Using Evidence to Inform Policy

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J-PAL South Asia at IFMR

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Course Overview

1. What is Evaluation?
2. Theory of Change
3. Outcome, Impact, & Indicators
4. Why Randomize?
5. How to Randomize?
6. Sampling and Sample Size
7. Threats and Analysis
8. **Research to Policy**
9. Project from Start to Finish

Overview

1. From Evidence to Policy

2. Constraints to evidence-informed policymaking

3. How we seek to overcome these constraints?

4. How to use the evidence?

J-PAL's mission and the challenge…

- …to reduce poverty by ensuring that policy is based on scientific evidence, and research is translated into action.

- And the Reality: Policy is really hard to change
  - institutions have constraints
  - good evidence is often unavailable or inaccessible
  - people can be driven more by instincts, ideology, or inertia

- So what helps promote the use of evidence?
  - good research?
  - accessible evidence?
  - receptive policymakers?
  - lots of hard work and shoe-leather?
  - a bit of good luck?

J-PAL works with governments, NGOs, development organizations, and donors to scale up programs found to be effective. To date, over 300 million people have been reached by these scale-ups around the world.

FRANCE
Parental Involvement Programs

BANGLADESH
Graduation Approach

VIETNAM
School-Based Deworming

THE GAMBIA
School-based Deworming

ETHIOPIA
School-based Deworming

INDIA
School-based Deworming
Remedial Education
Third Party Pollution Audits
Police Skills Training
Graduation Approach
Fund-Flow Reforms

NIGERIA
School-Based Deworming

UGANDA
Chlorine Dispensers
Unconditional Cash Transfers

KENYA
Chlorine Dispensers
School-based Deworming
Unconditional Cash Transfers

INDONESIA
Community Block Grants
Social Assistance ID Cards

Rwanda
Unconditional Cash Transfers

MALAWI
Chlorine Dispensers

The "Politics of Evidence" is about understanding why some and not other evidence gets used to inform policies or scale up programs

1. Who was most interested in generating evidence?

2. Was there something about the research design that helped or hindered the use of evidence?

3. Are there some sectors that are more amenable to generating/using evidence?

4. Is the move from evidence to policy automatic or does something more needs to be done after the evidence is generated?

There are multiple paths through which evidence informs policy – but these are NOT the only ones.

Attempts underway to study more systematically these paths and causal link between evidence and policy

Constraints to evidence-informed policymaking

From evaluation to policy
VS Constraints

| Evidence Generated | Evidence Summarized | Evidence Shared | Evidence informs policy |

Varying quality of evidence

Evidence presence not in digestible format

Policymakers are not aware of the available evidence

Policymakers have limited knowledge to use the evidence

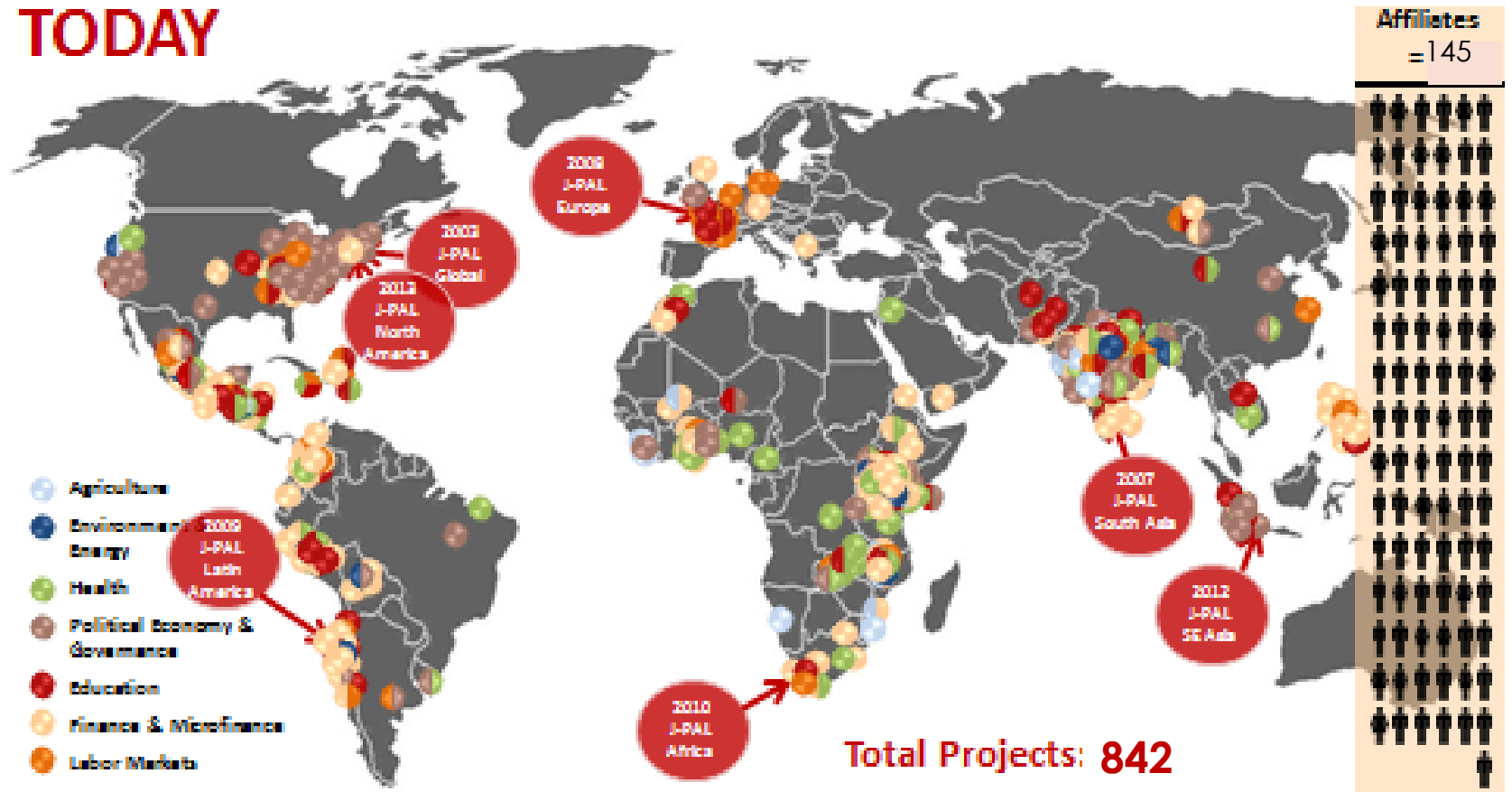How to generate evidence more likely to overcome these constraints

