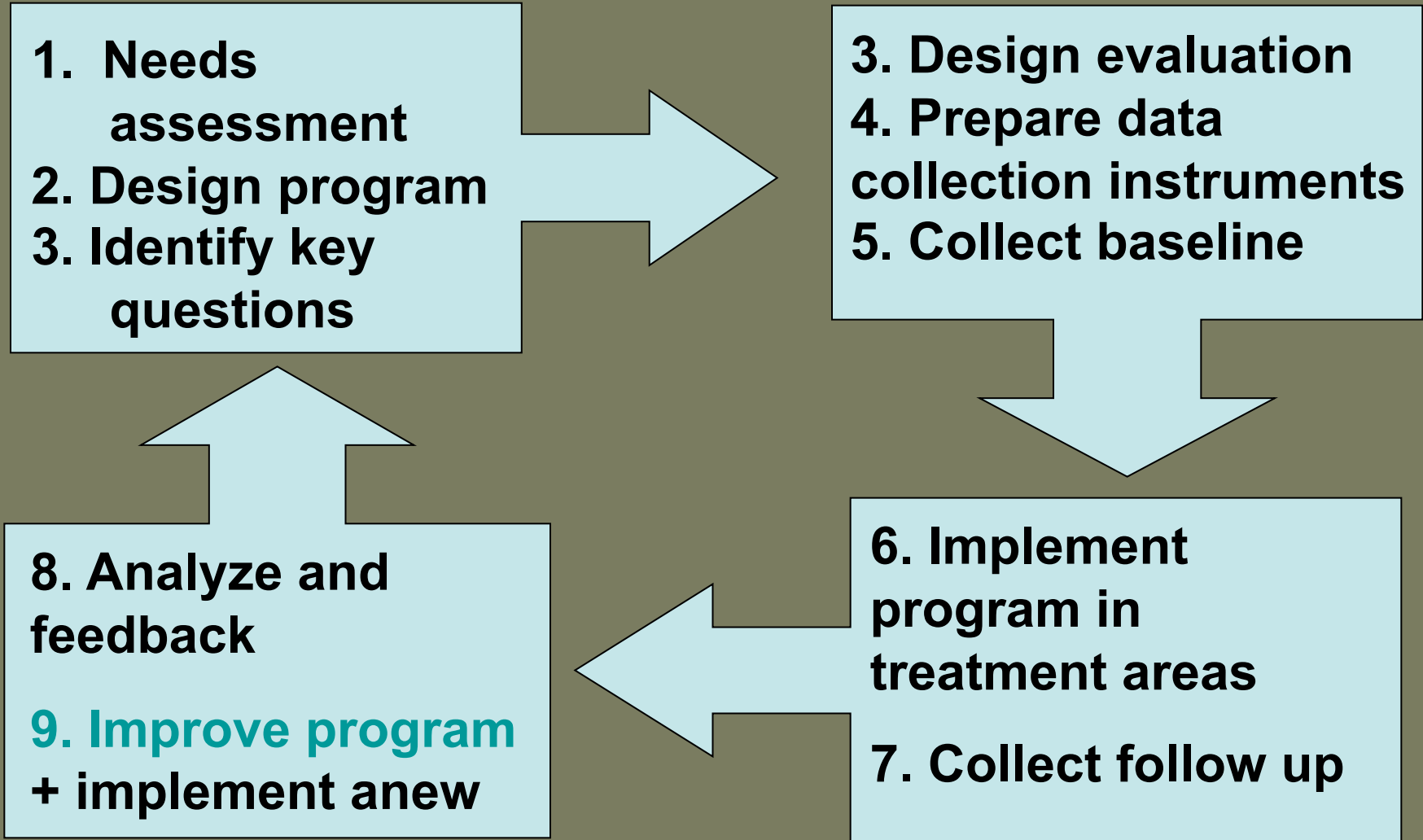
4. M&E system

**7. Analyze and
feedback**

8. Report outcomes

**5. Implement
program**

**6. Collect data in
treatment areas**



Priorities for Learning

Identify a public health target

- Increase proportion of women delivering in institutions
- Reduce health worker absenteeism

How to reach target?

- Create incentives for institutional births
- Make health workers accountable to communities

What interventions or services can be used?

- Small payments to mothers & ASHAs, conditioned on institutional birth
- Community "report cards"

Which is the best program to use?

- Pilot a few programs and measure their impacts and costs.
- Strip away alternative explanations for the results.

When to think impact evaluation?

- EARLY! Plan evaluation into your program design and roll-out phases
- When you introduce a CHANGE into the program
 - New targeting strategy
 - Variation on a theme
 - Creating an eligibility criterion for the program
- Scale-up is a good time for evaluation!
 - Sample size is larger

When is impact evaluation impossible?

- Treatment was already assigned and announced *and* no possibility for expansion
- The program is over (retrospective)
- Universal take up already
- Program is national and non excludable
 - Freedom of the press, exchange rate policy (sometimes some components can be randomized)
- Sample size is too small to make it worth it

Workshop Agenda

- Day 1: Context & Causal Inference
- Days 2-3: IE Toolbox
- Days 4-5: Application & Action

Context:

Existing Evaluations
in India

Causal Inference:

Counterfactuals
Before-After
With-Without

1

IE Toolbox:

Randomization

Difference in Differences

Regression Discontinuity

Matching

Instrumental Variables

Promotion

Lottery

Phased Roll-out

Variation in treatment

Eligibility criterion

2

Application:

Evaluation designs

Planning tools

Presentations

Concept Notes

3

Supply- and Demand-side

Supply interventions:

- Incentives for health worker performance
- Strategies to improve drug supply chains
- Decentralized management schemes

Demand Side: Behavior Change

- Contingent (conditional) transfers
- Beneficiary incentives
 - Individual and group
 - Positive and negative
- Commitment strategies

About CEGA

- Impact Evaluation Center headquartered at UC Berkeley
- UC-wide faculty: 23 members (and growing)
- Multidisciplinary:
 - Economics
 - Agricultural & Resource Economics
 - Political Science
 - Public Health
 - Business
 - Education
 - Public Policy
- Projects in 25+ countries

A Few of our Partners



What CEGA Brings to Partners

- Researchers with experience conducting impact evaluation at multiple scales
- Research capacity development, through international student exchanges, short courses, workshops, collaboration
- Dissemination of research and assistance in scaling up successful interventions, via global network of think tanks, policy-makers and implementers
- Access to grants and funding for research

How We Benefit from Partnership

- Opportunities for collaborative research and learning
- Building our capacity to translate research into better policies and programs
- Partners for training in impact evaluation
- Expanding our network of researchers, policy-makers and implementing organizations