

AEW 2024



Working around the Generalizability Puzzle



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We keep running into the same problem from place to place to place. ... The solutions, in a sense, can be the same. You learn something general, and from this general finding, you can extract a lesson that policymakers will then tailor to each individual context.”

—**Esther Duflo**, Interview after the announcement of the 2019 Prize in Economic Sciences <https://bit.ly/2WI37Bk>



Illustration: Niklas Elmehed

- I. Introducing IPA and RCTs**
- II. The Generalizability Framework**
- III. Case Study: Immunization Program**

- I. **Introducing IPA and RCTs**
- II. The Generalizability Framework
- III. Case Study: Immunization Program



At **IPA**, we discover and advance what works to improve the lives of people living in poverty.



**Create
Evidence**

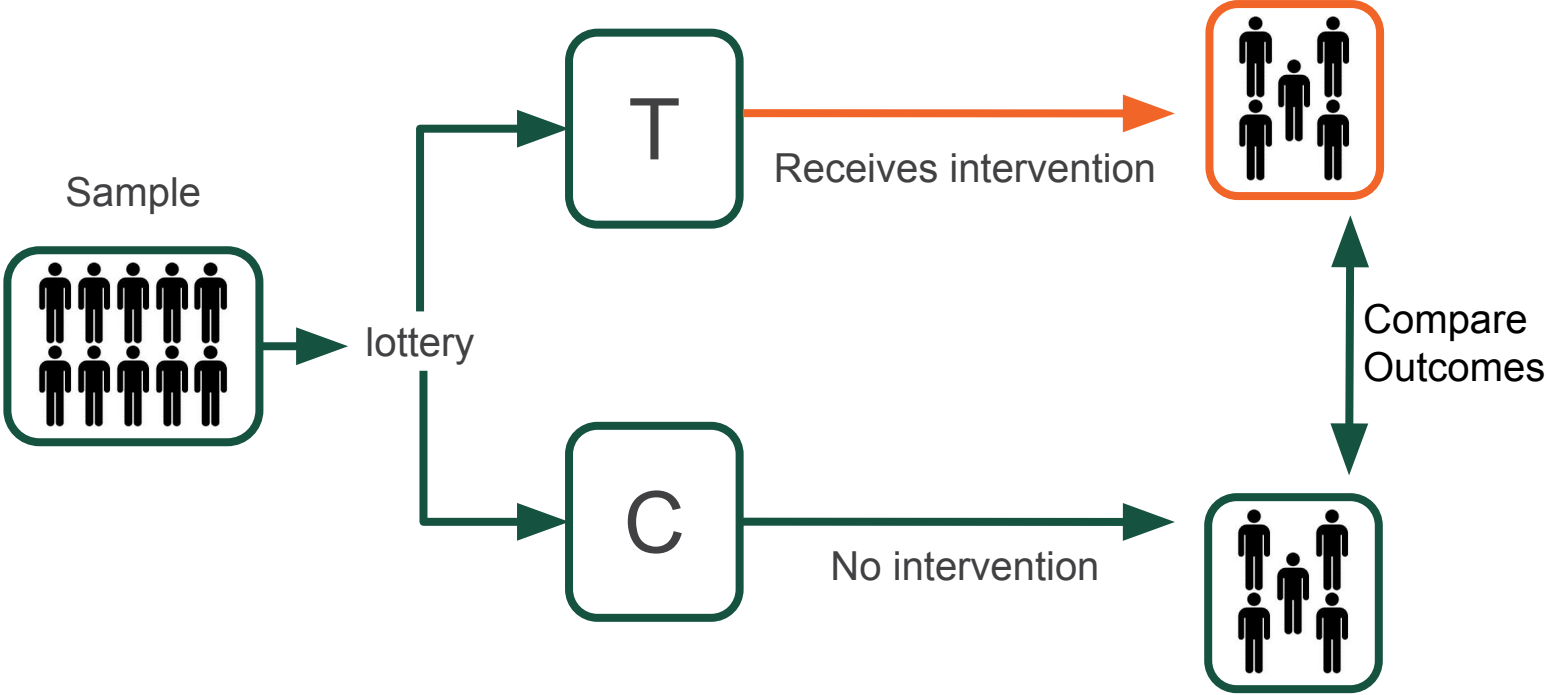


**Share
Evidence**

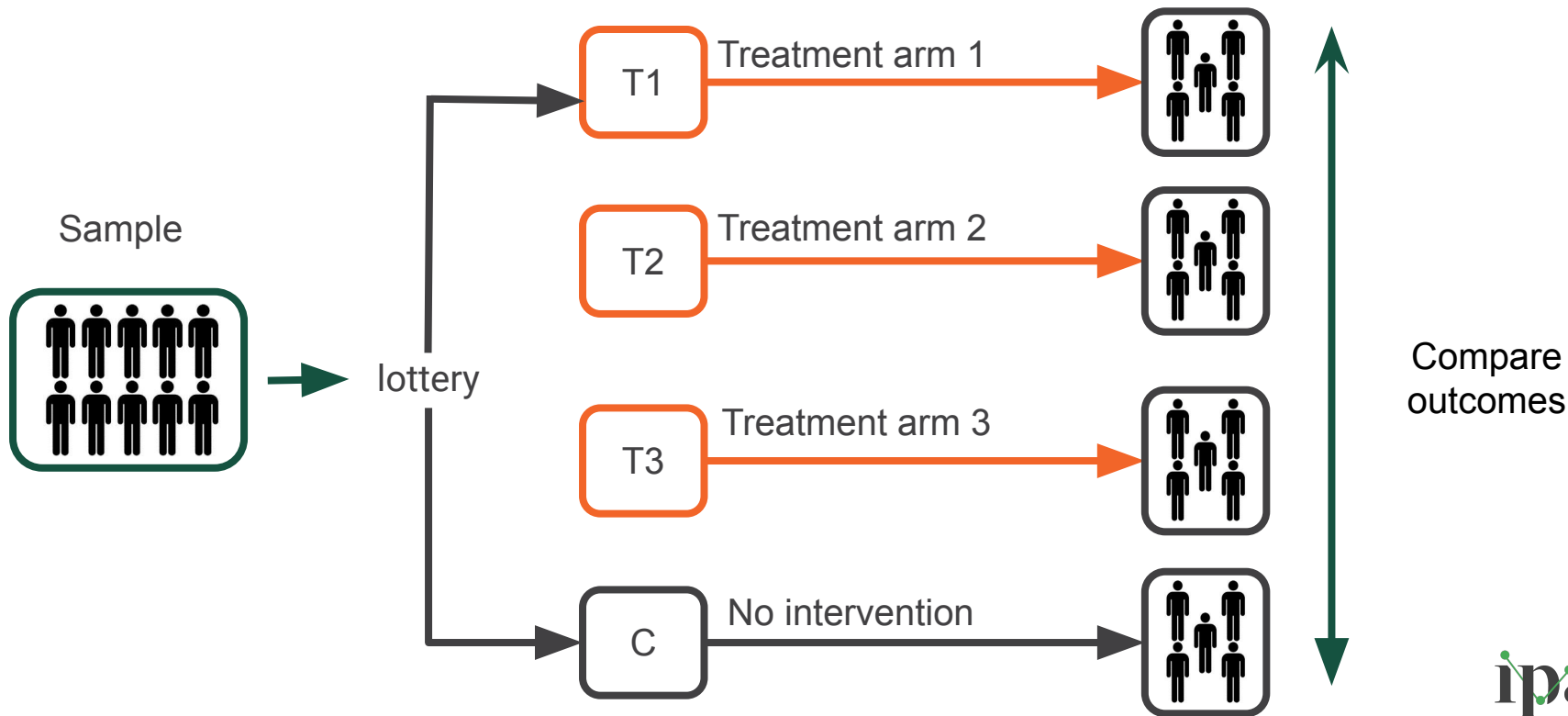


**Use
Evidence**

Randomized Controlled Trial (RCT)



More Complex RCT



19 Country
offices

950+
evaluations to
date in

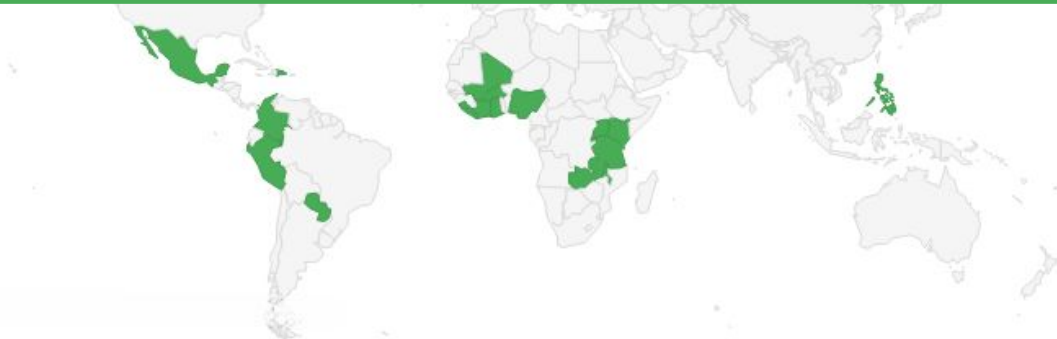
How we can leverage the existing evidence base to ensure that we don't reinvent the wheel every time we run into a similar policy issue.