Constraints from evaluation to policy

Evidence Generated

Evidence Summarized

Evidence Shared

Evidence informs policy

Varying quality of evidence
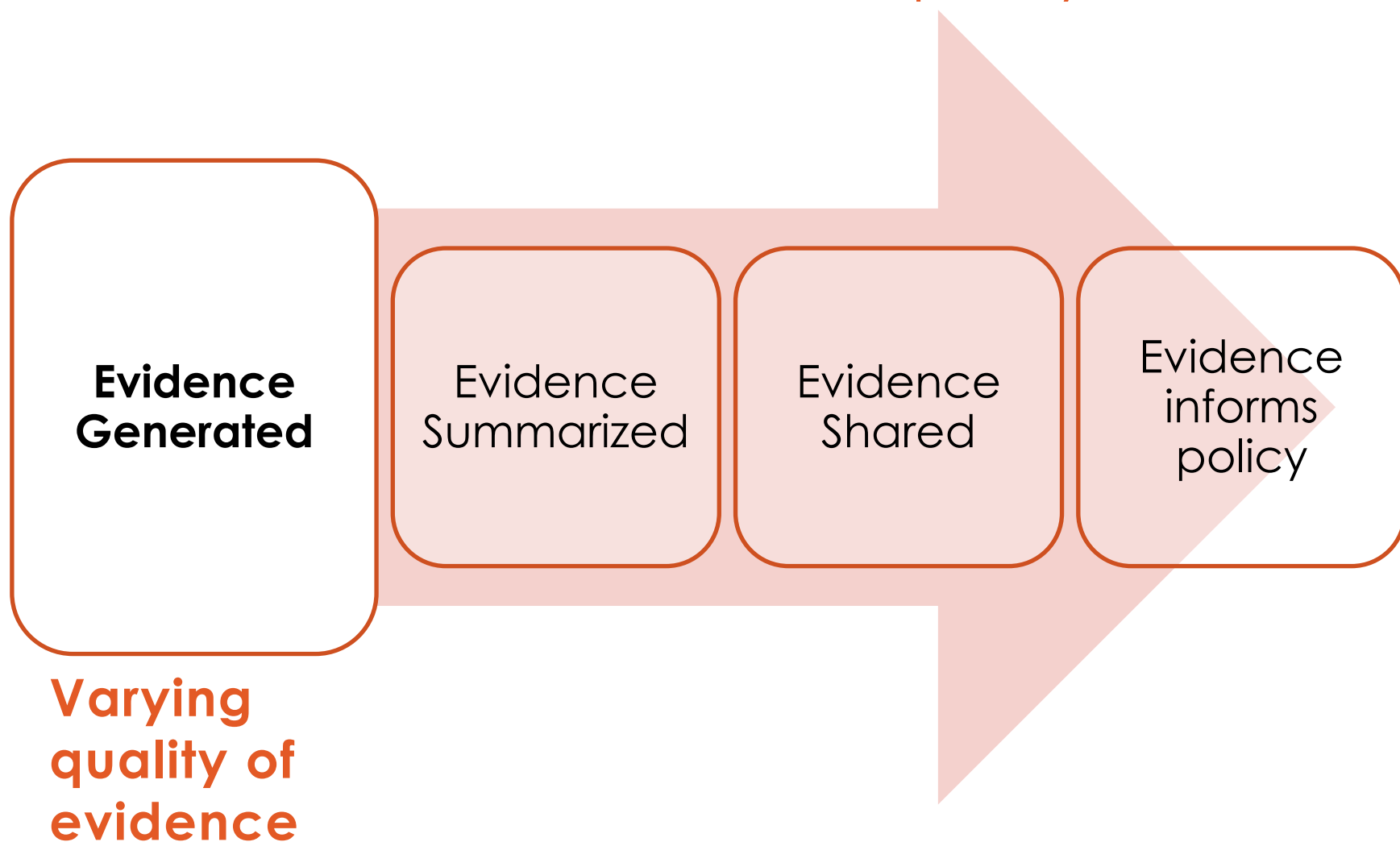
The growth of randomized evaluations

The growth of randomized evaluations

Incentivizing policy-relevant research

- Long-term collaborations with governments

- Matchmaking by J-PAL staff

- J-PAL raises funds before research ideas are idenitified to enable:

  1. Exploratory studies that respond to government needs or identify feasibility of rigorous evaluation;

  2. Full-scale studies that need to be launched fast in order to capture a policy window;

  3. Attracting high quality researchers to explore pressing policy questions

- Examples:

  1. Sectoral funds

  2. Collaboration with NITI Aayog and J-PAL SA to test DBT interventions

Constraints from evaluation to policy

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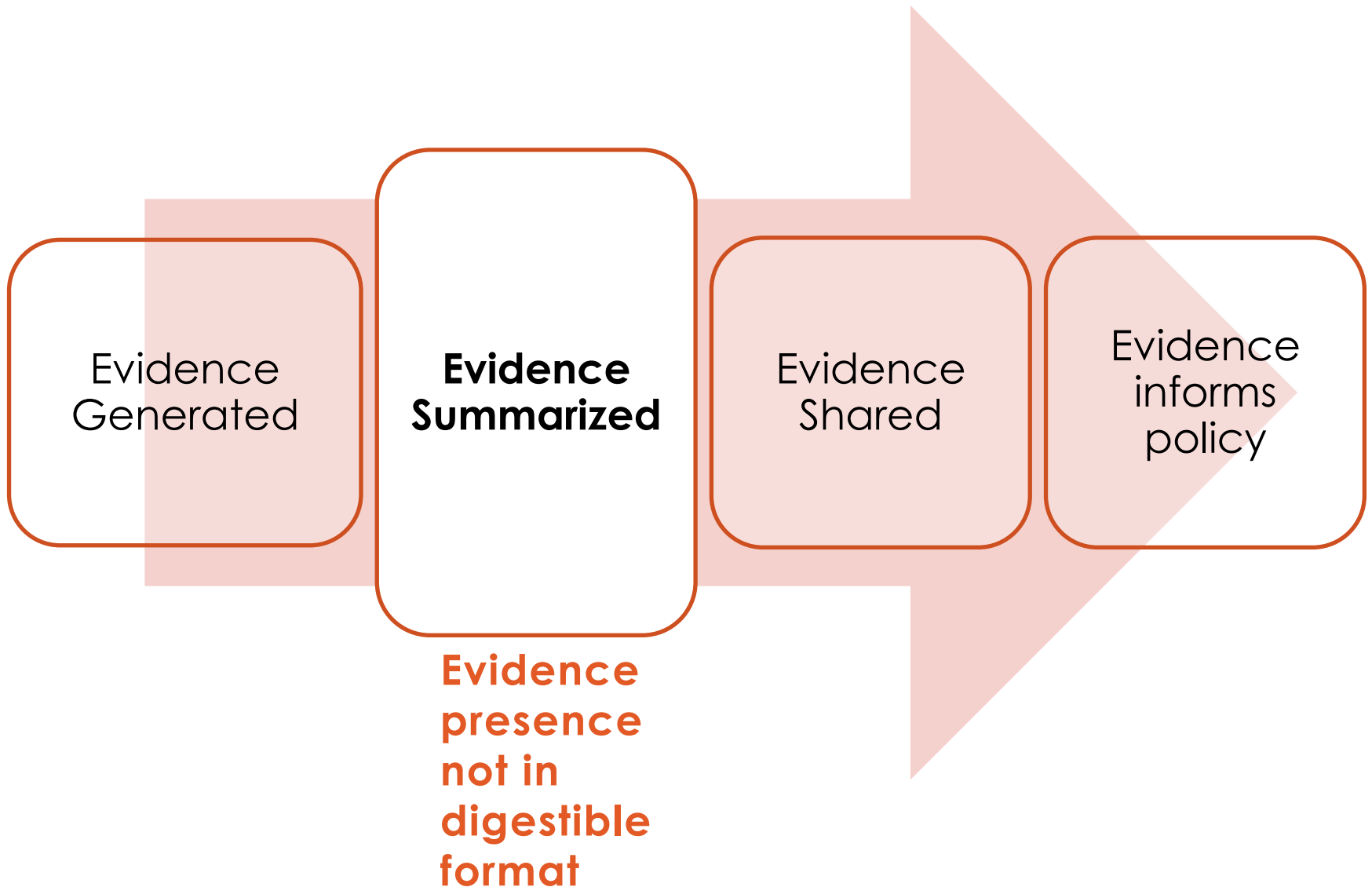
1. J-PAL and many others create Policy Publications that summarize evidence. Searchable online databases and regional staff make access easy

2. J-PAL also synthesizes evidence within sectors

Agriculture

Crime

Education

Environment and Energy

Finance and Microfinance

Health

Labor Markets

Political Economy and Governance

3. J-PAL policy lessons: Bulletins

BULLETIN

J-PAL BULLETIN [APRIL 2011]

ABDUL LATIF JAMEEL
Poverty Action Lab

TRANSLATING RESEARCH INTO ACTION

THE PRICE IS WRONG
Charging small fees dramatically reduces access to important products for the poor.

Medical research has identified many cheap and simple life-saving and life-improving interventions that combat infectious and communicable disease, but even low-cost interventions are often prohibitively expensive for poor families in the developing world. Where families are unable to afford the full cost, governments and NGOs often provide health products either for free, or at highly subsidized prices under "user fee" or cost-sharing programs. In recent years, there has been substantial debate about whether to charge user fees or to distribute basic products for free.

User fees and cost-sharing have been advocated for many years to promote sustainability of health services, to help ensure that goods and services are not wasted, and to provide a source of flexible revenue to those in frontline services to replenish supplies and pay for clinic repairs. More recently, social entrepreneurs have argued that small fees can help fund marketing networks that bring socially important products to the poor in a sustainable way and that people are more likely to use products they pay for. Those arguing against charging for basic services point to the massive increases in the take-up of public services that have accompanied the abolition of user fees for schooling and healthcare in many countries.

