

# Management inputs for strengthening health System through public private partnership with reference to National Rural Health Mission

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## Abstract

**Background:** It was proposed to study the scope of PPP as a strategic management policy to improve standards of health services in hospital to IPHS (Indian Public Health Standards) level. **Objectives:** The objective of this study is to assess the scope and feasibility of specific managerial inputs to promote Public Private Partnership of National Rural Health Mission in emphasizing qualitative aspect of services by identifying components where Public Private Partnership can be evolved for hospital services development and probable modalities for the sustainability of the same. To study and compare outcome of select indicators in study and control groups, implementing Public Private Partnership strategies in the domains of “Outsourcing” of Clinical services, Nonclinical services, Paramedical services, Civil works, Hospital accreditation under Janani Suraksha Yojna. To review public-private partnership practices in Public Health Department and to recommend strategies of Public Private Partnership in implementing quality health services in hospitals based on study findings. **Material and Methods:** The present study adopts an experimental epidemiological study design involving study and control group, in which study group of 6 hospitals receives an intervention package and control group of 14 hospitals does not receive an intervention package. **Results and Impact:** In Present study output indicators are found statistically different at 90% C.I. level, while outcome indicators are not found statistically different at 90% C.I.level. So it is needed to institutionalize outcome quality indicators. All these Outcome quality indicators are included in grading criteria of empanelled Public and Private hospitals under Rajeev Gandhi Jeevandayee Yojna of state which is a Health insurance scheme.

**Keywords:** Public Private Partnership, Clinical indicators, Nonclinical and clinical services

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department has 26 District and General, 84 Sub district hospitals, 11 women and 360 rural hospitals. Selected good performing rural hospitals and all District, General Subdistrict and women hospitals are selected for upgradation to Indian Public Health Standards as per norms framed by National Rural Health Mission. It was proposed to study the scope of PPP as a strategic management policy to improve standards of health services in hospital to IPHS (Indian Public Health Standards) level. Hospital based health care system of Maharashtra was studied and with reference to Public Private Partnership, it was decided to evaluate probable impact of PPP strategies in randomly selected hospitals. Accordingly appropriate sampling methodology and subsequent research norms were utilized for this purpose. Extensive review of literature was done and through interactions with Public Health Experts, programme managers, key administrators. Objectives of study were

## INTRODUCTION

The spectrum of PPP strategies was studied in detail to understand the scope of its implementation in Maharashtra state and at National level. Public Health Department of state of Maharashtra and its affiliated health system is the universe of this study. Public health

designed. The research question was formulated as “PPP strategies with specified management inputs would positively contribute to improved quality of health care services in hospitals.” In other words “PPP strategy as facilitator for qualitative change in health services of hospitals.” Present study explores multilateral aspects of the feasibility and scope of PPP strategies in Public Health Department run hospitals. Present status of PPP is explained in detail at Global, National and state level describing different PPP modes with different angles stating SWOT analysis mentioning strengths, weaknesses, Opportunities, Threats.

## AIMS AND OBJECTIVES

- To assess the scope and feasibility of specific managerial inputs to promote Public Private Partnership of National Rural Health Mission in emphasizing qualitative aspect of services by identifying components where Public Private Partnership can be evolved for hospital services development and probable modalities for the sustainability of the same.
- To study and compare outcome of select indicators in study and control groups, implementing Public Private Partnership strategies in the domains of “Outsourcing” of Clinical services, Nonclinical services, Paramedical services, Civil works, Hospital accreditation under Janani SurakshaYojna.
- To review public-private partnership practices in Public Health Department and to recommend strategies of Public Private Partnership in implementing quality health services in hospitals based on study findings

## MATERIAL AND METHOD

The present experimental epidemiological study was conducted to study the various management inputs for strengthening health system through PPP with reference to

## OBSERVATIONS

**Table 1:** Distribution of quality indicators between Study and Control group

Sr no	Name of indicator	Observation
1	Call book response time	There is decrease in call response time in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
2	Surgical wound sepsis	There is decrease in Surgical wound sepsis in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
3	Deaths in low birth babies	There is decrease in Deaths in low birth babies in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
4	Preoperative average	There is decrease in Preoperative average length of stay in study group of hospitals than

NRHM. For identifying the various inputs, the structural and managerial components of public private partnership in NRHM for hospital development were studied through reference books, modules, manuals published by ministry of health and family welfare Government of India. The Government circulars issued from time to time was also referred. Keeping in view the health administration system in state of Maharashtra, it was decided that the sample frame would be derived from different regions of the state by random method. The sampling frame was thus representative of the state of Maharashtra. The sociocultural, demographic and environmental characteristics of each division were also studied.

