

Using Evidence from Randomized Evaluations for Decision-Making and Policy Change

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Some key questions RCTs have tried to answer

Agriculture

- Adopting a flood-tolerant rice variety in India
- Increasing fertilizer adoption in Kenya

Crime

- Cognitive behavioral therapy to reduce crime in Liberia
- Impacts of military conscription in Argentina

Education

- Merit scholarships for girls in Kenya
- Remedial education in India

Environment & Energy

- Environmental audits of firms in India
- Protecting springs in Kenya



RRI Photos

Some key questions RCTs have tried to answer

Finance

- Impact of microfinance on poverty
- Using fingerprinting for lending in Malawi

Health

- CCTs and child development in Nicaragua
- Improving healthcare provider attendance in India

Labor Markets

- Attracting candidates to the Mexican public sector
- Job opportunities and investing in girls in India

Political Economy & Governance

- Community-based monitoring to reduce corruption in Indonesia
- Overcoming parochial voting with debates in Sierra Leone?



J-PAL is much more than just evaluations – we work extensively to promote evidence informed policy



EVALUATIONS

J-PAL researchers conduct randomized evaluations to test and improve the effectiveness of programs and policies aimed at reducing poverty.



CAPACITY BUILDING

Through training courses, evidence workshops, and research projects, J-PAL equips policymakers and practitioners with the expertise to carry out their own rigorous evaluations.



POLICY OUTREACH

J-PAL affiliates and staff analyze and disseminate research results and build partnerships with policymakers to ensure policy is driven by evidence and effective programs are scaled up.

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
 - 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?

Over 200 million people reached through scale-ups of programs evaluated by J-PAL researchers

Program	People Reached (mn)
School-based Deworming	95
Raskin: Subsidized Rice (Indonesia)	66
Teaching at the Right Level (India)	34
Generasi: Conditional Community Block Grants (Indonesia)	6
Chlorine Dispensers for Safe Water (East Africa)	0.5
Free Insecticidal Bednets	Policy influence
Police Skills Training	Policy influence
TOTAL THE ROLE OF RANDOMIZED EVALUATIONS	IN INF OROZ IOMOLICY



There are different paths from impact evaluations to scale-ups

 Governments evaluate their pilot programs to demonstrate usefulness to public, gather support for their expansion and learn lessons to make it more effective (e.g. Raskin)

 Leveraging evidence by implementing organization to expand existing programs and get more funding (e.g. Pratham)

 Independent organizations can use evidence to replicate or scale-up programs found to be highly cost-effective, and/or simple to implement (e.g. Evidence Action)

There are different paths from impact evaluations to scale-ups

 If an evaluation helps provide evidence on a very policy relevant and salient topic, it gets a huge amount of traction very easily (e.g. Pricing preventative health products)

 Careful study of the new context, collaboration with original evaluator and implementer and a pilot replication (e.g. Immunization in Haryana)

Overview

1. Constraints to evidence-informed policymaking

2. How J-PAL seeks to overcome these constraints

- 3. Catalyzing evidence use
 - a) Scale-up in the same context
 - b) Institutional partnerships with governments
 - c) Generalizing evidence from one context to another

Constraints to evidenceinformed policymaking



Why doesn't evidence get integrated into policy and programs?

- Supply-side constraints:
 - Varying quality of evaluations
 - Evaluations not summarized

- Evaluations not synthesized
- Evaluations do not capture cost-effectiveness

Why doesn't evidence get integrated into policy and programs?

