Countdown to 2015
Maternal, Newborn & Child Survival

The Partnership for Maternal, Newborn & Child Health

msh Management Sciences for Health



Performance-based financing (PBF) to accelerate progress towards MDGs 4 and 5: What have we learned?

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Presentation objectives

- Summary of evidence of effectiveness
- Summary of the evidence of the cost, cost-effectiveness and efficiency
- Challenges and future research and learning agenda

Methodology

145 REFERENCES (LMIC focus)

- 30 journal articles
- 14 reports and PBF evaluations
- 41 synthesis papers (Cochran and Systematic reviews, working papers, discussion papers)
- 60 other documents and presentations
- Summarized in Excel and will be made available on Countdown, MSH and PMNCH websites

TYPES OF PBF

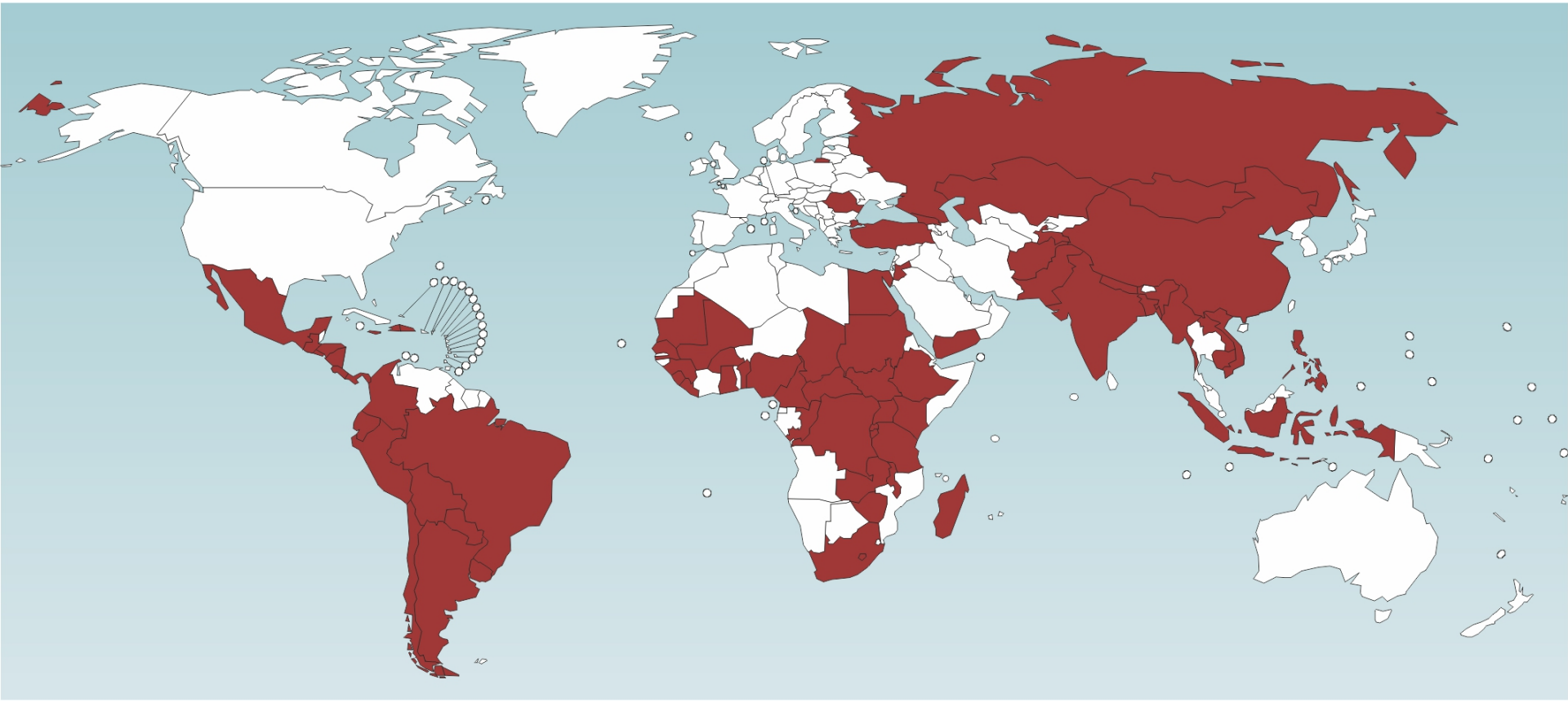
(where there was a focus)