For the [purpose of study two groups were formed

- Study group and
- Control group.

In the study group 6 hospitals were selected which received an intervention package whereas in control group of 14 hospitals were selected which did not receive an intervention package. Various domains of Public Private Partnership as envisaged in NRHM were identified and the scope for facilitating Public Private Partnership for hospital development was contemplated. The focus was given mainly on “outsourcing” components such as nonclinical services, Clinical services, Paramedical services, Civil works and Hospital accreditation under Janani Suraksha Yojna and its impact on quality of clinical services. In evaluation of nonclinical services, Clinical services, paramedical services the focus was on quality of performance and cost saving, in comparison to expenditure if the services would have delivered by regular appointed employees.

Performance of following 15 Clinical quality indicators was studied between control and study group of hospitals for between the year 07-08 and 09-10. Questionnaire for study, visits, preparation for interviews and post interview follow up was planned for individual hospitals.

	length of stay	control group hospitals for the year 09-10 as compared to 07-08 and means are statistically different at 90 percent C.I. level
5	Postponed elective surgeries	There is decrease in percentage of Postponed elective surgeries in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
6	Left against medical advice	There is decrease in percentage of LAMA in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
7	Average OPD per day	There is increase in Average OPD per day in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
8	Bed occupancy rate	There is increase in Bed occupancy rate in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
9	Average length of stay in days	There is increase in average length of stay in days in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
10	Carried over admissions per bed	The value of COAPB is nearer to -1 to +1 in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
11	% of referred in to admissions	There is increase in % of referred in to admissions in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
12	Imaging / 100 OPD and IPD	There is increase in percentage of Imaging / 100 OPD and IPD in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
13	Percent of major surgeries to admission	There is increase in percentage of major surgeries to admission in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 and means are statistically different at 90 percent C.I. level
14	% of deliveries to admission	There is increase in % of deliveries to admission in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level
15	Emergency entry ratio	There is increase in Emergency entry ratio in study group of hospitals than control group hospitals for the year 09-10 as compared to 07-08 but means are not statistically different at 90 percent C.I. level

## A. OUTSOURCING OF NONCLINICAL SERVICES

**Awareness:** The patients and staff knows about the nonclinical services were given by private contractors. This was a better sign for community participation and monitoring by people. This study shows that the outsourcing of nonclinical services is not 100% effective. 75% patients are satisfied with outsourcing of clinical services as against 25% patients with outsourcing of nonclinical services. This is because patients are not in direct contact nonclinical staff and these services are not visible as compared to clinical services. Nonclinical services are effective in study hospitals because they are timely and regular with effective monitoring and supervision with quality output by checklist prepared.

**Cost Benefit Analysis** - It was observed that contractors do not pay enough wages to employees according to Minimum wages act 1948. This is because the cost of contract decided in tendering process is very

less. The cost of contract should be 20% less than the cost of salary if employees would have been appointed on regular basis. The cost containment should not be at the cost of quality.<sup>1</sup> **Role of Staff** - The study shows that the staff still needs to be oriented with their roles and responsibilities. To improve quality of nonclinical services system needs trained in good record keeping of checklist.

## B. OUTSOURCING OF CLINICAL AND SUPPORT SERVICES

Panel of particular specialty should be appointed on contract basis rather than appointing single specialist. In case panel is appointed, specialist who is free can attend the call in Government hospital, thereby reducing percentage of referred out cases. Nearest private medical college, multispecialty hospital should be contacted for appointment of contract specialists. There should be incentive clauses for specialists on contract basis for attending proportion of calls attended,

proportion of surgeries operated, postoperative surgical complications or sepsis etc which should be approved and monitored by Rugna Kalyan Samiti.

