Using Evaluation for High Impact Public Health Delivery

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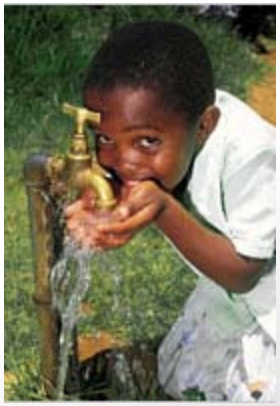
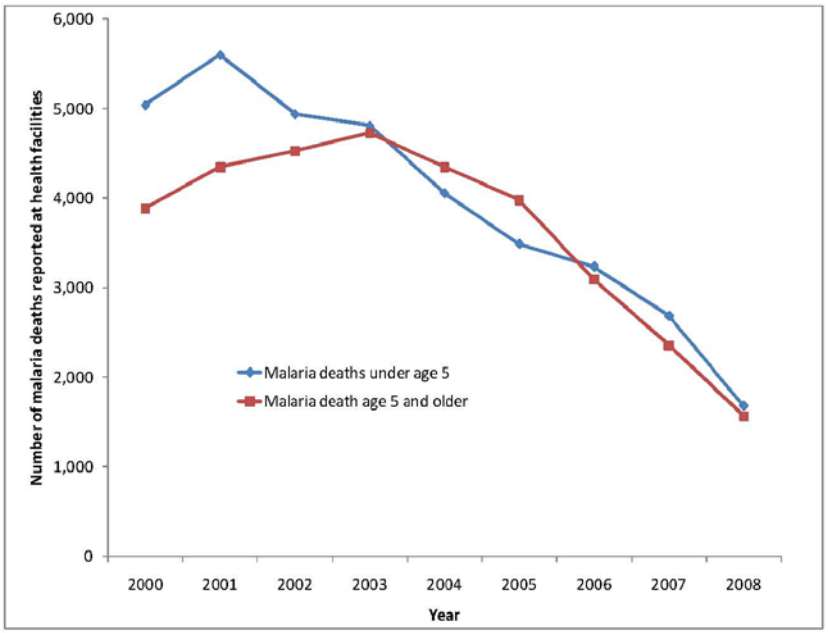
Recent technological achievements in public health are very promising



But less progress on delivery…

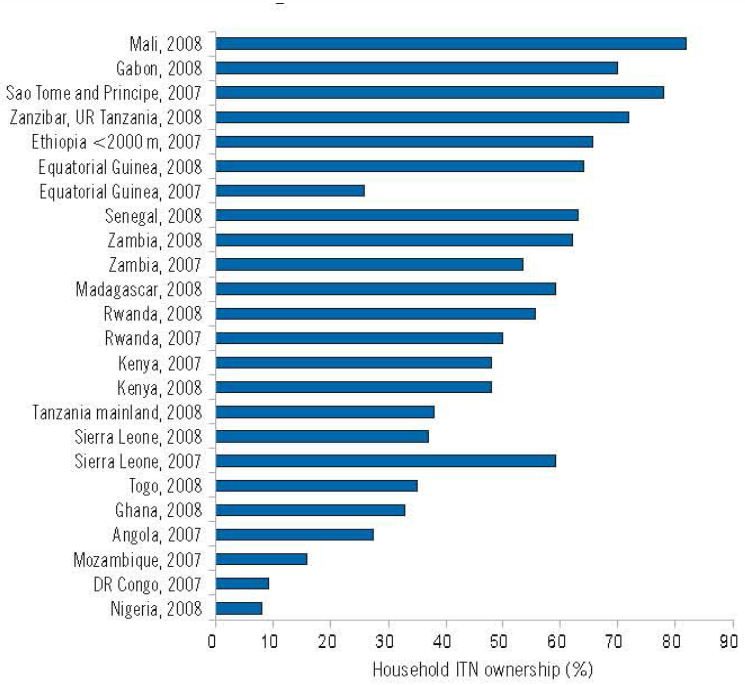
Bed nets to prevent malaria save lives of children, pregnant women & avert maternal anemia & poor birth outcomes

Malaria Deaths in Zambia



Source: Ashraf, Fink and Weil (2010)

But coverage remains low in many highly malaria-endemic countries



Source: World Malarai Report 2009 (WHO)

The “Last Mile” problem in global health

We have the technology to improve health and quality of life,
but how do we get it to those who need it?