What does the evidence say? How big a barrier to access are user fees in education and health? Does charging for health and education products encourage people to use them? Do fees screen out those who do not intend to use the product and target it to those who need it the most? Or does charging simply screen out the poor? Ten randomized evaluations tested how take-up and use of education and health products for non-acute care respond to price. Evidence from these studies suggests the following:

4. J-PAL evidence reviews

Expanding Access and Increasing Student Learning in Post-Primary Education in Developing Countries: A Review of the Evidence

Abhijit Banerjee, Paul Glewwe, Shawn Powers, and Melanie Wasserman[1]

Abdul Latif Jameel Poverty Action Lab (J-PAL)
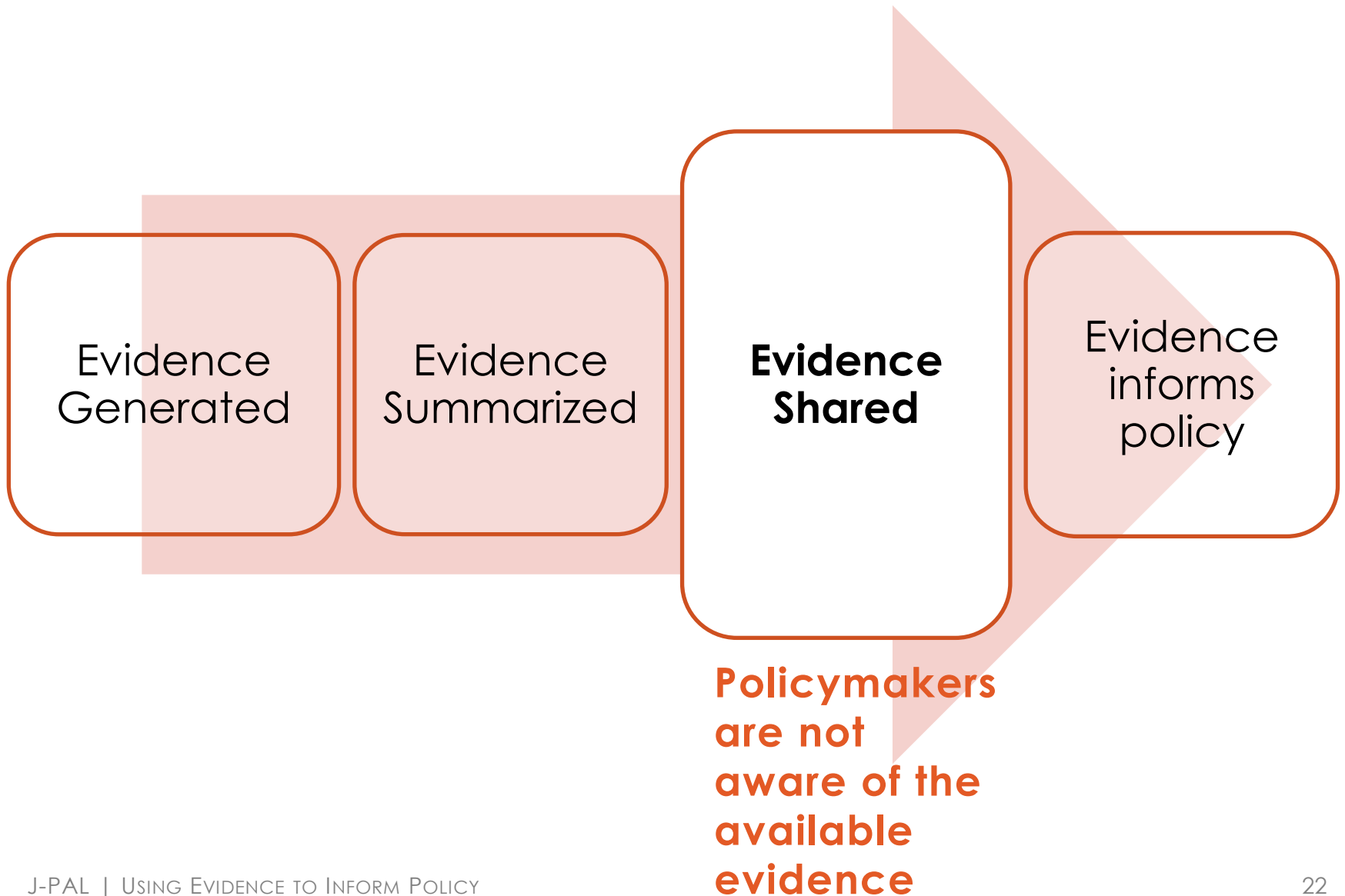Post-Primary Education Initiative Review Paper[2]

Version of 2013-04-09 – Comments Welcome

I. Introduction

Effective, evidence-based policies on post-primary education are of vital importance as many developing countries start to the see a bulge in secondary and post-secondary enrollment, the product of the achievement of near-universal access to primary school. Finding ways to deliver and promote access to high-quality post-primary education, and to ensure that education is relevant to labor market needs, is one of the great challenges of our times. This must be accomplished in countries where governments face severe budget constraints and many, of not most, parents are too poor to cover the costs out of pocket. International reports such as *A Global Compact on Learning*, by the Center for Universal Education at the Brookings Institution, emphasize providing opportunities for post-primary education as a first-tier policy challenge (Center for Universal Education, 2011). In addition, there has been considerably less progress in gender parity at the secondary level. Meeting these challenges will require a combination of using existing resources more effectively – which requires both understanding which inputs are key and which are not—and a range of innovations that may fundamentally alter the current methods of instruction.

