Public Private Partnerships for Emergency Obstetric Care: Lessons from Maharashtra

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ABSTRACT
Background: The National Rural Health Mission of India advocates public private partnerships (PPPs) to meet its “service guarantee” of Emergency obstetric care (EmOC) provision. The Janani Suraksha Yojana (JSY) has a provision of Rs. 1500 for contracting in obstetric specialists. Objectives: The study aimed to understand the issues in the design and implementation of the PPPs for EmOC under the JSY in Maharashtra and how they affect the availability of EmOC services to women. Materials and Methods: A cross-sectional study using the rapid assessment approach was conducted in Ahmednagar district of Maharashtra spanning 1-year duration ending in June 2009. Primary data were obtained through interviews with women, providers, and administrators at various levels. Data were analyzed thematically. Results: The PPP scheme for EmOC is restricted to deliveries by Caesarean section. The administrators prefer subsidization of costs for services in private facilities to contracting in. There are no PPPs executed in the study district. This study identifies barriers to women in accessing the benefit and the difficulties faced by administrators in implementing the scheme. Conclusion: The PPPs for EmOC under the JSY have minimally influenced the out-of-pocket payments for EmOC. Infrastructural inadequacies and passive support of the implementers are major barriers to the implementation of contracting-in model of PPPs. Capacities in the public health system are inadequate to design and manage PPPs.

Keywords: Emergency obstetric care, Janani Suraksha Yojana, public private partnerships

Introduction
India contributes nearly one-quarter to the maternal deaths worldwide. Its insufficient progress in reducing maternal mortality imperils not only its own targets, but also the global achievement of the Millennium Development Goal 5. The recent maternal mortality ratio (MMRs) range from the Indian government’s estimate of 301 maternal deaths per 100,000 live births to the World Health Organization’s estimate of 450 with substantial interstate variations. These figures are much higher than neighboring countries such as China (56), Thailand (44), Malaysia (41), and Sri Lanka (92). The five most common causes of maternal mortality in India as of 2001–2003 were hemorrhage (38%), sepsis (11%), unsafe abortion (8%), hypertensive disorders (5%), and obstructed labor (5%). Emergency obstetric care (EmOC) comprises services to manage these complications.

Within the overarching framework known as the NRHM, which covers years 2005–2012, the Indian Government committed to increased spending on public health and envisioned an “architectural correction in the country’s health delivery.” NRHM’s first stated objective is to reduce MMR to 100 by 2012 and deems 24 hr EmOC to be one of the concrete “service guarantees.” Towards this, the Janani Suraksha Yojana (JSY) was launched to promote institutional deliveries among poor pregnant women.

The Indian public health system suffers from a severe shortage of specialists to deliver EmOC – of the 20,000 obstetricians in the country, only 780 work in rural areas at
the subdistrict level. However, the private health sector has grown remarkably, from a share of 8% of facilities to an estimate of 93% of all hospitals and 80–85% of doctors, and accounts for 60% of maternal health services. Contrary to commonly held views, private hospitals are relatively less urban biased than the public ones. Contemporary health system policy documents emphasize public private partnerships (PPPs) as an important mechanism for both gaining from the experience of private sector managerial efficiencies and ensuring coordinated achievement of public health goals.

EmOC provision through PPPs is perceived as an immediate solution to the inadequacies in the public sector and there has been no empirical exploration about EmOC provision in this way in rural India. This document tries to fill this gap. It first describes the PPP model and then presents the findings of a rapid assessment of it to understand the design and implementation issues.

Description of the PPP Model in the JSY

The following description of the JSY and PPP model in it is taken from the national guidelines developed by the government. Maharashtra is categorized as a high performing state where the JSY is applicable to only those women either living below the poverty line (BPL), or from the scheduled castes or scheduled tribes and above 19 years of age at the time of the first two live births.

In promoting the contracting-in model of PPP for EmOC, the JSY provides an assistance of Rs. 1500 for hiring specialist from the private sector and expects the district administration to empanel specialists for this scheme. The medical officer at a first referral unit (FRU) is expected to call the empanelled specialist in the case of obstetric complication and thus the woman receives free EmOC at the FRU. In order to give choice to women preferring private facilities, the scheme subsidizes the cost in such cases by providing Rs.1500 to the empanelled specialist when he/she produces the discharge summary to the medical officer. The scheme is monitored by the committees formed for this at national, state, and district levels. A grievance redressal officer is expected to be appointed at the district level.

Materials and Methods

This study used the rapid assessment of health programs (RAHP) approach that harnesses the process of evaluation so that findings could be used to provide midcourse adjustments. This process is aimed at documenting, analyzing, and communicating lessons and its results are not meant to be statistically valid.