• CCT	23
• P4P	17
• Health insurance	10
• Contracting	8
• Vouchers	8
• Social franchising	4
• Accreditation	1
• CODA	1

Broad methodological issues

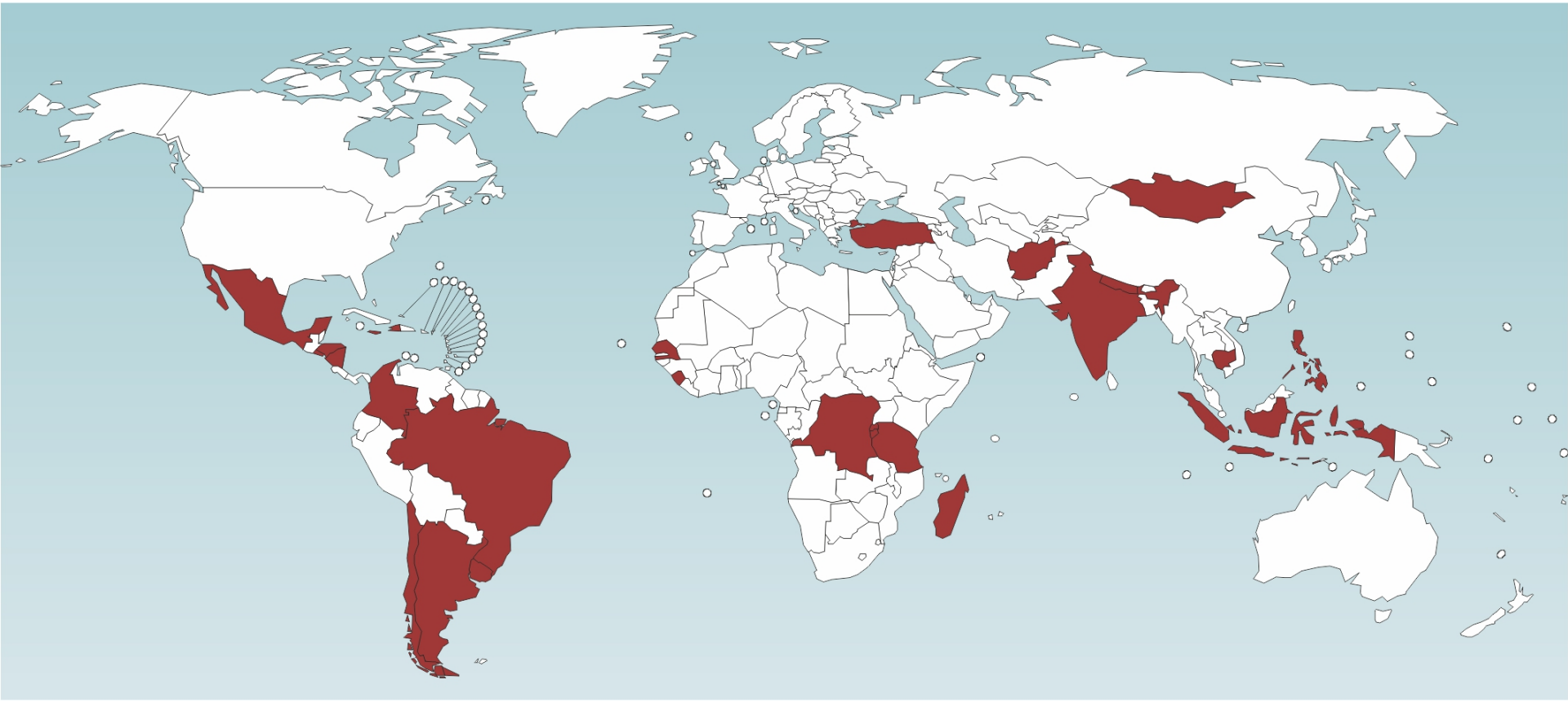
- Imprecise terminology and categorization of PBF types
- PBF focusing on a range of different outputs, outcomes and impact
- Significant number of studies reported positive effects, but few evaluations able to conclusively attribute results to PBF
  - Few experimental design evaluations
  - PBF is often part of broader health reform
  - PBF programs have different components