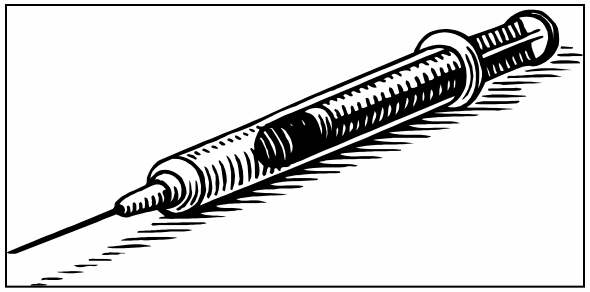
Health product delivery is complex, requiring knowledge about culture, behavior, politics, and psychology..

But we can study approaches to delivery in similar manner to health product development and testing

How should health products be priced?

We know for many health products, most vulnerable populations cannot afford the full price.

➔ We must subsidize the price, bring down cost.



But what should we charge?

A Hand-Out or a Hand-Up?

- Big debate in countries w/ malaria over price of bed nets
- Some countries insist on “cost-sharing”, not free

➔ “Nets given for free are wasted on fishing nets & wedding veils;” more are just sitting in packaging

A Hand-Out or a Hand-Up?

- On the other hand, even *small prices for bed nets can lead to big drops in uptake among vulnerable populations*

➔ Raising price to ↑ usage rates may be counterproductive if uptake ↓ enough

Comparative Cost-Effectiveness:
Which strategy ensures more women sleeping under nets?

Testing bed net delivery in Kenya

- Randomized-controlled field experiment in Kenya to explore:

What is the best pricing strategy to ensure high bed net coverage among pregnant women?

➔ Distribution at prenatal care allows targeting to those who need them (pregnant women & babies)

Experimental design & questions

- Bed nets Distributed to Women at Prenatal Visit
- Different Prices Randomly Assigned to Each Prenatal Clinic

$0

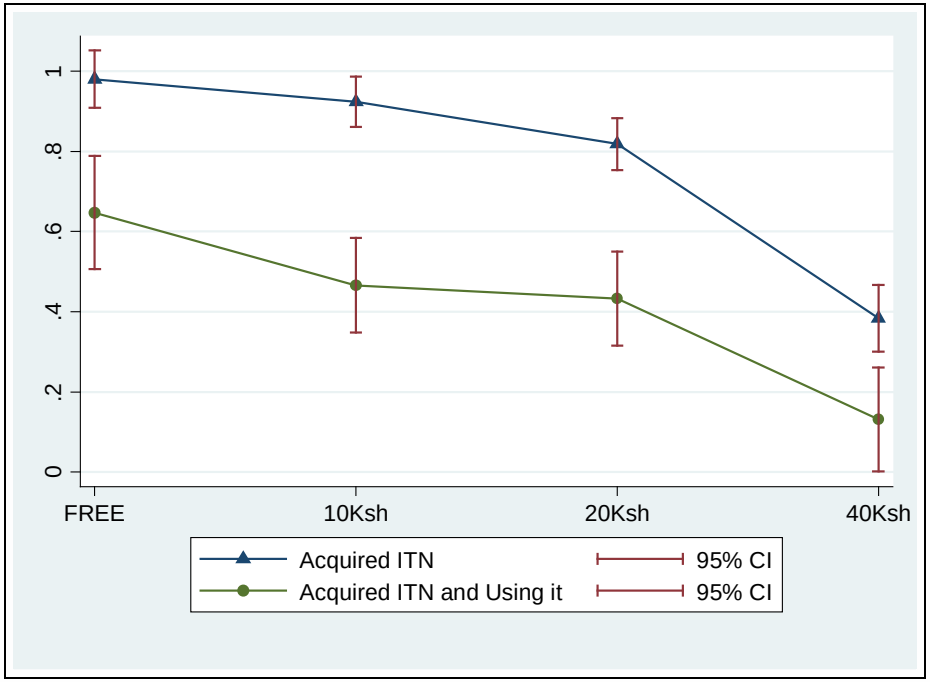
$.10

Other prices …

$0.60

We measure uptake and usage at each price.

Findings



1) Uptake drops steeply with price
2) Usage doesn't change with price

Free distribution is more effective and cost-effective than cost-sharing in this context.