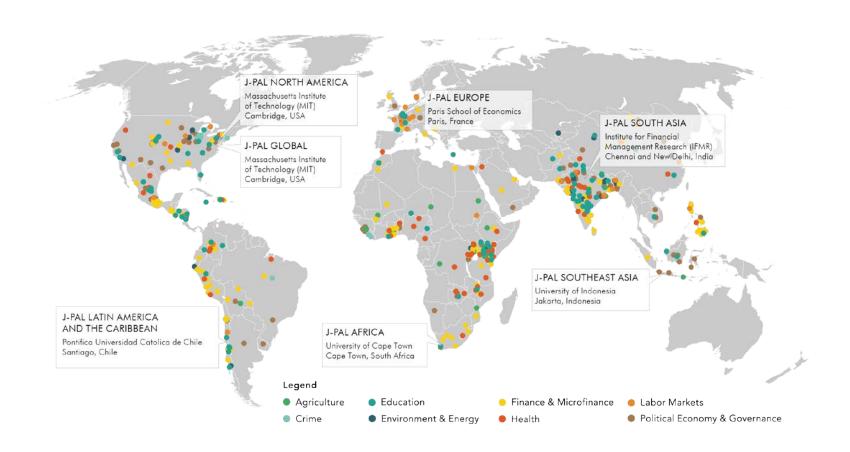
- Demand-side constraints:
 - Systemic
 - Political
 - Administrative
 - Technical
 - Time
- But also the 4 "I"s:
 - Ignorance
 - Inertia
 - Ideology
 - Instinct

How J-PAL seeks to overcome these constraints

Addressing Supply Barriers:

Lots of high-quality, relevant evidence summarized and synthesized for policymakers

700 RCTs in 64 countries provide key insights in many sectors



Incentivizing policy relevant research





Matchmaking by J-PAL staff



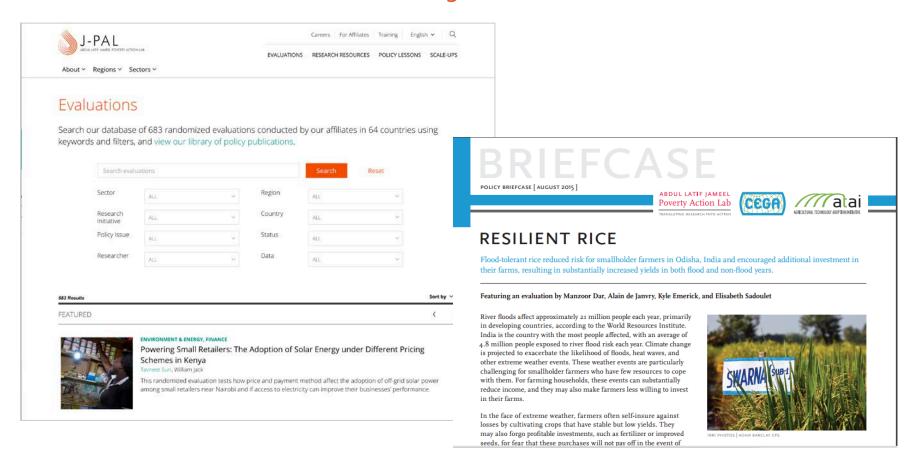
J-PAL Funding Initiatives

- Governance (Democracy, Corruption etc.)
- Agriculture (Technology Adoption)
- Government Partnerships (Institutionalizing evidence informed policy)
- Urban Services (sanitation, sewage, environment)
- Crime (prevention, recividism)
- Non-Communicable Diseases (diet, life-style changes)
- Post-Primary Education (the missing link after primary education success)





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



J-PAL also synthesizes evidence within sectors

















J-PAL policy lessons: Bulletins

BULLETIN

J-PAL BULLETIN [APRIL 2011]



TRANSLATING RESEARCH INTO ACTION

THE PRICE IS WRONG

Charging small fees dramatically reduces access to important products for the poor.



edical 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. By idence from these studies suggests the following:

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 Wasserman¹

Abdul Latif Jameel Poverty Action Lab (J-PAL) Post-Primary Education Initiative Review Paper²