Map 1: Where has any type of PBF been implemented (LMICs)?



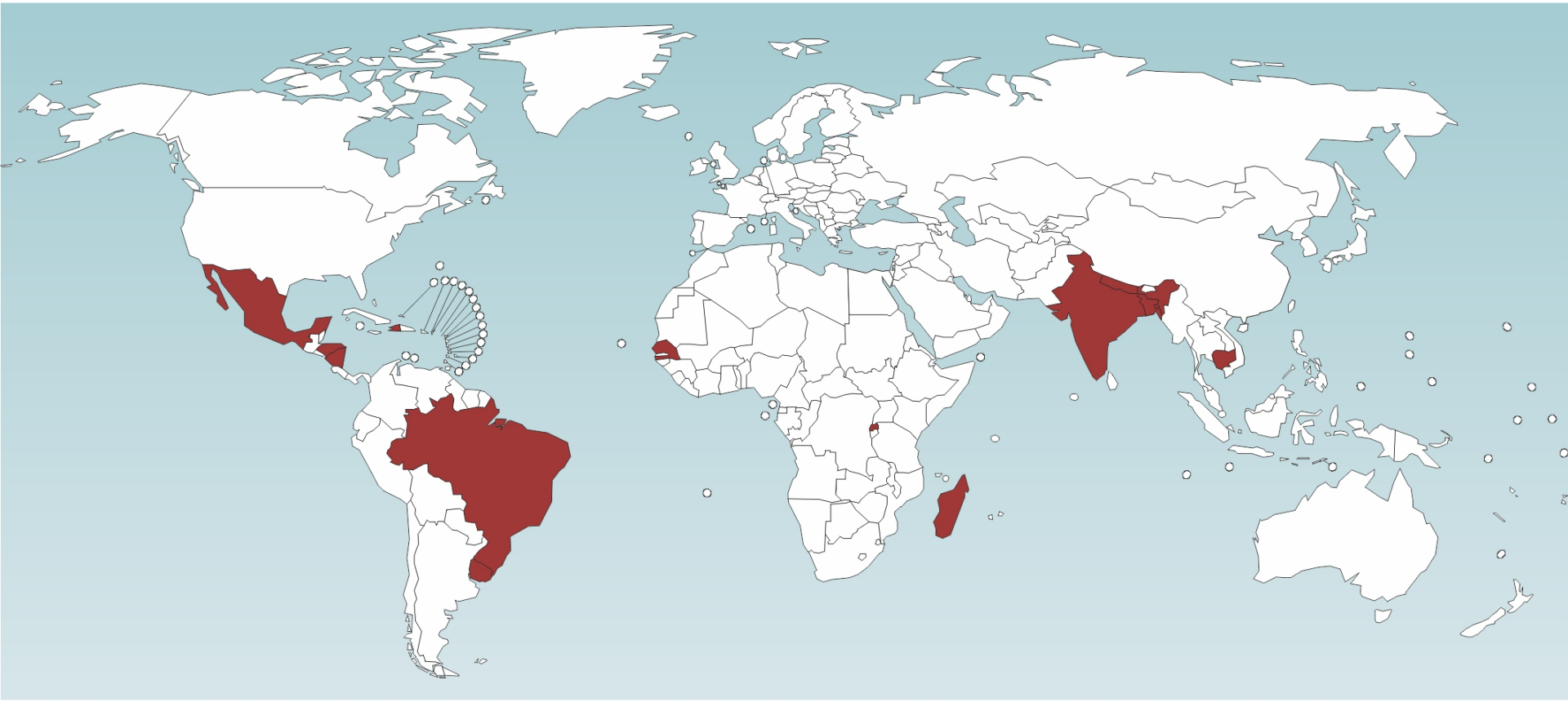
Afghanistan	Burundi	Colombia	El Salvador	Honduras	Lao PDR	Mexico	Panama	Senegal	Turkey
Argentina	Cambodia	Congo	Ethiopia	India	Lesotho	Mongolia	Paraguay	Sierra Leone	Uganda
Bangladesh	Cameroon	Costa Rica	Ghana	Indonesia	Liberia	Myanmar	Peru	South Africa	Uruguay
Benin	Central African Republic	Dominican Republic	Georgia	Jamaica	Madagascar	Nepal	Philippines	South Sudan	Vietnam
Bolivia	Chad	DRC	Guatemala	Jordan	Malawi	Nicaragua	Romania	Sudan	Yemen
Brazil	Chile	Ecuador	Guinea	Kazakhstan	Mali	Nigeria	Russian Federation	Tajikistan	Zambia
Burkina Faso	China	Egypt	Haiti	Kenya	Mauritania	Pakistan	Rwanda	Tanzania	Zimbabwe