600+
researchers in our
network

700+
partners

50+
countries

20+ Years generating evidence
and moving evidence to policy



- I. Introducing IPA and RCTs
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Questions when reviewing evidence

Can a study inform policy only in the location it was undertaken?

Should we only use evidence from our location?

What counts as a “similar enough” new setting?

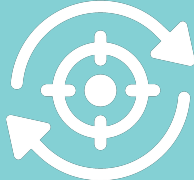
Must a program be replicated several times before scale?

Shifting questions on evaluations



Are the **locations** similar?

How many times has the program been evaluated?



Is the **problem** and its **underlying cause** similar?

Why did the program work? And what is the strength of the evidence on the **general behavior change**?

Generalizability framework



Step 1: What needs does the program address and what is the disaggregated theory behind the program?

Step 2: Are the local needs similar, and do the local conditions hold for that theory of change to apply?

Step 3: How strong is the evidence for the required general behavioral change?

Step 4: What is the evidence that the implementation process can be carried out well?



Shanghai

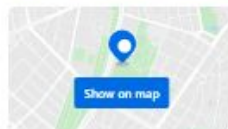


Thu 26 Dec — Sun 29 Dec

2 adults · 0 children · 2 rooms



Search

[Home](#) > [China](#) > [Shanghai Area](#) > [Shanghai](#) > Search results

Show on map

Shanghai: 498 properties found

Sort by: Our top picks

Your results include some shared accommodations, such as dormitory beds. Show private rooms only

Some options have fewer than 2 rooms. Only show results with 2 rooms or more.

Filter by:

Your previous filters

- Very good: 8+ 100
Based on guest reviews
- Only show available properties
- Twin beds 258
Based on guest reviews
- Superb: 9+ 85
Based on guest reviews

Your budget (per night)

€ 10 — € 300+

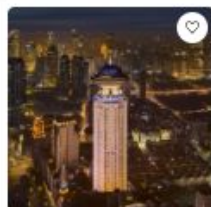


Deals

- All deals 101

Popular filters

- Free cancellation 460
- No prepayment 205
- 131
- Hotels 356
- Downtown, Shanghai 101
- Superb: 9+ 85
Based on guest reviews
- Book without credit card 62
- Twin beds 258



Radisson Blu Hotel Shanghai New World

Huangpu, Shanghai Show on map 0.6 km from centre · Metro access

Recommended for your group

- Junior Suite**
2 private suites + 2 bedrooms + 2 living rooms + 2 bathrooms
2 large double beds
✓ Free cancellation
✓ No prepayment needed – pay at the property

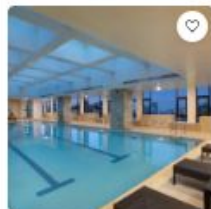
Very good
2,215 reviews
8.5
Location 9.6

3 nights, 2 adults

€ 636

+ 8 10€ taxes and charges

See availability



Holiday Inn Shanghai Vista, an IHG Hotel

Shanghai Show on map 4.2 km from centre · Metro access

Recommended for your group

- Standard Room**
Beds: 1 double or 2 singles
✓ Free cancellation
✓ No prepayment needed – pay at the property

Very good
157 reviews
8.2

3 nights, 2 adults

€ 275

+ 8 4€ taxes and charges

See availability



SSAW Boutique Hotel Shanghai Bund

Huangpu, Shanghai Show on map 0.8 km from centre · Metro access

Recommended for your group

- Deluxe Double Room**
2 extra-large double beds
✓ Free cancellation

Very good
2,216 reviews
8.5

3 nights, 2 adults

€ 690

Includes taxes and charges

Filters

Reviewers

All (157)

- All (157)
- Families (73)
- Couples (19)
- Groups of friends (20)
- Solo travellers (45)
- Business travellers (37)

Review scores

All (157)

Languages

All (157)

Time of year

All (157)

+ Location

+ Clean

+ Pool



Show more

Guest reviews

Sort reviews by: Most relevant

- I. Introducing IPA and RCTs
- II. The Generalizability Framework
- III. Case Study: Immunization Program**

Imagine you want to improve health outcomes in your country.