To that end, the Abdul Latif Jameel Poverty Action Lab (J-PAL) has launched a Post-Primary Education Initiative intended to promote policy-relevant research on

Constraints from evaluation to policy

Evidence Generated

Evidence Summarized

Evidence Shared

Evidence informs policy

Policymakers are not aware of the available evidence

J-PAL works with policymakers

Trainings on evidence

Sharing evidence-based programs

Constraints from evaluation to policy

Evidence Generated

Evidence Summarized

Evidence Shared

Evidence informs policy

Policymakers have limited capacity to use the evidence
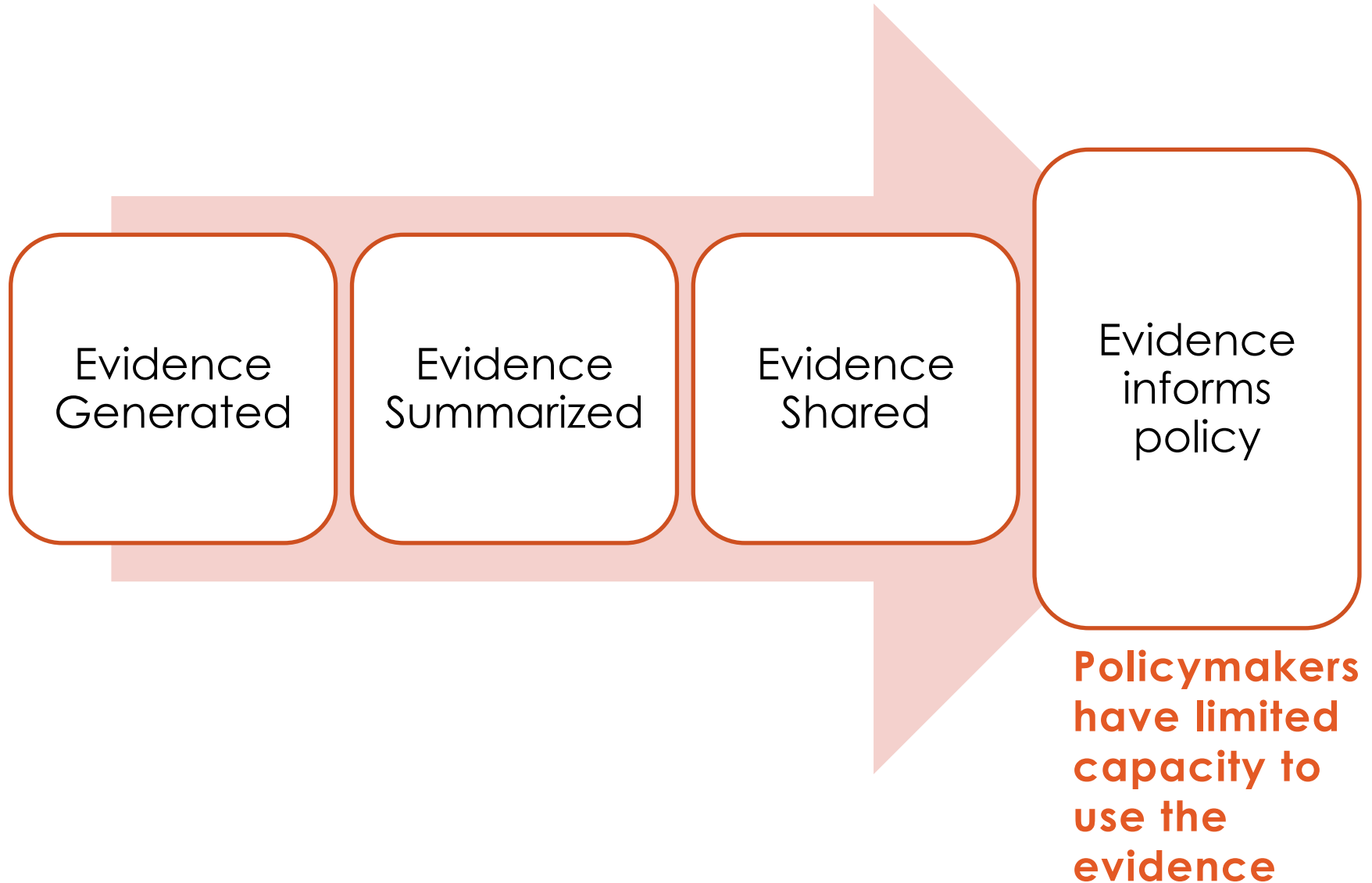
How to Use Evidence Effectively?

How to Use Evidence Effectively?

1. How to identify the quality of your evidence?

2. How to draw policy lessons from one context to another?

How to Identify the Quality of your Evidence?

Good Evidence vs Bad Evidence

Evidence can tell us many stories…

Best practices to check for in any impact evaluation research

- Watch for red flags!

- Read the original research or a summary of it from the same organization (not just news sources)

- Peer-reviewed material is usually more reliable (published papers)