Version of 2013-04-09 — Comments Welcome

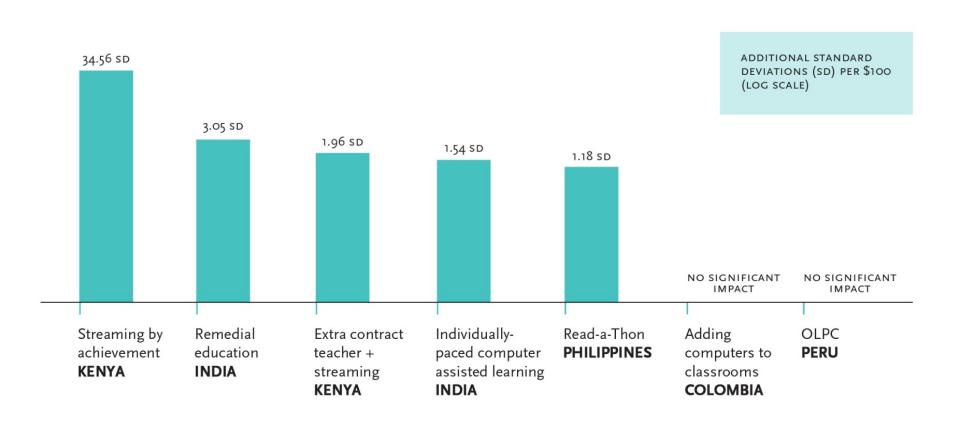
I. Introduction

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

Cost-Effectiveness Analysis: Improving learning

IMPROVING STUDENT LEARNING: COST-EFFECTIVENESS OF EDUCATION PROGRAMS



Addressing demand barriers:

Building policymaker knowledge and interest on the value of rigorous evaluation

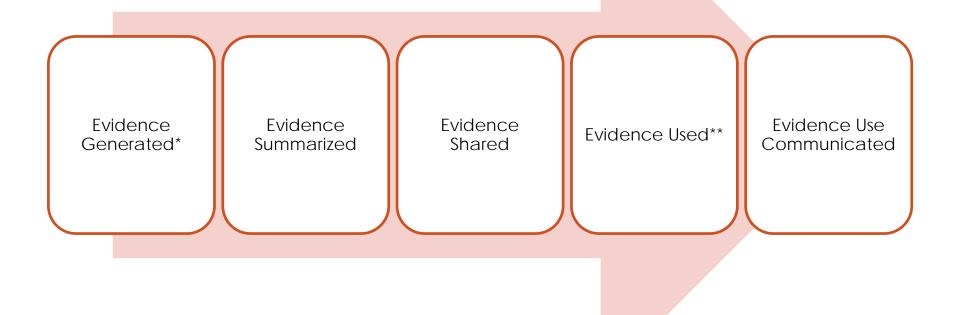
Training policymakers on evidence



Sharing these evidenced-based programs with policymakers



From evaluation to policy: A simple theory of change



Catalyzing evidence use



1) Scale up in the same context

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Free Insecticidal Bednets	Policy influence
Police Skills Training	Policy influence
TOTAL	202 mn



2) Develop institutional partnerships with governments

Creating Long-Term Partnerships – A Case Study of Tamil Nadu state, India

- Policy Window:
 - Well governed state
 - Eager to be leader in country
 - Champion in Chief Secretary and Planning Secretary
- Extensive Policy-Research Dialogues
 - Boots on the ground
 - Understand local context
 - Preliminary matchmaking
 - Needs assessment and scoping surveys (funds help)



Creating Long-Term Partnerships and A Culture of Evidence Informed Policy

- Comprehensive Long Term Partnership
 - Institutionalized MoU
 - Advisory Committee: Government and JPAL

Research

- Innovation Fund: Research jointly funded by government and researchers / JPAL
- Approval Committee: Government and JPAL

Scale Ups

- Examine External validity of relevant existing evidence to confirm Theory of Change (basic local conditions, behavioral, process evaluation and outcomes)
- Involve original researcher and implementing partners



Creating Long-Term Partnerships and A Culture of Evidence Informed Policy: Some other examples

- Nudge Units
 - E.g. White House SBST
- Internal Evaluation Units
 - E.g. Compass Commission, Quipu Commission