Your **needs assessment** shows **only a small percentage of the population** has completed a **full immunization schedule** for a life-saving vaccine.

You are interested in designing an intervention to increase immunization rates.



Studies

Search by Keyword(s)

Type: Program Areas: Topics:

Researchers: Country:



Improving Immunization Rates Through Regular Camps and Incentives in India
[Learn More](#)

RESEARCHERS
[Abhijit Banerjee](#) [Esther Duflo](#) [Rachel Glennerster](#)
[Dhruba Kohli](#)

COUNTRY
 India

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Color Coded Bracelets: Using Signaling Incentives to Improve Childhood Immunization in Sierra Leone
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Researchers

[Abhijit Banerjee](#)
 Massachusetts Institute of Technology

[Esther Duflo](#)
 Massachusetts Institute of Technology

[Rachel Glennerster](#)
 U.S. Department for International Development (USAID)

[Dhruba Kohli](#)

Details

TIMELINE
 2004-2007

SAMPLE SIZE
 Nearly 2,000 children in 104 villages

DATA DEPOSITORY
<https://data.worldbank.org/indicator/SH.UVM.SRVS.VS.DS?locations=IN>
[parental-feeding-practices/](https://www.ips.usd.edu/research/child/parental-feeding-practices/)

RESEARCH IMPLEMENTED BY IPA
 No

Improving Immunization Rates Through Regular Camps and Incentives in India

Abstract
 Every year 2 to 3 million people die from diseases which could be prevented by existing vaccines. In India, immunization rates are offered free in public facilities, but the immunization rate remains low. This study found that offering families small, non-financial incentives in addition to reliable services and education is a cost-effective method of increasing uptake of vaccinations.

Policy Issue
 Immunization is a highly cost-effective way of improving child survival, however, every year an estimated 2 to 3 million people die from vaccine-preventable diseases. High absenteeism rates among healthcare providers and unrolltable supplies of vaccines may contribute to low vaccination rates in many developing countries. A lack of understanding of the benefits of vaccination or even a suspicion of government health services have been raised as possible

Improving Immunization Rates in Rajasthan

Program implemented by a local NGO (Seva Mandir) to increase immunization rates in rural Rajasthan, tested with RCT.

Components

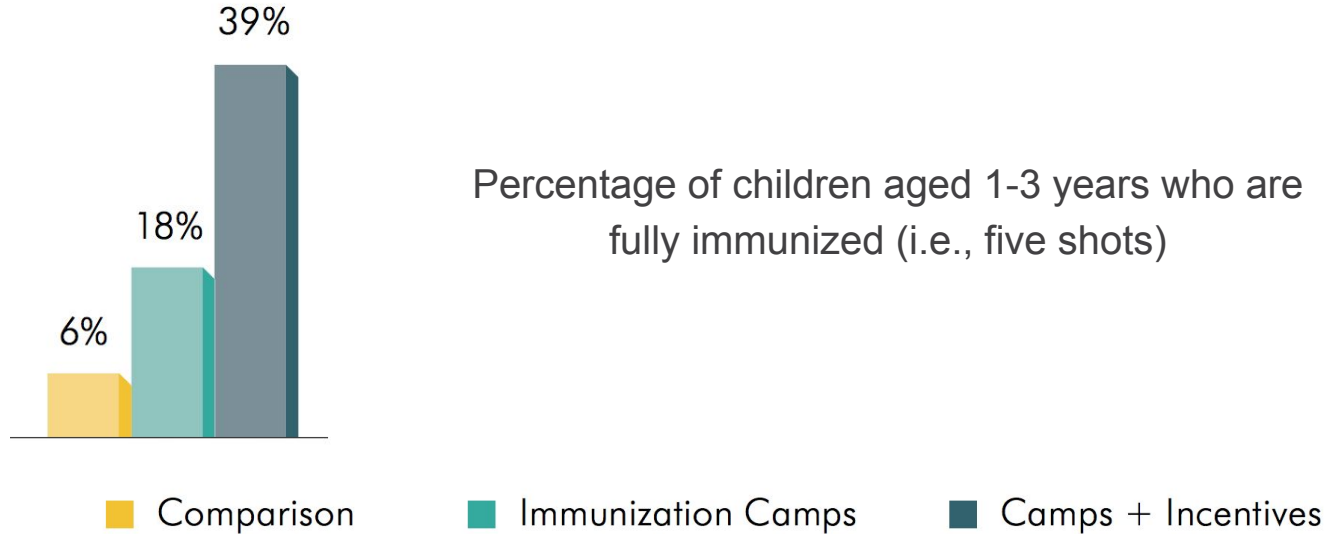
1. **Reliable infrastructure:** regular monthly immunization camps with nurse present without fail (**supply**)
2. **Incentives:** 1kg lentils for every vaccination, set of plates on completed immunization schedule (**demand**)