Map 2: Where has PBF been implemented at scale?



Afghanistan	Cambodia	El Salvador	Indonesia	Mongolia	Rwanda	Turkey
Argentina	Chile	Haiti	Jamaica	Nepal	Senegal	Uruguay
Brazil	Colombia	Honduras	Madagascar	Nicaragua	Sierra Leone	
Burundi	DRC	India	Mexico	Philippines	Tanzania	

Map 3: Where has PBF been rigorously evaluated and shown results that can be attributed to PBF programs?



Bangladesh	Cambodia	Honduras	Madagascar	Nepal	Rwanda	Uruguay
Brazil	Haiti	India	Mexico	Nicaragua	Senegal	

Effect on health outcomes

- Evidence of positive impact on maternal and child health outcomes, but mixed results
- Attribution is an issue

- Examples
  - Brazil Bolsa Familia
  - India JSY
  - Mexico Opportunidades
  - Uruguay PANES CCT

Sources: Cecchini & Madariaga, 2011; Lim et al, 2010; Cecchini & Madariaga, 2011; Amarante et al, 2011

Effect on coverage and utilization

- Significant number or studies reported positive impact on coverage of services
- But results are mixed and attribution an issue
- Most PBF programs have focused on increasing inputs, processes and outputs as opposed to outcomes and impact
- Examples
  - Cambodia contracting
  - Haiti PBF for PHC services
  - India Chiranjeevi Yojana
  - Nepal SDIP
  - Rwanda P4P to PHC providers

Sources: Schwartz & Bhushan, 2004; Zeng et al, 2012; Devadasan et al, 2008; Powell-Jackson et al, 2009; Basinga et al, 2011)

Effect on quality of care

- Limited evidence of improved quality of care
- Mostly general statements with no quantitative data
- Incentives often linked to quantity, not quality
- Difficult to measure

- Examples
  - Rwanda P4P to PHC providers (Basinga et al, 2011)