When reading a claim always ask…

1. What type of claim is this:

    - Descriptive

    - Process

    - Causal impact

2. Does the evidence match the claim? Is the claim causal but the evidence only a correlation?

Descriptive

Is the sample representative ?
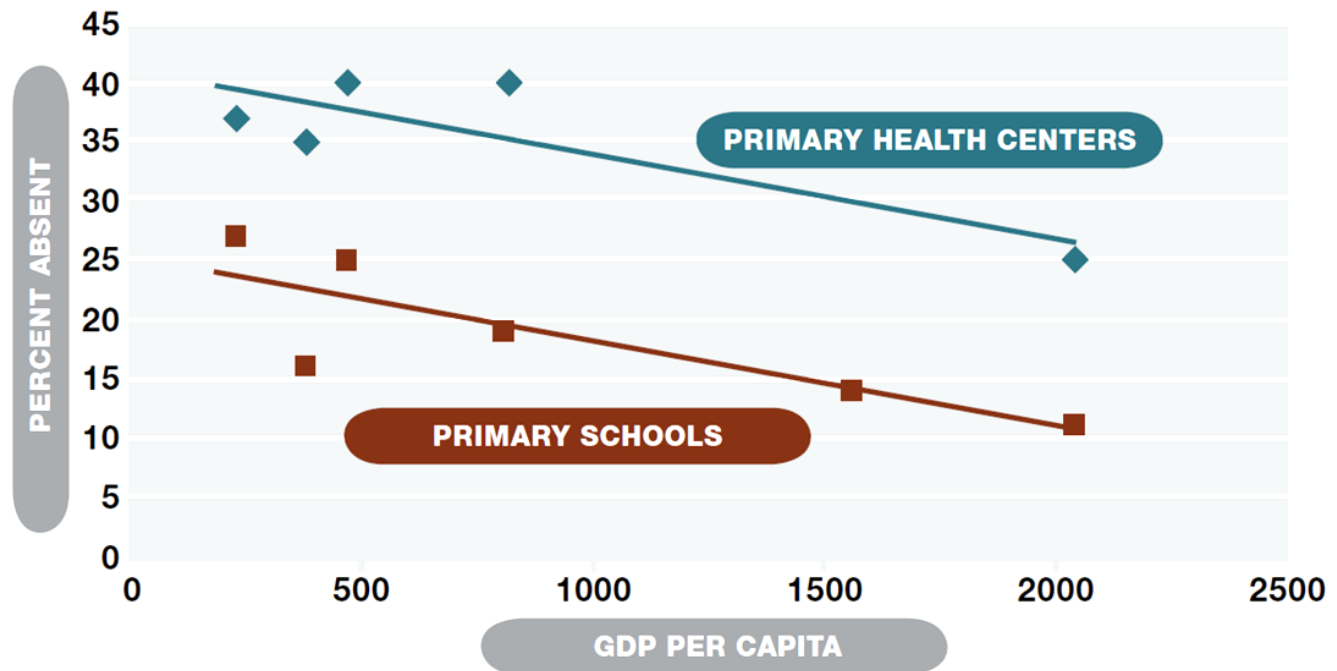
Process

- Process indicators can be very useful
  - Example : MFI in West Bengal
  - 500,000 clients
  - 35% are in rural areas
  - 45% are low-income clients
  - Repayment rate of 95%
  - 40% increase in income of clients

- How are they collected?

- Can it be claimed as impact?

Causal: What is the method?

- If the claim is causal, are you convinced about the method and the way it is implemented?

- Is there a good comparison group (counterfactual)?

- Clear on the assumptions of the method

- Is the sample size large enough?

- Interpretation of the results

For lack of loos

India, 2013-14, open defecation and underweight children

Source: Rapid Survey on Children, Unicef and Government of India
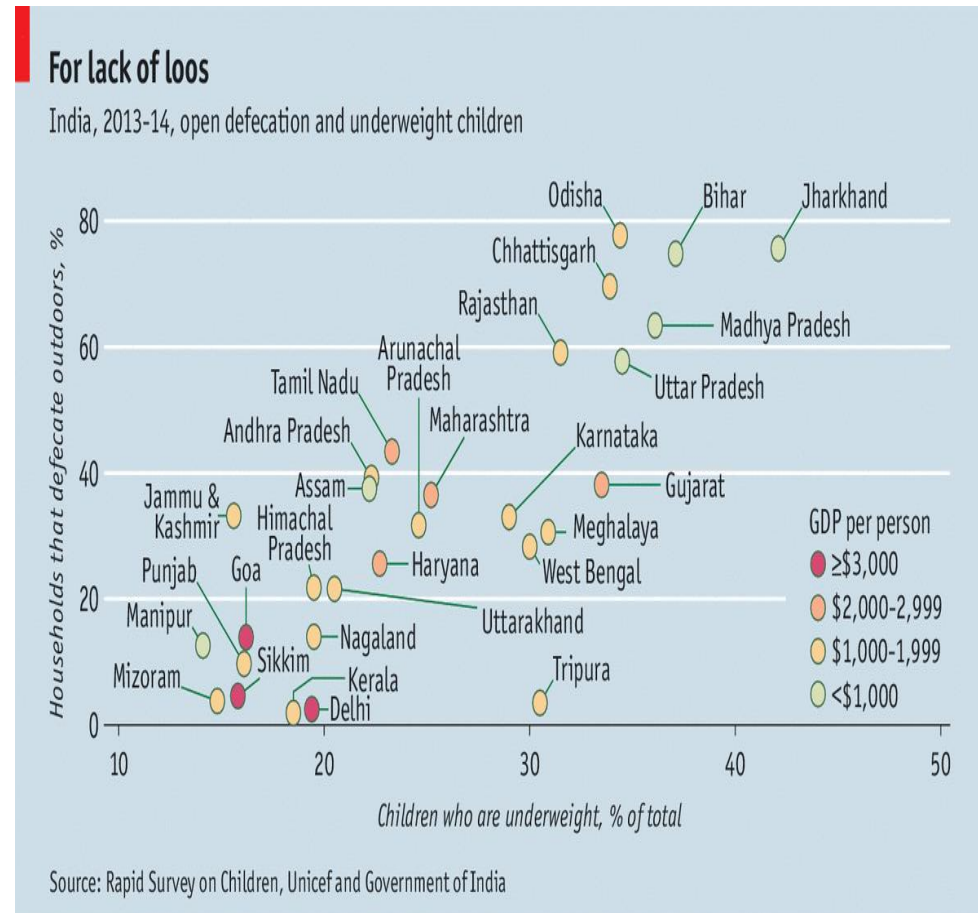
Economist.com

How to draw policy lessons from one context to another?

Generalization

The challenge of using evidence

- Rigorous impact evaluations are hard to do well and we underutilize their potential if we only learn about the precise program and context they evaluate

- But understanding local needs, and informal and formal institutions is critical to good policy

The challenge of using evidence

We should do more replications of RCTs of similar programs in different contexts…

The challenge of using evidence

…. but there are limits!

