Effectiveness of Performance-Based Incentives on Supply Side Provision and Use of Maternal Health Services

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What are Performance-Based Incentives?

“Any program that rewards the delivery of one or more outputs or outcomes by one or more incentives, financial or otherwise, upon verification that the agreed-upon result has actually been delivered.”

Muschrope, Rewards for Good Performance or Results: A Short Glossary
**Concept**

**Payers**
(Government, Health Programs, Insurers, NGOs)

Well-defined, measureable results

Money, goods, other rewards

**Recipients**
(Households, Service Providers (Facilities, Health Workers), NGOs, Sub-National Levels of Government)
PBI addresses dysfunctional incentives by providing a direct link between money spent and value generated in terms of the quantity and quality of health services.

Aim of PBI is to:

- Increase effort, reduce absenteeism, and enhance innovation and motivation
- Enhance accountability between:
  - Payers and providers
  - Among team members
  - Provider teams and supply systems
- Strengthen the quality and use of data for decision making
Many Types of Supply-side PBI

Three types of supply-side schemes:

• **Performance-based intergovernmental transfers:** for example, from a national to a state-level government

• **Schemes to incentivize health facilities** (including teams of health workers and sometimes CHWs from facilities’ catchment areas), hospitals, and subnational levels of government

• **Performance-based contracting:** NGOs are contracted to either directly deliver health services or manage public facilities in fragile states

*NOTE: voucher programs also provide incentives to providers in the form of fees paid for services delivered in exchange for vouchers.*
Variations in type of program and geographic location:

National public health delivery systems:
- Democratic Republic of Congo (Soeters et al. 2011)
- Rwanda (Basinga et al. 2011)

Social insurance schemes:
- Egypt (Huntington et al. 2010)

Safe motherhood schemes:
- Bangladesh (Rahman et al. 2011)
- Nepal (Powell-Jackson et al. 2009)
- Philippines (Gonzales et al. 2010)

Contracts with service delivery NGOs:
- Afghanistan (Sondorp et al. 2009)
- Cambodia (Jacobs et al. 2010)
- Haiti (Eichler and Levine 2009)
Research methods

Degree of rigor of studies varied greatly among studies:

- Before and after evaluation designs.
  - Powell-Jackson et al 2009, Gonzales 2010, Jacobs 2012
- Comparison or control groups (not randomly selected).
- Econometric methods applied to a time series
  - Eichler and Levine 2009
- Large scale impact evaluation with intervention and control facilities
  - Basinga et al 2011
Issues of study quality and methods

- Quality of study designs generally weak: In most studies not possible to disentangle supply side from demand side incentives.
- Specific performance measures incentivized not consistent across studies and generally weakly defined (in some cases unknown)
- Majority of studies were of short duration
- Program design and implementation details are limited
Majority of studies show PBI associated with increased quantities of institutional deliveries

- Increases in Afghanistan, Bangladesh, Cambodia, Haiti, Nepal, Philippines, Rwanda
  *Bangladesh also found evidence of increases in quality of deliveries as measured by use of partograph and readiness of labor ward.
- South Kivu in the DRC did not find an association between incentivizing institutional deliveries an increases in such.
- Egypt did not incentivize institutional deliveries.
Findings: ANC

Some impact on content of ANC

- Afghanistan saw increases in ANC visits
- Rwanda did not find increases in number of ANC visits, but did find an increase in the quality of ANC as measured by provision of tetanus toxoid vaccine.
- Quality of ANC care improved in Egypt, but unclear if quantity of ANC visits increased
- No increase in number of ANC visits in Bangladesh, Cambodia, DRC, Haiti
- Was not incentivized in Nepal or Philippines and no change was reported
Family planning was incentivized (in various ways) in 5/9 programs (Cambodia, DRC, Egypt, Haiti, and Rwanda).

Overall, effects of PBI were weak:

- No effect on number of new and continuing users (Cambodia, DRC, Rwanda), or on reduced discontinuation (Haiti).
- Effect on availability of FP commodities (Haiti) and quality of family planning counseling and service provision (Egypt).
Findings: Quality

Two big points:

- Quality measured and rewarded in different ways (while in some programs, quality is not addressed at all)
- Quality metrics typically not defined in the studies reviewed

What did we find?

- Where quality tools are used to inflate or deflate incentive payments, facility scores on such tools generally increase (DRC, Rwanda)
- Content of care improved in some programs (partographs in deliveries in Bangladesh; ANC and FP care in Egypt; content of ANC in Rwanda)
- Some modest evidence that PBI is associated with improvements in patient perceptions of quality.
So what does the evidence review tell us?

- Evidence is mixed: some positive, some inconclusive
- Type of programs vary a lot, as does the rigor of evaluation methods
- Gold standard evaluation is RCT, but difficult to find perfect control and to isolate incentive effect in complex, dynamic systems
- Lack of evidence – and the limited evidence of impact – may be due to a dearth of quality studies published rather than weak programs or inadequate impact of PBI schemes.
- Results depend a lot on design and implementation, of which we know little in these programs
But the evidence review does not represent the entire universe of evidence

- Burundi
- Liberia
- Argentina
- many others...

And, there are many more impact evaluations to come: Zambia, Senegal, Malawi...
Thank You!

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