This study conducted during June 2008–June 2009 used qualitative methods. These included semistructured interviews and focus group discussion. Secondary data were obtained from the District Programme Management Unit (DPMU).

Respondents were included from the implementers of the scheme, the providers, both public and private, the beneficiaries, and nonbeneficiaries of the scheme. In the implementers’ category, we recruited the district health officer, the block medical officers (BMOs) of the 5 randomly selected blocks of the 14 in the district and the medical officer or auxiliary nurse midwife (ANM) at each of the two selected primary health centers (PHCs) in a block thus totaling to 16 implementers in the district. Three obstetricians who provide EmOC in private facilities in the study blocks and whose names were frequently mentioned by respondents were interviewed. Women who delivered during the period June 2007–October 2008 meeting the eligibility conditions for the JSY and who had received the same for EmOC services as per government records were recruited as beneficiaries while those who had not received it, although eligible for it, were recruited as nonbeneficiaries. We interviewed 10 randomly chosen beneficiaries, 2 from each of the five blocks and 8 nonbeneficiaries identified with information from private providers and anganwadi workers. Two focus group discussions were conducted with ANMs working in the chosen blocks.

This study was approved by our Institutional Ethics Committee.

Study area

The study was conducted in the Ahmednagar district of Maharashtra in Western India. The sociodemographic profile of the district is summarized in Table 1.

The public health system in the district functions through 96 PHCs and 23 community health centers, 3 subdistrict hospitals which are the secondary care centers, and a district general hospital.

In a facility survey (public facilities) that defined availability of 60% critical inputs (staff, infrastructure and supplies – SIS) as adequate, Ahmednagar is one of the eight districts in the state that have a high SIS index. In contrast, its public system scores a “medium” in the

| Indicator                  | Ahmednagar | Maharashtra | India  |
|----------------------------|------------|-------------|-------|
| Population (millions)      | 4          | 96.9        | 1028.6|
| SC (%)                     | 12         | 10.2        | 16.2  |
| ST (%)                     | 7.5        | 8.9         | 8.2   |
| BPL (%)                    | 30         | 30.7        | 27.5  |
| Birth rate                 | 22.3       | 19          | 23    |
| MMR/1000 live births       | <2         | <2          | 3     |

Table 1: Sociodemographic profile of Ahmednagar in comparison to Maharashtra state and India
performance index based on five important indicators of maternal and child health.\(^{(9)}\)

The private medical sector has a significant presence in the district with multiple speciality centers at the block and district headquarters.

**Results**

The results about scheme design are presented first followed by the implementation issues.

**Design issues**

*Choice between contracting-in and cost subsidization*

The scheme, while advocating contracting-in also provides an option of subsidization of costs in private facilities. However, we found that cost subsidization was the exclusive preference of all the facilities studied. As contracting-in is optional and there are no defined criteria to decide on choice of either or both options, the scheme provides opportunity for mere diversion of patients from public to private and no net gains to the public sector.

*Scheme restricted to Caesarean deliveries*

This study finds the term obstetric complications missing in the Maharashtra state guidelines.\(^{(14)}\) The scheme in Maharashtra is operational only for deliveries by Caesarean section (CS) and not all complicated deliveries unlike the national scheme. However, national estimates suggest that 15% of all deliveries would require EmOC and a minimum 5% would need a CS.

*Inadequate financial provision for hiring a specialist*

The implementers and also the private providers find the monetary provision of Rs. 1500 per service episode made by the scheme inadequate for hiring specialists with the prevailing rates crossing Rs. 3000.

**Implementation issues**

*No PPPs*

This study finds that there were no public private partnerships executed for EmOC provision in the study district. There is lack of ownership of the scheme among the administrators at the district and block level who did not take any initiative to implement the scheme. We could not find any documents regarding the design of the contract like the specification of services, performance measurement, incentives and penalties, etc. The district health officer, who according to the guidelines is responsible for execution of the PPP scheme in the district, calls this as *a special accreditation to be done by the civil surgeon and not a PPP*. A medical officer at a PHC questions the interest of any private specialist to contract-in pointing that this arrangement would only reduce their revenue at the private center:

...because of interests in his private hospital, otherwise all patients will get it done in the sub district hospital, who will want to spoil their own practice? ....Interview, MO, PHC

*Private providers unaware of the PPP scheme*

The private EmOC providers were unaware of the partnership scheme and there was no formal communication to inform them. They mentioned of patients’ relatives coming in after a CS to ask for payment receipts and thus had a vague idea of a subsidy being provided.