- Literature review and policy dialogue to identify key open questions
- A long term review board for continuity in research and policy partnerships
- Accessible funding to incentivize partnerships
- Institutional support to do outreach on lessons





Generalizing evidence from one context to another

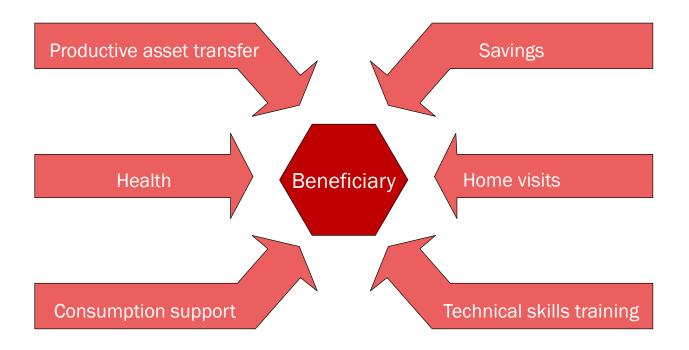


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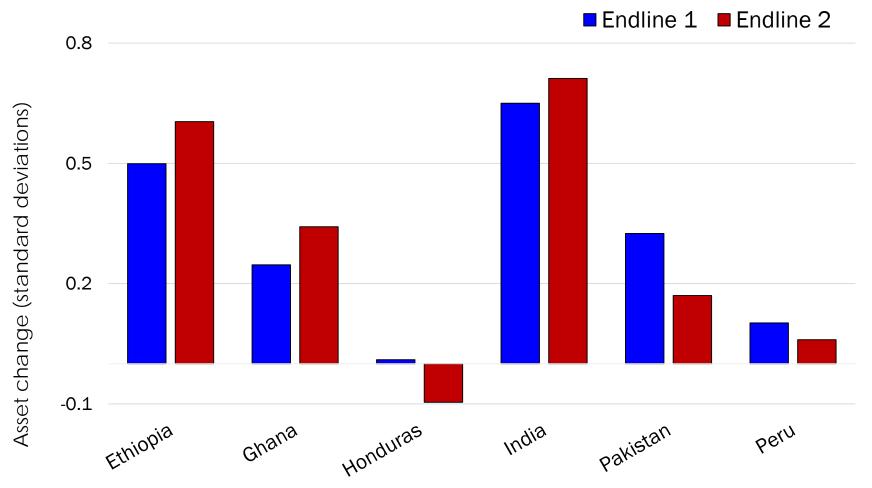