Photo: J-PAL/IPA

A parent receives a kilogram of lentils at a vaccination clinic in Rajasthan, India

Improving Immunization Rates in Rajasthan



Viewing evidence in isolation

- Only one RCT in India; Not the Philippines
- Program conducted by NGO, not government
- Lentils not core part of local diet in the Philippines

How can we determine if this intervention is likely to work in our context?

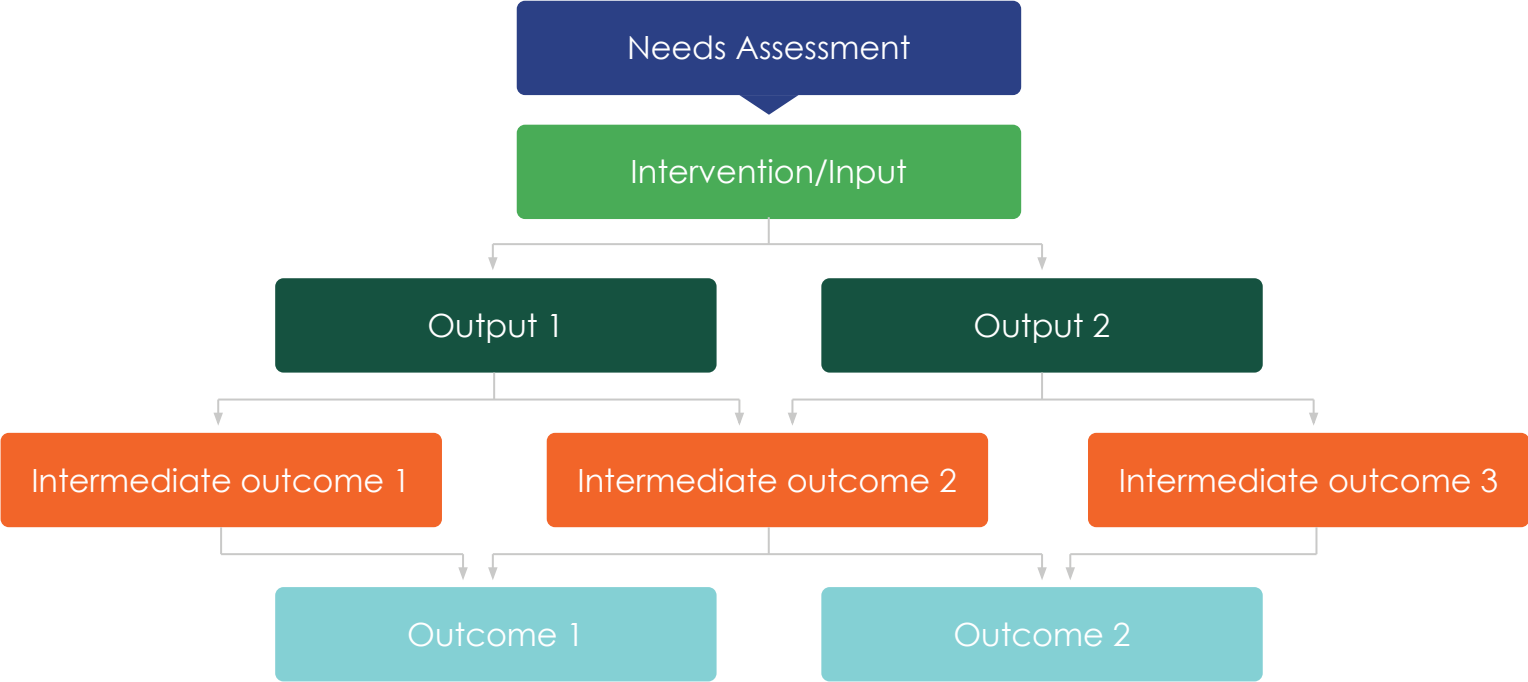


INCENTIVES FOR
IMMUNIZATION
PROGRAM







COMPLETED
IMMUNIZATION
RATES RISE

Always start with the Theory of Change



Original Study

Your Context

<ul style="list-style-type: none">• What is the problem?• What are the underlying conditions?	<ul style="list-style-type: none">• Does the same problem exist?• Do important local conditions hold true?		PROGRAM