The challenge of using evidence

Policy makers never have 100% certainty

- Basu (2014): tomorrow is a new context.

- Is imperfect evidence **likely** to be worse than no global evidence?

Overview of theory approach to evidence

- Evidence from a single RCT is only one part of the puzzle

- We use it to adjust our "priors" which are based on theory, descriptive work, other empirical evidence

- Putting evidence into a theoretical overview allows more efficient use of different forms of evidence than "black box" and allows us to be more precise about what a "similar context" is

- **Draw on a theory based overview of 70+ RCTs on health econ in dev countries** (Kremer and Glennerster, 2012)

Overview of theory approach to evidence

Improving immunization in a West African country

The "black box" approach to evidence

- If govt. in West African country wanted to improve immunization rate, should they consider non-cash incentives?

- What is our evidence of the following relationship?

| Incentives for immunization | Higher completed immunization rate |

- Only one RCT in South Asia (none in Africa)

- Program conducted by NGO not government

Impact of the Camp and Incentive in Udaipur, India:
Number of immunizations received by children aged 1-3 years

Legend: Comparison · Immunization Camps · Camps + Incentives

Number of Immunizations	Comparison	Immunization Camps	Camps + Incentives
≥1	50%	78%	74%
≥2	39%	70%	70%
≥3	20%	42%	55%
≥4	10%	23%	46%
≥5	6%	18%	39%

Theory of change: Incentives for Immunization

| Incentive program | Parents want to immunize | Can access clinic | Provider presence sufficient |

Basic conditions

| Parents pro-crastinate | Small incentives offset bias | Completed schedule salient | Incentives delivered to clinic |

Behavioral

| Incentives given to parents | Min. risk from over vaccination | Completed imm. rises | Improved health |

Process

Impact

Evidence on the basic conditions

- **What evidence do we have on basic conditions?**
  - Do parents want to immunize?
  - Is access to clinics adequate?
  - How big a barrier is health worker absenteeism?

| Parents want to immunize | Can access clinic | Provider presence sufficient |
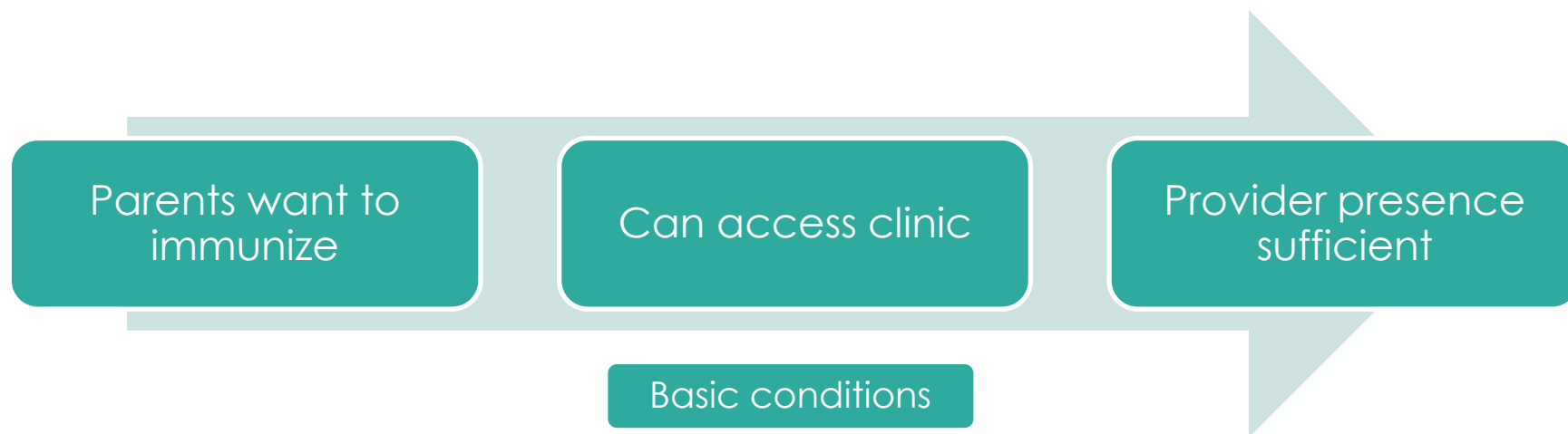
Basic conditions

Evidence on the basic conditions

- **Descriptive evidence** (from said West African country):
  - 84% of children receive DPT1
  - 54% of households within 1 hour walk of clinic
  - Health worker absenteeism 44%

- **Institutional knowledge:**
  - Unlike in India, clinics often have multiple workers, only closed 12%. Immunizations on specific days when absenteeism is lower

Parents want to immunize ✓   Can access clinic ✓   Provider presence sufficient ✓

Basic conditions

Evidence on behavioral linkages in TOC

- **People procrastinate and find it hard to stick with behavior they believe is good for them and their children**

    - Small changes in price of preventative products sharply reduces take up (9+ RCTs)

    - People are willing to pay to tie their own hands with commitment savings products: difficult to explain unless people know they are present biased (e.g. Gine et al. 2010)

Parents procrastinate ✓
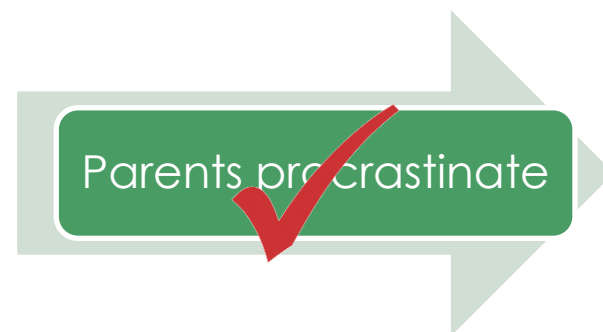
Evidence on behavioral linkages in TOC II