Targeting the Ultra Poor Program

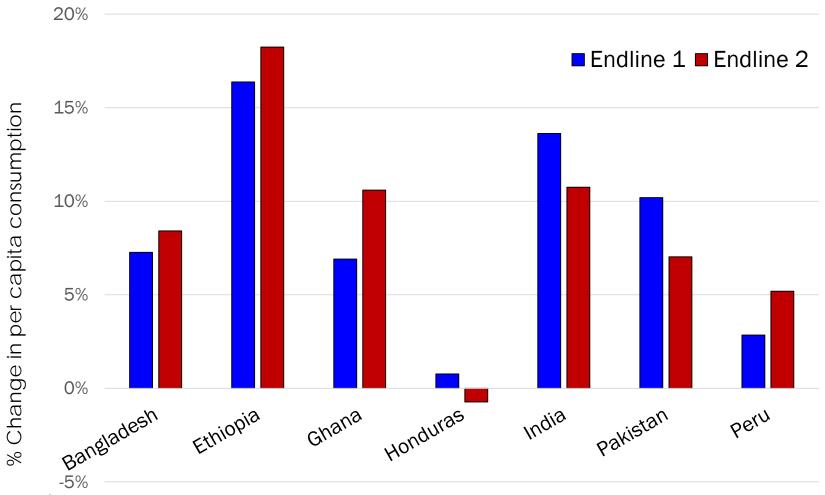


Banerjee et al, 2015

Targeting the Ultra Poor Program: Assets Increased



Targeting the Ultra Poor Program: Consumption Increased



Seven Microcredit Evaluations

TABLE 2 SUMMARY OF MICROCREDIT'S IMPACT ON VARIOUS OUTCOMES

Outcome	Bosnia and Herzegovina	Ethiopia	India	Mexico	Mongolia	Morocco	Philippines
Business ownership	↑	_	_	_	↑	_	_
Business revenue	_	_	_	↑	_	1	_
Business inventory/assets	↑	no data	↑	no data	↑	1	_
Business investment/costs	_	_	1	1	no data	1	\
Business profit	_	_	_	_	_	1	_
Household income	_	_	-	_	_	_	_
Household spending/consumption	_	1	_	T	↑	_	_
Social well-being	_	_	_	1	_	_	\

J-PAL Policy Publications: Bulletins





J-PAL: Where Credit is Due, 2015 J-PAL: Building Stable Livelihoods,

The challenge of using evidence

- Dramatic rise in the number of rigorous impact evaluations in developing countries in last 20 years
- Unlikely to be rigorous evaluation of precisely the program policy makers wants to introduce in exactly same location
- How should we respond?
 - Wait to act until there is more evidence?
 - Always do new rigorous eval before introducing in new context
 - Only use less rigorous local evidence?
 - Use results from study in another context?
 - Only use from other countries if at least X replications or if replicated in a similar enough context?

The challenge of using evidence II

- 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
- We should do more replications of RCTs of similar programs in different contexts but there are limits
- 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

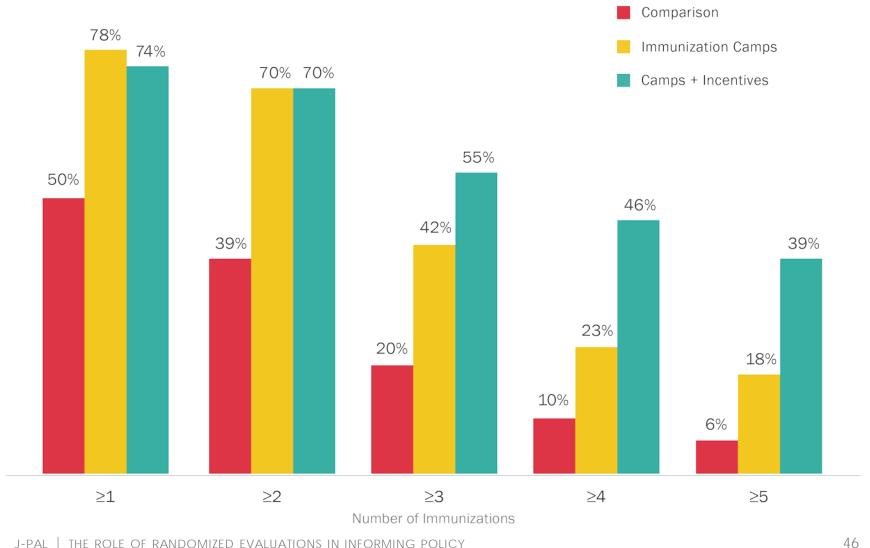
- Evidence from a single RCT is only one part of the puzzle
- We use it to adjust our "priors" which are based on theory, descriptive work, other empirical evidence
- Putting evidence into a theoretical overview allows more efficient use of different forms of evidence than "black box"
 - allows us to be more precise about what a "similar context" is
- E.g. on improving immunization in a West African country
- Draw on a theory based overview of 70+ RCTs on health econ in dev countries (Kremer and Glennerster, 2012)

Non cash incentives for immunization in Rajasthan

- Seva Mandir program to increase immunization rates in rural Rajasthan, tested with RCT
 - Banerjee, Duflo, Glennerster, Kothari, 2010
- Fixing supply: regular monthly immunization camps with nurse present without fail

 Incentive: 1kg dahl for every vaccination, set of plates on completed immunization schedule