### C. JANANI SURAKSHA YOJNA

Only intranatal causes of maternal mortality and Institutional deliveries are addressed in this model of PPP by paying 1500 rupees for LSCS and institutional deliveries. Antenatal and post causes of maternal mortality should be addressed. There should be execution plans. This model of PPP should be chosen considering local feasibility by dialogue among partners rather than directives from top. Under this scheme service provision is needed rather than financial subsidy or cash assistance. Charges for hiring specialists should be based on area specific competitive rates with concurrence of Governing body of Rugna Kalyan Samiti rather than directives from top. Only intranatal causes of maternal mortality are addressed in this model of PPP Scheme by giving benefit for Caesarian section. It should include all life threatening complications of pregnancy and child birth such as Eclampsia/Forceps delivery/ Vacuum delivery / Breech delivery, Septicemia, Blood Transfusion, Pre delivery visits for check up to institution, Investigations such as sonography for foetal well being in private hospitals, NICU Support, Food and transport, as 2/3 rd Emergency Obstetric care is barred from the scheme.

### D. INFRASTRUCTURE DEVELOPMENT WING

National Rural Health Mission has formulated infrastructure development wing. It is a contracting in model with engineers appointed on contract basis at field and state level. Superintending engineer at state level is a government employee who controls and facilitates the work under guidance of state health society. He is been assisted by executive and junior engineer. The IDD carries out specified repairs and current repairs. At present this wing carries out new construction work of PHC and subcenter. Outsourcing of civil works is not substitute but supplementary to existing services as outsourcing is permitted over and above the existing grants for civil works. New constructions should be given to PWD. There can be duplication of work between PWD and infrastructure development wing. In order to avoid it preparation of annual pip of repairs and new constructions should be carried out jointly by PWD and IDD. In order to accustom with government working and to avoid AG's audit paras NRHM deputy engineer & field staff must be given training and executive engineer should be deputed from state government. New constructions

should be carried out by PWD and specified repairs and current repairs by infrastructure development wing.

### MANAGEMENT INPUTS

### RECOMMENDED FOR EFFECTIVE PPP

#### 1. CAPACITY BUILDING

There were adequate funds but low absorption capacity due to lack of capacity building. Adequate capacity does not exist currently in government to meet the varied demand made by PPPs. **Technical Scrutiny**— The technical scrutiny is important to find out eligible / effective agency. Training needs to be given to sort out difficulties while processing the tender. Health Authorities can introduce latest technology, skilled technical manpower in the tender terms & conditions while publishing for future contracts. **Programme management skills** - These skills have to determine service package and there by determine process of selection of service providers, training of PPP personnel in programme management skills like NGO management, NGO selection model, and joint appraisal of chosen franchisers. **Technical Skills** - One of primary aims of PPP is to ensure availability of good quality services at affordable prizes. **Problem solving skills** - The success of PPP venture is dependent on spontaneity of action of human resource employed. The workforce has to be responsive to local needs. **Financial systems management** - Since PPP involves interface between public and private stakeholders, laying accountable and transparent financial system is critical for its success. **Developing capabilities of professional associations like IMA** - Training and capacity building of members of associations is also important. In order to address the lack organizational capacity and to provide regulation Bihar state has enacted Bihar State Infrastructure Development Enabling Act, 2006 and the Infrastructure Development Authority (financial, service and technical) regulations 2007. The government declared Infrastructure Development Authority (IDA) which is the nodal agency for all PPP activities.<sup>2</sup> Roles envisaged for IDA are that of a consultant to a department and advisory body for departments on PPP or other projects. **Training** - Identification of appropriate training institutions in the private sector, especially private medical colleges for providing hands on training for medical professionals. The private sector is skewed in favor of urban areas, economically better-developed states and within states in districts that are economically more prosperous so the government in the poorer states will have to try harder to woo the prospective PSPs.

#### 2. ADVOCACY

Advocacy aimed at stakeholders for creating positive environment. There is need for extensive advocacy, aimed at stakeholders involved to ensure that they understand and

can relate to programme goals and objectives. A user friendly interface is needed to encourage any private partner. **Advocacy for scaling up initiative of PPP** - Small scale models catering to specific local needs are working in different parts of nation. Ongoing documentation and analysis of successes and failures will be required to attract agencies for scaling up. **Advocacy for successful PPP in action** - It is essential to disseminate the knowledge regarding successful strategies employed (employee relocation, employee support, local people's participation etc.) and to ensure that these are acknowledged, supported and appropriately replicated by all stakeholders.