Effect on equity

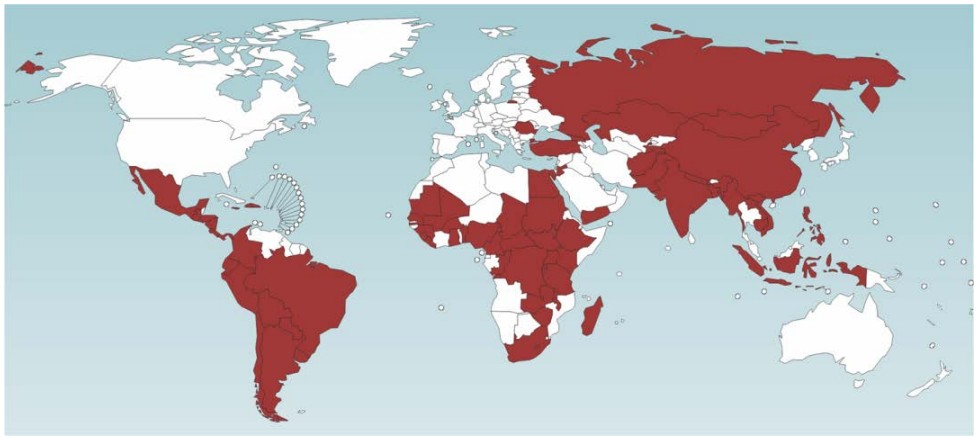
- Evidence of successful targeting of the poor and reduced catastrophic health spending

- Examples
  - Brazil Bolsa Familia
  - Mexico PROGRESA/Oportunidades
  - Turkey Green Card Program for the Poor
  - Uruguay PANES CCT

Sources: Rasella et al, 2013; Menon et al, 2013; Amarante et al, 2011)