- **Small incentives can have big impacts on behavior**
  - 30+ RCTs of CCTs but usually much bigger incentives (Fiszbein and Schady, 2009)
  - Malawi: smaller CCT same impact as bigger CCT (Baird et al 2010)
  - Small incentives for HIV testing (Thornton 2008 Malawi), age of marriage (Field et al, 2014 Bangladesh)

Small incentives offset bias

Take up rates particularly informative

Immunization rates by antigen		
	Country 1	**Country 2**
DPT1	84	47
DPT3	74	41
Measles	67	41
Fully immunized	49	38

Evidence on behavioral linkages in TOC III

- **Knowledge, or salience, of how many visits are needed for completed immunization**

    – Weaker evidence on the importance of salience

    – India study had different incentive at final vaccination: how important?

Completed schedule salient

Evidence on process links in the ToC

- Process questions include:
  - Will the incentives be delivered regularly to the clinic?
  - Will the incentives be given to parents appropriately?

| Incentives delivered to clinic | Incentives given to parents |

Process
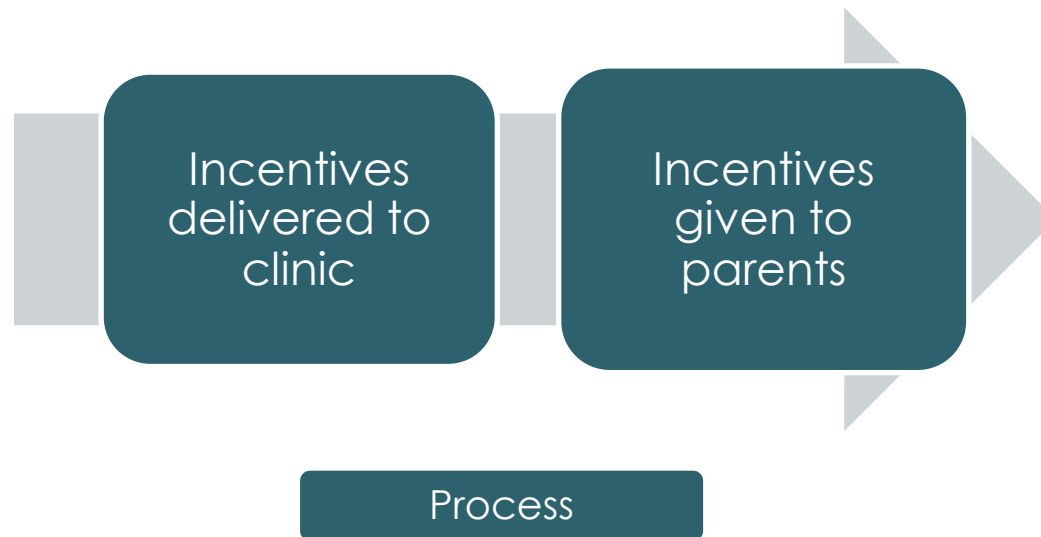
Can RCTs tell us about details of delivery?

- Yes, but harder than in other areas
  - Very similar results across contexts for consumer behavior (68 RCTs)
  - More varied results on provider behavior (6 RCTs)
- Providers are humans too, why harder to predict?
  - Work in bureaucratic settings with complex incentives
  - Theory of change longer, with many more steps
  - Increasingly RCTs are breaking down these steps and testing them
  - Many fewer RCTs on provider behavior than consumer behavior
- Some delivery harder than others
  - Incentives through MPESA, or cell phone vouchers
  - Less concern about bureaucratic incentives

Theory of change: Incentives for Immunization

Incentive program	Parents want to immunize	Can access clinic	Provider presence sufficient

Local descriptive evidence suggests basic conditions hold ✓

Parents pro-crastinate	Small incentives offset bias	Completed schedule salient	Incentives delivered to clinic

Strong RCT evidence of behavioral conditions ✓   Need to…

Incentives given to parents	Min. risk from over vaccination	Completed imm. rises	Improved health

…monitor process   **Strong RCT evidence of impact** ✓

So, when do we stop evaluating?

If we have enough evidence to **act**, do we **stop evaluating** impact? (always monitor of course)

NO!

Why should we keep evaluating?

- We often need to act even when evidence is thin.

- Often big overlap between when we have enough evidence to launch big new initiative and when still worth evaluating.

- Questions may remain about best way to implement.

- Billions spent on CCTs. Very strong evidence they work, but important evaluations on how to make more effective.

- HOWEVER, there is a trade-off of evidence in new areas vs. more on existing.

Generalizability Framework:
Immunizations incentives

Step 1: What is the disaggregated theory behind the program?

Step 2: Do the local conditions hold for that theory 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?

INCENTIVES FOR IMMUNIZATION PROGRAM

LOCAL CONDITIONS

1. Parents want to vaccinate
2. Parents can access clinic
3. Provider presence sufficient
4. Full immunization schedule is salient

GENERALIZED LESSONS ON BEHAVIOR

1. Minimal risk from overvaccination
2. Parents procrastinate or fail to persist
3. Parents are highly sensitive to price of preventative health

LOCAL IMPLEMENTATION

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

COMPLETED IMMUNIZATION RATES RISE

Concluding thoughts: Connecting it All

- Multiple reasons why governments, NGOs, funders and researchers choose to evaluate

- Multiple factors affect how and why evidence informs policy

- Design research for generalizability

- Policy making requires drawing on different kinds of evidence, but that does not mean all evidence is equal

- Implementation is hard: knowing a program will have impact if implemented is a good place to start

Thank you

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