



## **Appendix**

# ***The Emerging Role of PPP in Indian Healthcare Sector***

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# 1 **Healthcare PPP case studies in India**

## **Case study I - Chiranjeevi project in State of Gujarat<sup>1</sup>**

This Chiranjeevi Yojna Scheme was announced by the government in April 2005 with an aim to provide access to good medical services to the poor population and to remove the financial barrier that keeps them from availing proper healthcare facilities. The target group is women living below poverty line who face social and economic hardships due to complications during delivery. The scheme allows the families living below poverty line to use either public or private facilities for free and covers others expenses like travel. The families having BPL card or which have been certified by the designated village leader can avail this facility. The scheme also promotes follow-up during pre-natal and post-natal period.

### **Implementation**

The scheme was implemented in December 2005 as a one year pilot project in 5 districts, Bansakantha, Dahod, Kutch, Panchmahals and Sabakantha. The scheme was implemented by creating a network of private practitioners in providing maternity services to the BPL population living in remote areas of the states, having the highest maternal and infant mortality rates. The private practitioners were chosen by the district health centres after a detailed survey of their infrastructure assess their conditions of services. Professional bodies such as the Federation of Obstetrics and Gynaecology Societies of India and the Society of Welfare and Action-Rural were included for meeting and consultations with the private providers for deciding the maternity care service package and fees. The contracted practitioners were reimbursed through a capitation payment basis under they are paid for each delivery at a fixed rate. They are paid for a batch of 100 deliveries with an amount of INR 1,79,500 for hundred deliveries including normal as well as those with complications. The each networked party is paid an advance fee of INR 20,000 to start the services and the remaining is replenished at regular intervals.

### **Performance**

The pilot project covered 31,641 deliveries. 61% of the private practitioners in the area have been networked and each performed an average of 238 deliveries in one year. The results were very encouraging:

- Institutional deliveries in the five states increased from 38% to 59%
- No maternal deaths and only 13 infants death
- Only 4.7% caesarean operations as compared to average of 15% included in financial calculations.

## **Case study II - Rajiv Aarogyasri community health insurance scheme in Andhra Pradesh<sup>2</sup>**

Under the scheme, which is run in partnership with a private sector insurance company, the State pays an insurance premium of Rs. 210 per household per annum and each of the households can claim health expenses in relation to certain critical diseases (such as heart and

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<sup>1</sup> Public Private Partnerships: Managing Contracting arrangements to strengthen the Reproductive and Child Health Program in India, Lessons and implications from three case studies, Ramesh Bhat, IIMA; Dale Huntington, WHO; Sunil Maheshwari, IIMA

<sup>2</sup> PPP in Health and Education Sectors in India, ADB report, KPMG research, April 2008

cancer treatment, neurosurgery, renal diseases, etc) up to INR 2,00,000 for procedures and medical expenses. The scheme is supported by a well developed ID card and IT system that tracks, monitors and approves medical treatment for all covered families. While the health insurance company is responsible for claim processing and maintaining the database, the medical claim is approved by the Government doctors. The scheme currently covers over 85% of the households in the State.

### **Implementation**

The health insurance scheme was introduced in two phases – Phase I covered 2.3 mn. households for INR. 760 mn. (USD 19 mn) and paid claims for INR. 4.8 mn to date, Phase II covered additional 4.5 mn. households for INR. 1.06 bn., INR. 2.3 mn. have been paid out as claims so far in this phase. Till date, 75 hospitals have signed up for this scheme.

### **Performance**

- Health affordability for the patients has increased.
- The scheme has proven to be useful to the targeted beneficiaries.
- The scheme is easily scalable once the claim processing and monitoring mechanism is in place.

## **Case study III - Comprehensive Healthcare Outreach Services to the poor using mobile approach, Madhya Pradesh Ranbaxy Community Health Care Society<sup>3</sup>**

The Ranbaxy Community Health Care Society (RCHCS) is a non-profit registered society set up in 1994 by Ranbaxy Laboratories Ltd. It planned to provide a package of preventive and curative services through mobile vans in Dewas Block (in Madhya Pradesh) in November 2001 with the objective of increasing access to essential reproductive and child healthcare including adolescent health, prevention and treatment of Reproductive Tract Infections RTIs/STIs as well as AIDS awareness and health education on various health issues.