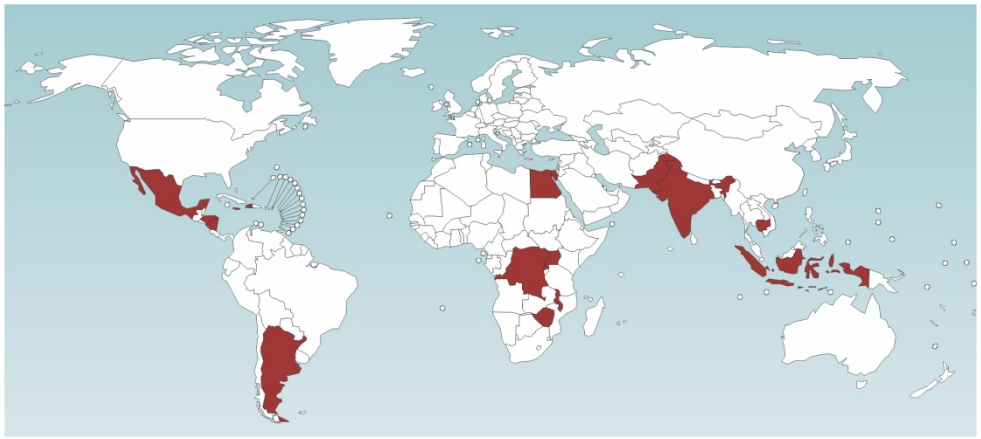

Map 4: Cost and cost-effectiveness

70 countries where PBF has been implemented



16 countries where we have any cost data

Only 3 full economic evaluations



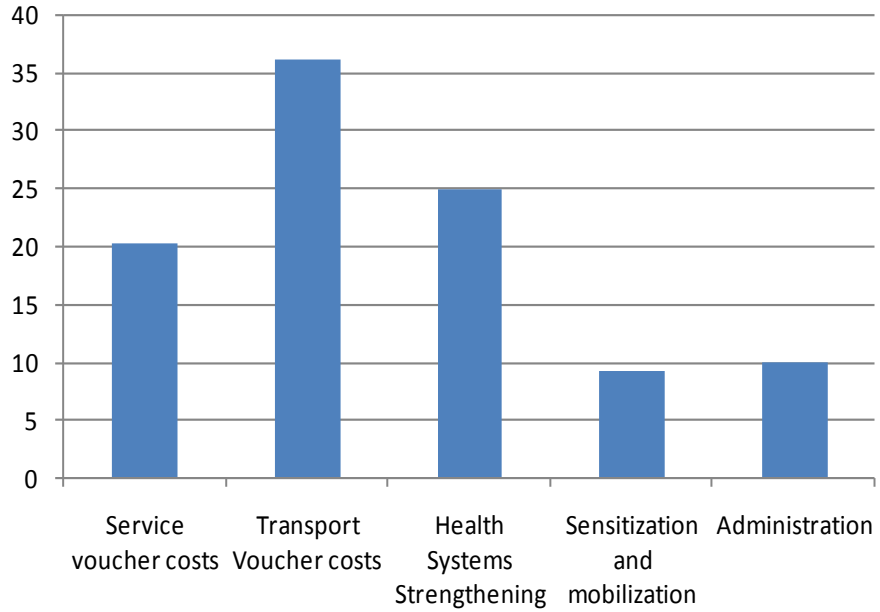
Argentina	Haiti	Jamaica	Pakistan
Cambodia	Honduras	Malawi	Rwanda
DRC	India	Mexico	Uganda
Egypt	Indonesia	Nicaragua	Zimbabwe

Cost elements, distribution and issues.

Six cost elements

1. Planning and design
2. Technical assistance
3. Health systems preparation & systems strengthening
4. Incentives
5. Sensitization, mobilization, public/provider education
6. Scheme management and administration and supervision

Distribution of Uganda voucher scheme costs



Issues:

1. Donor dependency (with exceptions)
2. High "overhead" and startup costs
3. Cost of scale and sustainability not adequately examined

Source: Future Health Systems "Understanding the incremental cost of increasing access to matetnal healht services: Perspectives from a voucher scheme in Eastern Uganda" C Mayora, E Ekirapa-Kiracho, F Ssengooba, SO Baine, O Okui

What caused the effect?

Evidence of interactions between elements

HAITI		
Cost element	**Percent of total cost**	**Attributable effect**
Technical assistance	39%	35%
Incentive	6%	39%
Combined TA and incentive	45%	87%

Ref: Zeng, et al 2012

Is PBF cost effective? More efficient?

- Few cost effectiveness, cost efficiency or cost benefit studies.
- Some notable exceptions, e.g., Nicaragua's STI voucher scheme
- Few studies compare different PBF types across different settings with comparable cost categories.
- Where studies exist, results are mixed.

Nicaragua STI voucher program

Cots effectiveness comparison

	Cost per case treated	Cost per case cured
With voucher program	$ 41	$ 118
Without voucher program	$ 12	$ 200

PBF-induced inefficiencies deserve more study

- Gaming by providers
- Cherry picking
- Over production
- Reduced intrinsic motivation
- Provider substitution
- Ineffective incentive induced provider behavior
- Threshold effects
- Undesirable outcomes if incentives set too high, e.g., increased pregnancies in India and Honduras
- Heavy donor reliance. Scale and sustainability in question.

Conclusions and key messages

- Several notable success stories and encouraging progress
- Inadequately nuanced nomenclature and categorization
- Few rigorous impact evaluations
- Some tantalizing cost data but few full economic, cost or cost effectiveness analyses
- Hard to tease out which program element (or combination) is responsible for the observed effects
- Heavy reliance on donor funding risks scale and sustainability
- PBF programs themselves may be a source of inefficiencies

Research, evaluation and learning agenda

- Incorporate more rigorous evaluation methods during PBF design and implementation
- More economic evaluations (cost, cost-effectiveness, efficiency, financial sustainability, opportunity costs, etc.).
- Determine ways of reducing or eliminating PBF caused inefficiencies
- Evaluations to answer the questions:
  - "Under what conditions is a given type of PBF more cost effective?"
  - "Which elements of PBF programs are responsible for how much of the effect?"
  - How to transition from donor financing to local financing

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Thank you