*Issues of flow of funds*

The administrators at block and higher levels find no problems with the fund flow; however, ANMs mentioned of shortages for even up to 6 months in a block. The reasons for the discrepancies could not be explained since district officials reported of adequate funds.

*Variable implementation across blocks*

Variations were found across blocks regarding the implementation issues. The study finds payments being made to the private specialists in certain blocks, to the woman in others, or to either in some determined by the interpretation of the guideline by the respective BMOs. A woman undergoing Caesarean section at hospitals run by the municipal corporation or at the district hospital, where it is expected to be free, is considered eligible for the Rs.1500 benefit in some blocks while not in others.

*Unorganized referrals*

As there was no accreditation of private facilities undertaken for the scheme, no such list was available. There exists no specific referral system for EmOC; rather the family is free to choose among the available private providers.

*No efforts for demand generation*

We found that 47% of the participants learnt of the JSY scheme only after the delivery. The ANMs played no role in guiding women to EmOC facilities. The concept of micro-birth planning by the ANMs to ensure birth preparedness and complication readiness was largely not implemented.

*Scheme uninfluential in terms of cost and consequences of complicated births*

The said subsidy of Rs. 1500 for a CS is irrespective of the place of delivery. There is no public sector option for EmOC services in rural areas; the women access these services from the private sector. The 16 participants who had a CS in private facilities incurred hospital expenses ranging from Rs. 10,000 to Rs. 30,000, the average amounting to Rs. 15,000. The proportion of cash assistance received to the cost incurred for CS is depicted in Figure 1.
One participant who had her CS in the district general hospital, where it is expected to be free of cost, spent Rs. 2500 on purchase of drugs and supplies and for contribution paid for the repair of broken-down equipment.

Women mentioned of families mortgaging belongings and seeking private loans at interest rates as high as 60% per annum to pay the hospital expenses.

It is noted that the subsidy of Rs. 1500 serves a mere 10% assistance to hospital expenses for CS in private facilities. The beneficiaries find it grossly inadequate and see it as hardly sufficient, not even for the payment of pharmacy bills:

…whatever we got was of little help, it is not sufficient even for tablets and medications that was required….

– Interview, Beneficiary

Participants mentioned of difficulties in collecting the documents in the stipulated period which is within 7 days of delivery.

This study finds experiences contradicting the commonly held belief that disbursement by cheque would bring in transparency. Women quoted incidents of cash demand by ANMs before releasing the check or at the time of its encashment.

Demand for services rather than subsidy

Women reiterated the need of provision of EmOC services in public facilities rather than any amount of cash assistance:

…they should provide the facility instead of the money…

…we poor do not have the money at that time to pay for the hospital, what if the government gives us the aid later on….

– Interview, Nonbeneficiary

Poor reach of the scheme

Table 2 presents the analysis of data obtained from the DPMU for the 6-month period, April 2008 through September 2008.

It is evident from Table 2 that by applying national estimates to the estimated number of JSY beneficiaries (7694), it is expected that 1154 women would require EmOC and 385 would require a CS. The change in the guideline at state level has resulted in excluding 769 eligible women (66%) from the scheme, those who need EmOC but not a CS.

It is evident that 83% of estimated EmOC needs of the eligible population were unapproachable by the practiced scheme.

Table 2: Analysis of HMIS data for Ahmednagar district: April–September 2008

|                       | Estimated no. of JSY beneficiaries | No. of JSY beneficiaries registered | No. of JSY beneficiaries paid Rs. 1500 for CS | Expected complicated deliveries (eligible for assistance by national guidelines) | Expected minimum no. of CS (eligible for assistance by state guidelines) | Missed out by state norms (66% of complicated deliveries) | Reach (by national guidelines – EmOC) | Reach (by state guidelines – CS) |
|-----------------------|-----------------------------------|------------------------------------|---------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------|---------------------------------|
|                       | 7694                              | 5609                               | 197 (2.5% of estimated beneficiaries)       | 1154 (15% of estimated beneficiaries)                                       | 385 (5% of estimated beneficiaries)                                       | 769 (1154–385)                                                 | 17%                               | 51%                             |

Figure 1: Proportion of JSY assistance to CS expenses in private facilities

| Women with CS in pvt. facilities |
|----------------------------------|
| JSY assistance for CS | CS charges paid by women |

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

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| Expected minimum no. of CS (eligible for assistance by state guidelines) | 385 (5% of estimated beneficiaries) |
| Missed out by state norms (66% of complicated deliveries) | 769 (1154–385) |
| Reach (by national guidelines – EmOC) | 17% |
| Reach (by state guidelines – CS) | 51% |
Discussion

High MMRs have become one of the major concerns globally and many countries have developed different strategies to address the same. To overcome the lack of skilled personnel to provide EmOC, the JSY attempted promotion of the contracting-in model of PPPs.