### 3. ACCREDITATION

Since PPP involves the outsourcing of services, there has to be efficient and evidence based quality monitoring mechanism. This includes laying down protocols for quality assurance, ISO certification, Interim Accreditation and Branding health care institutions as "government certified" with specific brand name will help to create ready market of clients. In case of social marketing there should be promotion of sanitary habits along with promotion of particular brand for example sanitary napkins.<sup>3</sup>

### 4. REGULATION

In particular, public private partnership organizations must work *together* with governments to ensure activities are mutually beneficial, rather than obstructive or duplicative<sup>4</sup>. Private provisioning and public funding needs regulation in the form of service Standards and quality. The lack of adequate regulation in and by the public sector, underpins the poor quality of many PPP's. Further there is lack of standardization in its practices<sup>5</sup>. **Financial regulation** - There is a need for transparent record keeping because the initiatives involve exchange of funds between government and private providers and credibility of transactions needs to be ensured. Transparency of financial dealing will act as big advocacy tool for the projects and will also ensure better fund utilization. Fund disbursement should be done on the basis of quality of services provided and performance levels achieved. In other words the payment should be performance based<sup>6</sup>. **Service quality regulation** - The service quality of clinical, and nonclinical services is critical for success of initiative. The economics of scale will cut the cost, but it needs to be ensured that this does not happen at the cost of quality. **Ethical regulation**<sup>7</sup>

- It is essential to strictly follow the ethical guidelines for clinical examination, treatment initiation and continuation, resource allocation and financial disbursement. **Market based regulation** - As two or more franchising or contracting agencies will be involved in same region, they will act as competitors in providing services. The state PPP

cell should be formed which along with NHSRC will document and analyze the experience and share them with partners on a regular basis to allow replication of successful strategies<sup>8</sup>

### 5. DEMAND GENERATION

**Role of Center:** The center will design and direct PPP initiatives in different states, which means discussing the PPP options available, helping them to choose the right mix based on state specific requirements and capacity building of state PPP units. The centre will initiate and operate PPP venture through NHSRC (National Health Systems Resource Center) PPP unit.<sup>9</sup> Developing standards and mechanisms for quality control of public and private providers - Technical divisions of GOI in consultation with FOGSI and IMA and other professional bodies would formulate guidelines, protocols and document appropriate ways of providing health care. This would include clinical and nonclinical services. These guidelines will be constantly revised and efforts will be made to ensure that health professionals are aware of these during course of their professional training. **Provide budget heads and mechanisms of fund flow, including e-banking.** - There is need to develop financial and accounting systems, procedures for quick verification of claims of franchisees and procedures for reimbursements of expenses to franchisee organizations. To ensure efficient and responsive systems, there is need to settle claims for reimbursements fast and later verify their authenticity. Clear indicators should be defined in order to have performance linked financial flows.

**Stakeholder dialogue for policy development** - The Government will initiate steps to facilitate development of different PPP mechanisms. It will ensure continuous dialogue and discussions with different Public and Private Partners to develop the policy. Various groups representing community, private stakeholders, public sector, employees and donor agencies will be consulted to develop comprehensive and holistic approach to PPP.

**Creating a user friendly website** for developing policy, strategies, operational plans and disseminating information on successes in PPP. **Document and disseminate successful models of PPP**- The success stories will be documented, analyzed and disseminated and strategies to rapidly scale up successful interventions should be prepared.<sup>10</sup>

**Role of states – State PPP Cell and SHSRC** - Following the guidelines of Government of India, the states will select units for different PPP mechanisms. The states will then enter in to agreement with different agencies to execute selected PPPs and build their capacities. The State PPP cell and SHSRC (State Health

Systems Resource Center) will carry out the "implementation task" which will involve micromanagement of the programme, ensuring that basic objectives are met. **Monitoring** - Improvement of Government capacities to monitor and regulate private sector is essential. Monitoring mechanism with clearly defined specific performance indicators is required. Public sector is both judge and party, so there should be third party monitoring. Certain percentage of the project cost should be earmarked for monitoring.<sup>11</sup> In case of PPP models<sup>12</sup> it should be ensured that enough financial resources are dedicated to monitoring contracts and that people with the right skills are involved. Due to Public Private Partnership access of poor and needy patients to health care should not suffer as India has one of the highest out-of-pocket household expenditure for health services.