### **Operation**

Two mobile health care vans visit the villages once a week. Two 14-seater vans were procured and converted into 4-seater ambulances with a check-up table suitable for gynaecological use. Sufficient storage space was also included. The van included collapsible furniture including television and CD Player to show educational programmes and had provisions for doing minor procedures like Copper-T, insertion, Non-Scalpular Vasectomy (NSV) operations, gynaecological / ANC check ups, immunisation etc. inside.

A team of doctor and paramedical staff manages the outreach services. The ‘Gram Swasthya Samiti’ members are also given training on health matters and sanitation. They notify the villagers (through the Village Chowkidars) about the visits of a mobile clinic. The Sarpanch is often the Chief Guest at ‘Health Camps’ and other functions like puppet shows, street plays etc.

RCHCS maintains records of all vital events like live births, infant deaths and maternal deaths in its areas to determine the health status of the community and monitor such events on a continuous basis. Information about deaths is obtained from direct home visits by RCHCS

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<sup>3</sup> Comprehensive Healthcare Outreach Services to the poor using mobile approach, Madhya Pradesh, PROD reference number: 175

staff and also by collating information from Community Health Volunteers (CHVs)/ Anganwadi workers (AWW)/ Auxiliary Nurse Midwives (ANMs). This helps RCHCS to plan specific interventions for preventing deaths.

Medicines are bought from wholesale dealers in Indore according to need and the budget allocated by RCHS and PFI. Some medicines like Iron tablets, Oral Rehydration Salts (ORS), Family Planning measures like condoms, Copper T (CuT) oral pills are obtained from District Hospital, Dewas, which also carries out maintenance of vehicles and general administration.

Local Registered Medical Practitioners are informed about all the initiatives started by RCHCS. They are invited to workshops organised by RCHS and educative materials are distributed to them on a regular basis. Linkages have also been established with local charitable hospitals for referral of patients. Poor patients referred by doctors of RCHS are given concessions at private clinics/hospitals.

From the villages, CHVs are identified with the objective of sustaining the efforts started even after the project ends. The CHVs have been given training on how to deal with some common health problems. Besides, they also function as depot holders for family planning methods, ORS, 'Environmental Health and Sanitation', 'HIV/STD/AIDS'. CHVs are identified from the educated villagers (they must have a minimum of 10th standard pass) and who are interested in Social Work. They are paid an honorarium of INR.100 per month. The dais (untrained birth attendants) was also given training on safe deliveries.

The Chief Medical Officer (CMO) of the District Hospital is the chairperson of the Project Implementation Committee (PIC) of RCHCS. The RCHCS takes part in all National Health Programmes like Pulse Polio, Bal Sanjeevani Mission for malnourished children, Malaria Eradication Programme etc. The doctor of RCHCS is a member of District Health Committee.

The project also used government buildings like PHCs, Subcentres, Panchayat buildings, schools in villages to hold health care camps. The Dais training was organised by using the Government Hospital, Dewas. The district administration has provided the project with requisite supplies from the District Hospital - vaccines, family planning products and also trained staff on RCH. The project involved Govt. Medical Officers to train village level health workers, specialists and health education material.

## **Performance**

- During 2003-2004, a total of 12,900 beneficiaries used the mobile-based health care services in 301 field visits.
- A total of 44 untrained Dai, 80 CHVs, 94 AWWs and 30 gram swasthya samitis were given orientation training on essential new born care. In addition, to facilitate normal working at the labour room at Barotha PHC in Dewas block, one 5 KV generator set was installed.
- All infant and maternal deaths were thoroughly investigated to find out the probable causes of death. Since RCHCS started operating, no malaria death has been reported so far from the RCHCS service area.
- The immunization coverage has improved among children aged 12 – 18 months. Complete vaccination increased from 61.2% (baseline) in 1998 to 92.2% in 2004.
- Supplementation of Vitamin A prophylaxis for prevention of nutritional blindness also showed an increase from 59.6% (baseline) in 1998 to 93.4% in 2004.
- Coverage of family planning methods increased from 56% in 1998 to 76.9% by end of 2004.
- The coverage of Tetanus also increased from 79.5% in 1998 to almost 100% in 2004.