<ul style="list-style-type: none">• What is the general lesson from the evidence?	<ul style="list-style-type: none">• Is the underlying mechanism of change valid in your context?		LOCAL CONDITIONS
<ul style="list-style-type: none">• What is the problem?• What are the underlying conditions?	<ul style="list-style-type: none">• Does the same problem exist?• Do important local conditions hold true?		GENERALIZED LESSONS ON BEHAVIOR
<ul style="list-style-type: none">• What is the implementation model?	<ul style="list-style-type: none">• Who would implement?• Can the program be implemented with fidelity?		LOCAL IMPLEMENTATION

Generalizability framework



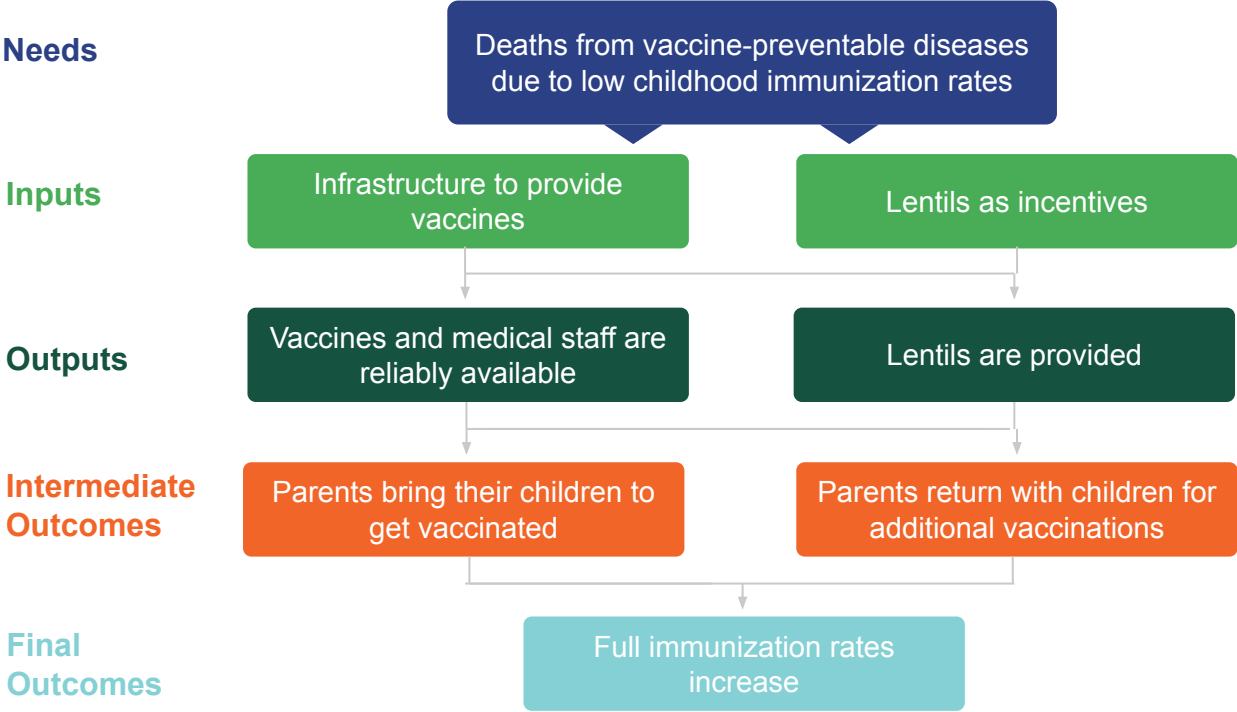
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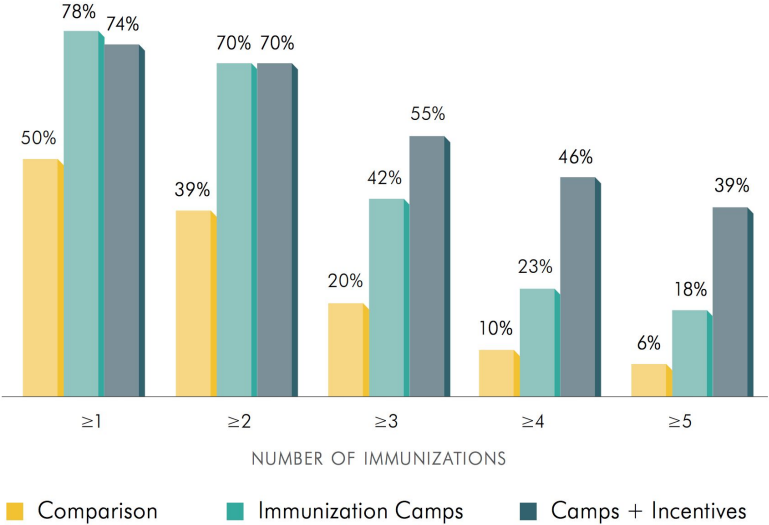
Step 1. Theory of Change



