BEYOND THE STATUS QUO

Using Impact Evaluation Research to Drive Innovation & Improve Outcomes in Health

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Improving Midwife Retention with Monetary and Non-Monetary Incentives: An Experimental Evaluation

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Subsidy Reinvestment and Empowerment Programme – Maternal and Child Health (SURE-P MCH)

- Nigeria: high rates of maternal mortality; strong association with short supply of midwives and insufficient healthcare infrastructure
- SURE-P aimed to increase institutional deliveries, skilled birth attendance and use of antenatal care.
- Recruitment, training and deployment of midwives to needy areas: 500 primary health centres (PHCs) across 36 states and Federal Capital Territory.
- Basic upgrading of PHC facilities

- **Retention incentives** given to midwives: monetary incentives and non-monetary ones
Retention incentives to midwives

- Randomized evaluation
- Relative effectiveness of different types of incentives on midwives attrition.
- Analysis of complementarity between types of incentives
- Identification of impact channels of different incentives
1.a.27 How many years and months have you been working as a midwife?
2.6 At the time when you attended primary school was that place more or less RURAL than the place where you live now or just the same?

Source: Nigeria SURE-P Midwife Survey 2013
What incentives work? Monetary, non-monetary or a combination of both?

Why do incentives work (or fail)?
Monetary incentives

₦ 30,000

Jan → Feb → Mar → Apr → May → Jun → Jul → Aug → Sept → Oct → Nov → Dec
Non-monetary incentives: FGD 13-17 May, 2013

Other non-monetary incentives included a SURE-P wall clock and a personalised wall calendar.
SURE-P midwives wearing uniform in a PHC in 2015
Monetary incentives

Non-monetary incentives

Both incentives
Midwife incentives

- Control (no incentives)
- Non-monetary incentives
- Monetary incentives
- Both monetary & non-monetary incentives
Percentage of midwives leaving before 9 months

20%
## Average effect of incentives on attrition

<table>
<thead>
<tr>
<th>Incentives</th>
<th>Effect Size</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary</td>
<td>-0.0654**</td>
<td>(0.0251)</td>
</tr>
<tr>
<td>Non-Monetary</td>
<td>0.0299</td>
<td>(0.0285)</td>
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<tr>
<td>Monetary &amp; Non-Monetary</td>
<td>-0.0695**</td>
<td>(0.0290)</td>
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</tbody>
</table>

Extended controls: yes

Observations: 1270

R-sq: 0.116

Note: *p < 0.1, **p < 0.05, ***p < 0.05; robust standard errors in parentheses clustered at the hospital id level

**Monetary incentives reduced attrition substantially**

**Non-monetary incentives did not.**
Why do incentives work (or fail)?
Why do incentives work (or not): mechanisms

- Incentives may affect individuals’ image motivation
  - engaging in the activity is no longer useful to signal that I am good; the public signal is lost.

- Reciprocity: workers that feel supported might reciprocate by working harder

- Incentives can affect perception of what is socially acceptable
Causal mechanisms: Why do incentives work?  
Sharing ₦2,000: altruism and image

**PRIVATE** version: the result of the split is kept private

Midwife’s bank account  
Red Cross/Red Crescent

**PUBLIC** version: the result of the split is made public

Midwife’s bank account  
Red Cross/Red Crescent
Effect of non-monetary incentives on the probability of midwives leaving SURE-P MCH

+ 3.2 percentage points
Why non-monetary incentives fail to work? Image motivation

<table>
<thead>
<tr>
<th></th>
<th>Image Motivation</th>
<th>Public - Private Donation</th>
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<tbody>
<tr>
<td>Pub-Priv</td>
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<tr>
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<tr>
<td>Observations</td>
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</tr>
<tr>
<td>R-sq 2 arms</td>
<td>0.120</td>
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</table>
Incentives: letter-contract
Effect of the announcement of non-monetary incentives on the probability of midwives enjoying living in the community, earning the appreciation of the community and working in their SURE-P facility.
Image motivation and anticipated lack of community appreciation for non-monetary incentives

<table>
<thead>
<tr>
<th></th>
<th>Living in the community</th>
<th>Appreciation of the community</th>
<th>Enjoyment working in the facility</th>
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<tbody>
<tr>
<td>Image Motivation</td>
<td>0.0167</td>
<td>0.0298*</td>
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<td>Any Monetary</td>
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<tr>
<td></td>
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<td>(0.0184)</td>
<td>(0.0274)</td>
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<td></td>
<td>(0.0295)</td>
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<td>(0.0250)</td>
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<tr>
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<td><strong>-0.0372</strong></td>
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<td>(0.0187)</td>
<td>(0.0283)</td>
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<td>Observations</td>
<td>1265</td>
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<td>1275</td>
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<tr>
<td>R-sq 2 arms</td>
<td>0.158</td>
<td>0.180</td>
<td>0.142</td>
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</table>
Percentage of midwives who feel supported by the NPHCDA
Post contract decision activities: social acceptability

- Centred on the concept of **socially acceptable length of service**
- Midwives asked to guess the most popular answer amongst midwives is; a correct guess is rewarded with ₦1000
- E.g:

Jamila is a midwife who joined SURE-P and was deployed to her PHC today. She is remunerated in the same way as you. Your colleagues from other PHCs are aware of this. Suppose that Jamila decides to quit her job in SURE-P, **2 months after joining**. We asked your colleagues from other primary health centres, who also receive the incentive package that you will receive, what they think of Jamila’s decision. Amongst these midwives, the most popular opinion is that Jamila’s decision of leaving is (please circle your answer):

Now suppose that Jamila decides to quit her job in SURE-P, **5 month after joining**. We asked your colleagues from other primary health centres, what they think of Jamila’s decision. Amongst these midwives, the most popular opinion is that Jamila’s decision of leaving is (please circle your answer):
Minimum socially acceptable length of service

- Control
- Non-monetary
- Monetary
- Both
Monetary incentives effective in reducing attrition of health workers

But non-monetary ineffective and harmed the motivation of some midwives

Important to understand health workers’ motivation to make incentives work