## PROPOSED PUBLIC PRIVATE PARTNERSHIP INITIATIVES

1. Contracting out of hospital Registration Services
2. Contracting in and out of High end Equipments
3. Canteen facility with cross subsidization with hospital Diet
4. Contracting out of linen services – **Under process of tender**
5. Public Private Partnership with Charitable Maternity & Nursing Home & Hospital at village or block level.
6. Public Private Partnership with Private Medical College.
7. Cancer Detection Camp in Rural Area
8. Organization of Medical and Dental Camps By Private Medical Colleges
9. Health Advice Call centre- **Already initiated in course of study.**
10. Indian Medical Association- **Already initiated in course of study.**

## IMPACT OF INTERVENTIONS

During course of PHD thesis, with progressive study findings and observations it provided me necessary inputs for future planning and administrative interventions. I was able to contribute my opinion in departmental meetings held on these issues from time to time. The outcome has resulted in generating Government Resolutions, circulars, guidelines which have indirectly supported my observations and recommendations as under.

1. Checklist for monitoring of security services was accepted by the department and it was circulated across the state as circular.

1. Checklist of Infection control committee meeting was accepted by department and circulated to all hospitals.
2. Intervention of evening OPD which was not carried out earlier was accepted by department and circulated as circulars.
3. Data validation indicator i.e. carried over admissions per bed was used and incorporated in monitoring of indicators under Rajeev Gandhi Jeevandayee Arogya Yojna for all 470 private and Public hospitals.
4. The honorarium of contract specialist was decided and it was fixed. Due to Geographical changes and nonavailability or shortage of specialists and technical staff, flexibility in payment structure was needed instead of fixed salary. This was especially true in relation to appointment of Medical physicist in Regional Referral Hospital Nashik or appointment of Nephrologists on contract in some of Hospitals where dialysis machine is provided due to shortage of qualified and registered personnel. This fact was addressed to higher authorities and flexibility was added in the process by adding clause of taking permission of Governing body of Rugna Kalyan Samiti for honorarium of more than norm in exceptional circumstances. I was instrumental in convincing and materializing this concept.
5. Earlier small repairs such as Current repairs and specified repairs were carried out by Infrastructure Development wing of National Rural Health Mission. This was raising risk of duplication of work as same head was available with PWD. So decision was taken to earmark separate Chief Engineer at Aurangabad. Construction grants were released to Chief Engineer which has resulted in uniform monitoring of construction activities there by nullifying scope of duplication.
8. Impact of Janani Suraksha Yojna was minimal except payment has been started from concerned Medical Superintendent of hospital which was earlier made by Taluka Health Officer. The payment strategy was modified from cash payment to cheque payment.

## RECOMMENDATIONS

1. PPP is not Privatization and should not be one sided nor it should be with just any partner, but terms should be dictated by Government with reference to objectives.
2. It is not with a redundant partner but performance related and not an alternative to better governance
3. It is not a substitute, but supplementary to Public Sector and there should be transparency in the scheme

4. Cost containment in PPP should not be at the cost of Quality.
5. Enforcement of penalty/incentive clause is essential for fulfilling target which improves quality of service.
6. There should be Political, managerial and technical ability in handholding with private partner.
7. PPP has huge potential to deliver targeted services and can ensure effective & equitable use of resources for greater economic as well as social return on public expenditure and a pragmatic and sustainable option to benefit the poor.
8. Public Private Partnership can promote use of state of the art technology and can ensure higher Human Development Index.
9. Public Private Partnership can deliver if private medical sector is regulated in terms of the quality, rationality and costs of care.
10. In order to reduce out of pocket expenditure of poor people, Health Insurance Scheme is best option and need of the hour.

Nobody of either Public or Private sector will win the race of development of state if they work in isolation. If they work together as they are complementary to each other will win race of development of state.

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