We have tried to assess this through primary data collection and some secondary data. While we were successful in interviewing important stakeholders, our attempts to obtain data on experiences from private partners in the scheme were not very successful, mostly because there were no partnerships executed with them. Also, we have interviewed women who had approached a facility for an obstetric complication; their experiences are likely to be different from the experiences of those who could not reach a facility. Our conclusions need to be interpreted keeping this in mind.

Government capacity for partnership

The findings reveal the lack of role clarity and specification of job tasks, clear guidelines and dedicated experts the prerequisites for effective PPPs. The findings reveal that the administrators do not have clarity about their roles in implementation of the PPP initiative and there remains much space for improvement in terms of specification of job tasks, clarity of guidelines and expertise for management of contracts, which are essential pre requisites for the success of PPPs. The lack of public health thinking in the managerial and administrative cadre warrants serious and urgent attention. Capacity building and skill development of district-level personnel in negotiation, consultation, and networking is essential and Government’s role lies in providing an enabling environment for this. At the same time, efforts are required to stimulate private providers to participate in the scheme.

Contracting-in strategy issues

The strategy of contracting in specialists assumes adequate infrastructure and supplies availability in the public system. However, even the comparatively better system in Ahmednagar is not equipped enough to provide EmOC just by hiring the specialists. The administrators who did not attempt the contracting-in option find it unfeasible in view of lacking infrastructure especially power backup for blood storage facility due to 8–12 h of power cuts in rural areas most of the times.

The reluctance among the administrators to attempt a contracting-in model also points to issues of trust and cooperation, essential for a partnership.

The findings also question the assumption that a private specialist would accept to offer services for the Rs. 1500. It is unlikely that a private specialist would allow loss of own profits and clients while performing services under a contract when there remain profitable opportunities for expansion within the private sector. A modest monetary incentive that is insufficient to attract private specialists into partnership needs reconsideration.

The partnership guidelines should be in consonance with the profit motive of the private partners as well as treatment needs of the poor. At the same time, for responsible and quality-driven private partners to enter into a partnership, contracts need to be based on realistic evaluations of the situation, also not curtailing performance.

The data collection for this study coincides with 3 years of the launch of the NRHM bringing forth the need to build sufficient time for partners to transition into new roles and arrangements created under the PPP.

A systematic effort to identify centers where contracting in could be feasible and a strategy accordingly would have resulted in at least few public sector options and real increase in outreach rather than ad hoc guidelines to be followed.

Contracting-in versus cost subsidization

This study finds that the option of cost subsidization was the one most preferred to contracting –in. The comparative advantages of contracting-in include strengthening the public system by filling for the gap of specialists, ease in monitoring quality of care, and better management of accounting and information systems besides providing cashless services. The subsidization option has no mechanisms as in any formal contract like for accreditation, quality control, accounting, and information systems. These concerns are important given the highly unregulated nature of the Indian private sector.

Subsidization of the cost by payment of Rs. 1500 diminishes the primary intent of the scheme of increasing easy access to EmOC services as most of the hospital charges continue to be out-of-pocket payments. The subsidization option becomes a very limited effort to increase access to EmOC in a context where a single hospitalization can push a quarter of the hospitalized Indians below the poverty line. 

Sustainability

Institutionalizing the contracting-in model of PPPs, even if successful to provide EmOC remains an interim solution, as it does not address the root cause – shortage of specialists in the public sector. Among the various Indian states, Maharashtra has the highest number of annual intake for specialization in obstetrics which is 102 compared to none
in certain states.\(^{(15)}\) This reinforces the fact that in spite of huge government support for medical education and training, there remains a lack of specialists in the public sector which points to governments’ failure to draw from its investment in specialist human resource production.

While developing the interim measures it is also essential to bring about the long-awaited changes in human resource policies to attract and retain specialists in public system. Training of basic medical officers in providing EmOC and anesthesia is being undertaken so far with limited success.\(^{(16)}\) Even if adequate contracting-in of specialists is achieved in rural areas, the resilience of the public health system in continuing such arrangements needs to be addressed.

**Conclusion**

This study raises concerns about the scope of PPPs for EmOC and the enabling conditions for these that warrant attention:

- The scheme does not include all life-threatening complications of pregnancy and childbirth, but is restricted to Caesarean deliveries.
- Capacity and expertise of the government at different levels in designing and managing contracts/partnerships.
- Appropriate organizational and management systems for PPPs.

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