Number of immunizations received by children aged 1-3 years



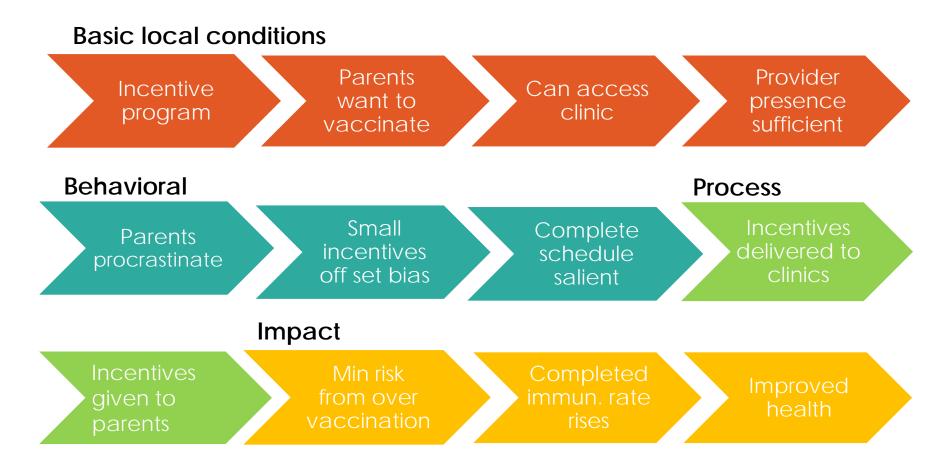
The "black box" approach to evidence

- If Govt in West Africa wanted to improved immunization rate, should they consider noncash incentives?
- What is our evidence of the following relationship?



- Only one RCT in South Asia not Africa
- Program conducted by NGO not government

Theory of change: incentives for immunization



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?
- Descriptive evidence:
 - 54% of households within 1 hour walk of clinic
 - Health worker absenteeism 44%,
 - 84% of children receive DPT1
- Institutional knowledge:
 - unlike India, clinics often have multiple workers, only closed 12%.
 Immunizations on specific days when absenteeism is lower

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

- People procrastinate and find it hard to stick with behavior they believe is good for them and their children
 - Good theoretical work showing how this small changes to a standard discounting model produces series of testable conclusions and can explain many stylized facts (e.g. Laibson, 1997)
 - 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)

Evidence on behavioral linkages in TOC

- 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)
- Knowledge, or salience, of how many vaccinations are needed for completed immunization
 - Weaker evidence on the importance of salience
 - India study had different incentive at final vaccination: how important?

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?
- Harder to generalize on these process questions from one program and country to another
- Not just a challenge from learning from RCTs, good implementation is a constant struggle in development
- This is why we need monitoring for every program:
 - We may be confident a program will work if it is delivered, but we need to make sure it is delivered appropriately

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

ToC incentives for immunization: Country 1

Incentive program

Parents want to vaccinate

Can access clinic

Provider presence sufficient

Local descriptive evidence suggest basic conditions hold

Parents procrastinate

Small incentives offset bias

Completed schedule schedule salient

Incentives delivered to clinic

Strong RCT evidence of behavioral conditions

Need to monitor process

Incentives
given to
parents

Min risk
from over
vaccination

Completed
imm. rises
Improved
health

Strong RCT evidence of impact

Theory of change: incentives for immunization in Country 1

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Incentives given to parents

Min risk from over vaccination

Completed immun. rate

Improved health

When do we stop evaluating?

- If we have enough evidence to act, do we have enough evidence to stop evaluating impact? (always monitor)
 - No: we often need to act even when evidence is thin
- Often a big overlap between when 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
- Trade-off of evidence in new areas, vs more on existing

Concluding thoughts

- Design research for generalizability
 - Theory based RCTs can be very useful for policy because ask particularly generalizable questions
- 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
 - Logistics pilots important part of scaling up, even if no new RCT

Overarching takeaway...