- The percentage of malnourished children in the age group 0-1 year showed a decline from 37.6% baseline in 1998 to 13% in 2004.
- The service statistics of RCHCS show a decline in the number of births and infant / maternal deaths. The birth rate reduced from 23 per 1000 population in 1998 to 17 per 1000 population in 2004. Significant reduction in infant deaths from 45 per 1000 live births (1998) to 20 per 1000 live births. Maternal mortality in RCHCS area declined from 4.5 per 1000 live births (1998) to 1.8 per 1000 live births.

## **Other Examples<sup>4</sup>**

The Rajiv Gandhi super-specialty hospital in Raichur Karnataka, was built at a cost of INR 600 mn. This economically backward region of the state has no modern health facilities so people are forced to travel long distances to seek specialist medical care. As government was unable either to deploy or retain specialist doctors, the hospital was lying unused. Apollo Hospitals Ltd, was seeking to establish its own hospitals in the region, but it was not sure about building a super specialty hospital. The respective dilemmas of the Government of Karnataka and Apollo Hospitals Ltd were highly conducive for establishing this partnership for mutual benefit. Through this partnership, the Government is able to provide free services to the poor, and Apollo Hospitals Ltd is able to establish its business operations without having to invest in constructing physical infrastructure. The corporate hospital is able to pay well for its staff so it could retain the desired manpower.

Similarly Chamarajanagar, a predominantly tribal district, had only primary care facilities at its district hospital. For any super specialty care, people had to travel far. Bangalore based Narayana Hrudayalaya came forward to set up telemedicine services in collaboration with the state government and the Indian Space Research Organization (ISRO).

Operational constraints also prompted some partnership initiatives. In Jaipur's SMS hospital, the hospital administration could not properly maintain its radiological equipment. Instead of purchasing and maintaining expensive equipment (CT scan and MRI), the government invited a private contractor to operate his own machine on the hospital premises, with special concessions and even free services for the poor (an example of purchasing services on behalf of the poor rather than provisioning).

Contracting out dietary, laundry and cleaning services in Kolkata's Bhagajatin Hospital is another typical example of private partnership for improving hospital efficiency.

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<sup>4</sup> Public/Private Partnership in Health Care Services in India; Dr. A.Venkat Raman and Prof. James Warner Björkman <http://medind.nic.in/haa/t08/i1/haat08i1p62.pdf>

## 2 Healthcare PPP case studies abroad

### Case Study I - UK PFI Example: Darent Valley Hospital<sup>5</sup>

Darent Valley was the first PFI hospital contract to be signed in the UK, with construction of the 400-bed facility (subsequently extended to 498 beds) completed in 2000 at a capital cost of £140 m. The PFI contractor provides a range of hard and soft facilities management services including estate management, catering, housekeeping, cleaning and security.

#### Implementation

The contract was advertised through the Official Journal of the European Union (OJEU), with a prequalification process based on financial and technical criteria, followed by a competitive tendering process.

Originally the contract period was of 28 years (including a 3-year construction period), but was subsequently extended to 35 years following a refinancing. All hospital support staff involved in delivering facilities management services were transferred over to the PFI contractor, following consultation with trade unions. The TUPE regulations in the UK protect the rights of staff who transfer from the public to private sector.

The net present cost of the contract over the original term was £241 m (discounted at 3.5% real), which increased to £252 m over the extended contract term following the refinancing. However, as a result of the refinancing the Trust received an initial lump sum payment of £1.5 m and a reduction of £2 m in its annual contract price. The cost of the facilities management services is benchmarked every 5 years and the Trust has the option to competitively tender the services if the parties are unable to agree the revised price. The payment mechanism is based on the availability of the hospital, with potential deductions weighted according to areas which are most critical to patient care. The PFI contractor can lose up to 100% of its payment through unavailability deductions.