Step 2. Local Conditions



Number of immunizations received by children aged 1-3 years



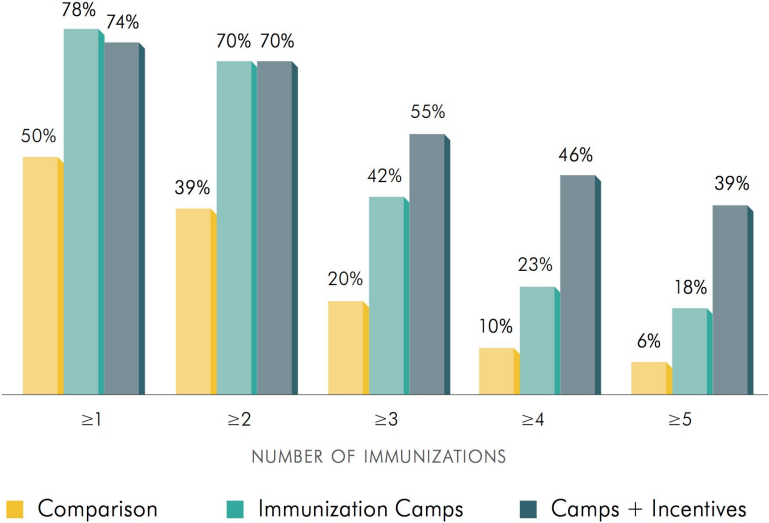
What do these results tell us about the local conditions (i.e, access to clinics, information, vaccine availability, etc.)?

Step 2. Local Conditions



PROGRAM

Number of immunizations received by children aged 1-3 years



- 1. Parents want to vaccinate
- 2. Parents can access clinic
- 3. Full immunization schedule is salient



LOCAL CONDITIONS

Step 3. Generalized Lessons

1. People find it hard to stick with behavior they believe is good for them and their children.
2. High sensitivity to the prices of preventative products (15+ randomized evaluations).



PROGRAM



LOCAL
CONDITIONS



GENERALIZED
LESSONS ON
BEHAVIOR



Step 3. Generalized Lessons

Even very small incentives can influence non-trivial decisions:

- encouraging HIV testing (Thornton 2008, Malawi)
- increasing take-up of flu vaccinations (Alsan et al. 2019, United States)
- combating diabetes (Aggarwal et al. 2020, India)



PROGRAM



LOCAL
CONDITIONS



GENERALIZED
LESSONS ON
BEHAVIOR



For which country would you suggest an incentive immunization program?

A. Country A

B. Country B

C. Neither

D. Both

Vaccination Schedule	Country A	Country B
1st vaccine	84%	47%
2nd vaccine	74%	41%
3rd vaccine	67%	41%
4th vaccine (full immunization)	49%	38%