Benefits of Randomized Trials

- This study contributed toward change in policy to free distribution of ITNs to pregnant women in Kenya
- A study with less rigor (e.g. pre-post or matched control) would have been less definitive
- Similarly, a non-RCT looking at impact of ITNs on health outcomes might be questioned

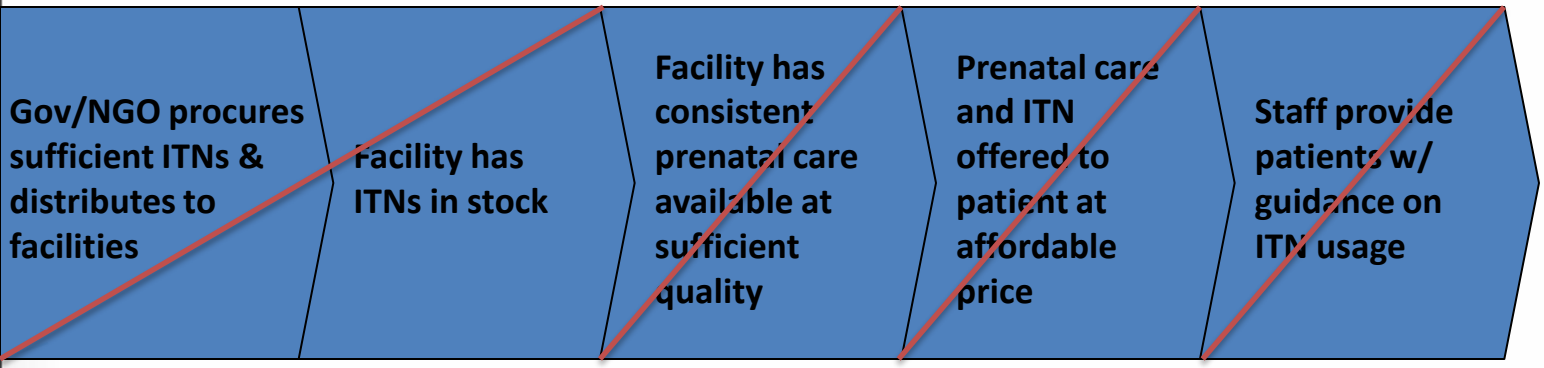
What Makes a Good Randomized Trial?

- Tests side-by-side alternative strategies/approaches to a problem that are motivated by:

1) Some kind of theory of change. What is the problem this strategy is solving? Under what circumstances might it not solve the problem? This is usually generated with qualitative research.
2) Testing the status quo or common wisdom. Can we improve on the current approach?
3) Thinking about the policy space. What type of empirical evidence can move policy forward?

Key Links in Supply Chain from Net Manufacturer to Pregnant Woman

Functional supply chain in **public sector**



Woman obtains ITN and uses it consistently for herself and newborn

Weak information systems lead to poor forecasting and to inconsistent inventory

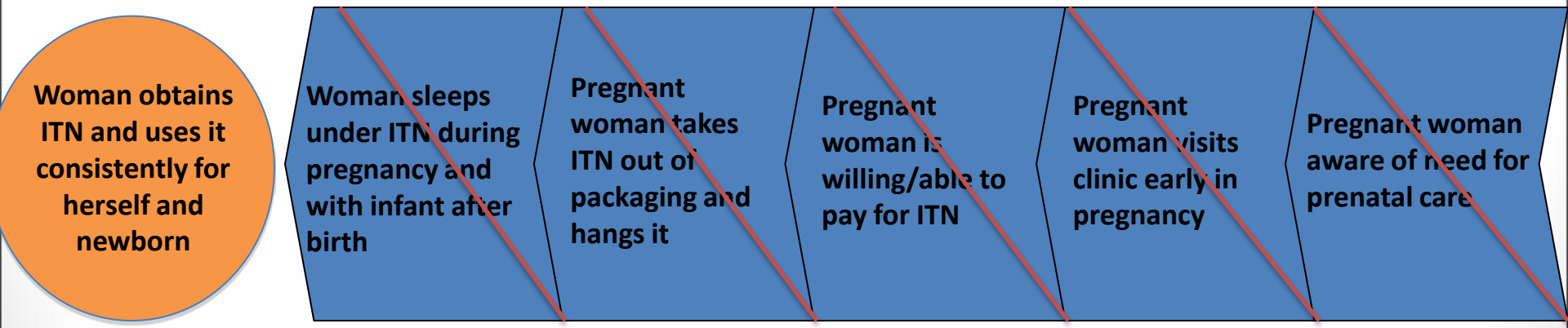
No incentives for attendance & performance; insufficient training

Fees charged to help fund missing meds & unpaid salaries

Insufficient training; visit times too short

Key Links in Demand Chain from Prenatal Visit to ITN Usage

Functional demand chain



No valuation of ITN; ITN used for other person

No materials to hang ITN; ITN won't hang in ceiling; keeping for later

ITN too expensive; unaware of benefits of ITN

Clinic too far, fees too high, understaffed, stocked out, etc.