#### Performance

- The hospital was completed two months ahead of schedule and to budget under a fixed price design and build contract. The Trust's ability to make early use of the hospital before it was contracted to make payments resulted in an estimated benefit of £2 m
- Service delivery overall has been satisfactory with a low level of payment deductions
- The Trust was able to share in the financial benefit of the refinancing conducted by the PFI contractor

### Case Study II – New Mestre Hospital, Italy<sup>6</sup>

The proposal for this project was submitted in June, 2001. The project focuses on the construction of a new hospital replacing an inadequate existing hospital. The new structure aims to overcome the shortfalls of the existing facility and improve the hospital specialist services (like Oncology, Cardiology) of the Venice/Mestre area. The concession was awarded in August, 2002. The project is designed, built, financed and operated (DBFO) by Veneto Sanitaria Finanza di Progetto S.p.A (VSFP) under a long term concession granted by the Local Health Authority for a period of 29 years (including 4 years of construction). The total investment for the project is €236 million of which public contribution is €105 million (45%). The shareholders are Astaldi SpA (one of the oldest construction companies in Italy), Gemmo

<sup>5</sup> PPP in Health and Education Sectors in India, ADB report, KPMG research, April 2008

<sup>6</sup> Models and Strategies for Public-Private Partnerships (PPP): Experiences from Italy and Bulgaria, Vidin, 13 November 2007

SpA (a leading Italian company in the most advanced field of technological plant and facility management) and Cofathec SpA (a Gaz de France service branch).

### **Services Provided**

- **Non Medical Services provided to Local Healthcare Authority (USL):**
  - Laboratories and radiodiagnostic service management
  - Waste disposal
  - Laundry
  - Catering for patients
  - Cleaning services of building and clinical equipment
  - Estate and medical equipment maintenance
  - Mechanical transport
  - Green areas maintenance
  - Housing services
- **Commercial Services:**
  - Restaurants
  - Commercial Areas
  - Parking Area

### **Case Study III – Holistic Care Center Waldviertel, Austria<sup>7</sup>**

An emergency hospital in Lower Austria on the verge of being closed down was transformed through a public-private partnership into a modern Holistic (Psychosomatic) Care Center Waldviertel (PSCW). Objectives of the partnership were to renew a medical facility and introduce a new model of care in Austria building on international experiences. After thorough refurbishment, a 100 bed PSCW was opened on July, 2006

#### **Implementation:**

The License including project development, planning, implementation, overall financing, and general management and service provision, granted to the PSCW project company founded for the project in accordance with the Austrian hospital plan and care guidelines. The PSCW is managed and operated by both the public partner, Hospital Association Waldviertel (KAV) (51% share) and the private partners ROMED, German clinic management company specialized in holistic care facilities (39% share); VAMED, Austrian company with experience in construction and financing of hospitals (10% share).

Legal entity of the PSCW is KAV, which is also responsible for the infrastructure; ROMED is responsible for the PSCW operation; and VAMED for planning, building and, optionally, facility management. Quality control, including monitoring of the medical and economic performance, conducted by inter-university advisory board responsible for developing and monitoring the holistic care quality standards.

#### **Performance:**

- Investment into a new type of high quality patient care
- Reduced public investment required for the new facility, at 65% of the total estimated investment of EUR 14.8 Million

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<sup>7</sup> Public Private Partnerships and Collaboration in the Health Sector: An Overview with Case Studies from Recent European Experience, Irina A. Nikolic and Herald Maikisch, October 2006, HNP discussion paper.