Step 4. Local Implementation



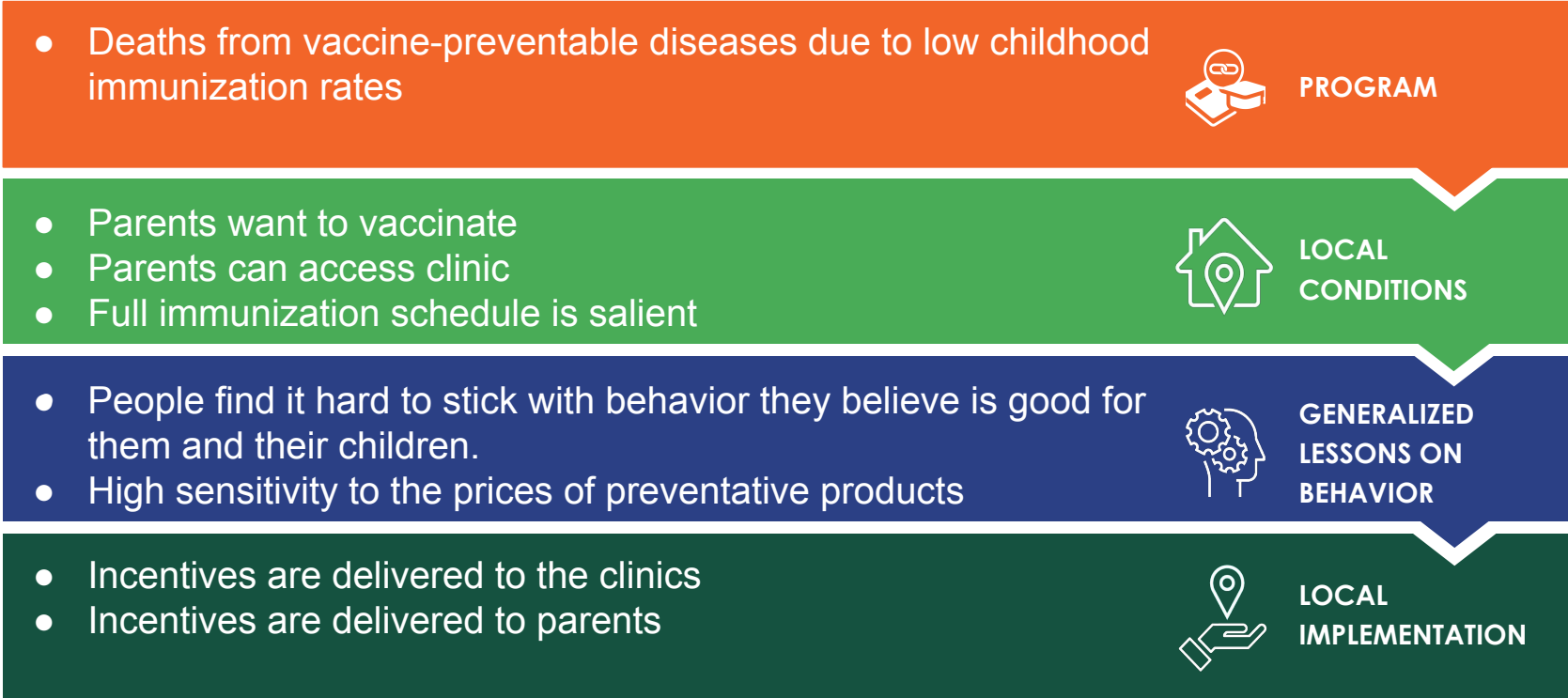
Who will be implementing the intervention? i.e., result with a government might be different than with NGO.

Step 4. Local Implementation



1. Incentives are delivered to the clinics
2. Incentives are delivered to parents





Generalizability Framework Principles

Instead of focusing on place and time, focus on **needs** and **behavior**

What are the mechanisms that made the program effective in addressing those needs/shifting behavior

Evidence from a study is **one part of the puzzle**

We weigh the evidence based on quality and adjust prior expectations

Combine **theory**, **descriptive evidence**, and results of **rigorous impact evaluations**

Whether results from one context are likely to replicate in another
When we need more evaluation and when we do not



Stay in touch!

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References

- Bates, M.A. and Glennerster, R. (2017), *The Generalizability Puzzle*, *Stanford Social Innovation Review*, https://ssir.org/articles/entry/the_generalizability_puzzle
- Banerjee, A., Duflo, E., Glennerster, R., and Kothari, D. (2010), *Improving immunisation coverage in rural India: Clustered randomised controlled evaluation of immunisation campaigns with and without incentives*. *BMJ* (340). doi: <https://doi.org/10.1136/bmj.c2220>
- J-PAL evaluation summary: [Improving Immunization Rates Through Regular Camps and Incentives in India](#)

Further reading and resources

- Bates and Glennerster, 2017, “The Generalizability Puzzle,” *Stanford Social Innovation Review*
https://ssir.org/articles/entry/the_generalizability_puzzle
- Kremer and Glennerster, 2012, Chapter in *Handbook of Health Economics*
- J-PAL Evidence to Policy page
<http://www.povertyactionlab.org/evidence-to-policy/>
- J-PAL Self-Guided Case Study on Applying the Generalizability Framework to Complex Health Care
<https://www.nationalcomplex.care/research-policy/resources/toolkits/case-study-generalizability-framework/>