- Leveraging of the private sector's expertise and financing
- Risk distribution and labor division between the partners
- Further savings expected to accrue through benefits of holistic care and efficient management by experienced private partners (e.g., costs of a daily hospital rate in holistic care of approximately EUR 200-300 expected to be significantly lower than those in the conventional hospital care of approximately EUR 440, due to the reduced overall length of treatment through holistic care)

## Other Examples

### **Inkosi Albert Luthuli Central Hospital, KwaZulu-Natal<sup>8</sup>**

The Inkosi Albert Luthuli Central Hospital (IALCH) is an 846-bed, referral-only hospital situated in Durban, with a catchment area of all of KwaZulu-Natal and at least 50 percent of the Eastern Cape. It is one of 10 designated central hospitals in the country. The hospital buildings are now complete and ready for the installation of equipment. The KwaZulu-Natal Department of Health, in conjunction with the Provincial Treasury, embarked on a process whereby the hospital equipment, IT system and most non-core functions would be procured in the form of a PPP. Facilities management and outsourcing of all non-medical functions, including catering and laundry services, is to be included in the PPP.

### **PPP in Bangladesh: Urban Primary Health Care<sup>9</sup>**

The scheme implemented by the Local Government Division of Government of Bangladesh is one of the largest PPP in health sector in South Asia. The first project was implemented between 2000-2005 and the second was implemented in 2005. The PPP involves contracting out urban health care services to Non Government Organisations and private sector.

The project covers 6 city corporations and 5 municipalities for 6.5 years of project implementation at the cost of USD 90 million. The Financing was through ADB ADF loans and grant and co-financing by DFID and SIDA.

There was a performance based modified management contract in order to mitigate risk and the contractor assumed performance, certain demand risk and user fees revenue generation risk as per contract agreement.

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<sup>8</sup> PPP Quarterly: Public Private Partnerships, March 2001

<sup>9</sup> Infrastructure Challenges in south Asia – The Role for Public-Private Partnerships; ADB presentation to South Asia Finance Ministers, 4 May 2008

### 3 A Perspective on PPP in Health<sup>10</sup>

#### **Background – Maternal healthcare in U.P.**

There are around 3.5 or 4 million live births in Uttar Pradesh each year, since an estimated 14% of the 26 million Indian births occur here (RGI, 2006). Beyond that there are a number of unwanted pregnancies, miscarriages and still births or maternal deaths before birth. Based on SRS estimates, the MMR of Uttar Pradesh was 517 in 2002-2003, which means roughly around 20,000 maternal deaths in a year in this state alone. According to estimates, the proportion of ill-health to maternal deaths is 20 times, giving a staggering total of women who are in need of maternal health care.

This situation has been in evidence since the last few decades, warranting special planning and provisions for ensuring service provision to all women to prevent deaths or ill-health – yet, this has not happened. It is neither for lack of state funds nor for lack of donor interest. Using maternal health service provision in Uttar Pradesh as a case study, the service provision facilities for these health needs of women and the public and private sector roles involved are discussed.

#### **Who provides the services?**

An overwhelming percentage of births occur in the private sphere in UP: according to the SRS figures, 89.9% of deliveries in Uttar Pradesh occurred at home in 2001-2003 (a slow decline from the 92.2% in 1997-98). Among the births surveyed during NFHS-3 of 2005-2006 in Uttar Pradesh, around 88 % were handled at home (the figure is 82.5% for rural UP). Around 70.8 % of the births in UP (76.2% in rural areas) appear to have been handled by non-health personnel: perhaps including family members and neighbours as well as **traditional birth attendants or TBAs**.

#### **What other services are available?**

Evidence from case studies collected in 2003-2004 and 2005-2007 indicates that families in rural UP do seek institutional care when they suspect complications. What is the situation regarding these institutions? In terms of facilities, UP has 7 Government Medical Colleges & Hospitals, 53 District Hospitals, 13 Combined Hospitals, 388 Community Health Centres, 823 Block PHCs, 2817 Sub Block PHCs apart from 20521 Sub Centres. The private sector has four Medical colleges & Hospitals and 4913 male / female hospitals/ nursing homes at district level. Thus there appear to be a far larger number of private hospitals than public health care institutions, excluding of course the sub-centres.

What is the state of these public hospitals? Ten years after the CSSM programme of 1992, with the further addition of the Reproductive and Child Health programme in 1997, well into the 2000- 2005 World Bank assisted health systems development programme, less than 20% Community Health Centres (CHCs) surveyed in Uttar Pradesh had even the minimum (60%) basic equipment needed to handle an obstetric emergency, and barely a third had 60% of the qualified medical staff required. Additionally, there is a great rural-urban gap in terms of qualified personnel such as doctors who are supposed to provide most of the emergency services.

How does this damaged state of the public sector affect the health service users? The State Planning Commission points out that “only 9 percent of the State’s population actually makes use of (state) facility for treatment of ordinary ailments and people mostly have to depend on

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<sup>10</sup> Adapted from document prepared for August 2007 Planning Commission CSW, Jashodhara Dasgupta

private healthcare.” Families of hospitalized persons borrow heavily or sell assets to cover expenses and 34 % fall below the poverty line because of hospital expenses. In actual figures this means that although households in UP spent around 17158 crores in 2004-2005, the government spent only 2650 crores; spending by NGOs, foreign agencies and private firms was merely 550 crores.

Free treatment is not guaranteed even when going to healthcare workers on state payroll as they are known to extract informal payments for treatment provided. Moreover irrational therapy appears to be used both by state providers like ANMs and private non-formal sector (quack doctors) who regularly use intra-muscular oxytocin injections in the intra-partum stage to speed up contractions. PHC staff's including ANMs are unable to provide skilled maternal health services to rural women, which sometimes lead to fatal consequences or force them into debt through expense.

### **The way forward**

In this context, the state has been suggesting the withdrawal of state roles and increased hand-over to a ‘more efficient’ private sector. However, more thought is needed on how to engage with various profit and not-for-profit parties in private sector. For example, it is required to differentiate between the various kinds of PPP as follows: in PPP where forms of exchange are involved like services being offered for payments or contracts being awarded, vested interests come to the fore and/or the lack of capacity of the public health system to handle such partnerships is exposed. What the present version of PPP is doing is that it is taking these exceptional or occasional and sporadic subsidies and trying to organise it into a systematic program which will marketize public goods like health and healthcare and reduce or even undermine the role of the state. Partnerships can only be meaningful if there is a well developed regulatory framework and where professional ethics are also strong. When public and private sector actors work together collaboratively on the basis of shared objectives, strategies and agreed monitoring and evaluation criteria, this may be called a PPP.

Some **innovative PPP** to ensure that the health outcomes improve for rural women could include:

- Working with organized groups of TBAs for accreditation, linking them to communications and transport networks to speed up referral, and doing substantial evidence gathering regarding how home births actually take place
- Working with rural practitioners and quacks for skill-building, rational therapy, infection prevention and some form of social franchising or accreditation
- Universal social health insurance for comprehensive health coverage for rural women (on the lines of the Thailand 30 Baht scheme) who are part of a large unorganized labour force, with state subsidy for the premium, and a modest pre-payment or co-payment (to prevent misuse of health services)
- Working with local management institutes to strengthen output-based administration of health service provision at primary and secondary level (since doctors should not use their time administering health programmes); especially to improve oversight skills in regulation of the for-profit private health providers of the area

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## 5 List of Acronyms

ADB – Asian Development Bank  
AFP – Alternative Finance Initiatives  
BPL – Below Poverty Line  
BOOT - Build Operate, Own, Transfer  
CHC – Community Health Centres  
DBFO - Design, Build, Finance and Operate  
GDP – Gross Domestic Product  
GP – General Practitioner  
GSDP – Gross State Domestic Product  
GOI – Government of India  
IMA – Indian Medical Association  
ISTC - Independent Sector Treatment Centre  
NGO – Non Governmental Organization  
OECD - Organisation for Economic Co-operation and Development  
PCT – Primary Care Trust  
PFH – Partnerships for Health  
PHC – Primary Health care centre  
PFI - Private Finance Initiative  
PPP – Public Private Partnership  
SC – Sub Centre  
UNDP – United Nations Development Program  
VFM – Value for Money