



PUBLIC PRIVATE PARTNERSHIPS IN HEALTHCARE

OUTSOURCING OF RADIOLOGY SERVICES IN BIHAR

A CASE STUDY

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SUPPORTED BY: OXFAM INDIA

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I. INTRODUCTION

The National Rural Health Mission (NRHM), since then renamed as National Health Mission (NHM), was launched in 2005 by the United Progressive Alliance (UPA-I)¹ government. It aimed for 'architectural correction' through increased budgetary allocation, inter-sectoral convergence, community participation; decentralized planning and innovations in health sector with primary health care as its main focus (NRHM, 2005-12). Private sector involvement was one of the supplementary strategies of NRHM. Public Private Partnerships (PPP) were seen in the context of viewing the whole medical sector as a national asset with health promotion as goal of all health providers, private or public². Subsequently, an agreement was built up between state and the market to involve private sector partners and consider them as equal stakeholders in the health care services delivery.

Lack of capacity in the high focus states (HFS)³ to implement multiple tasks ranging from preparation of district plan to running of mobile medical units coupled with huge inflow of funds from Government of India (GoI) with a pressure to increase the spending of health under NRHM necessitated PPPs (Gupta, n.d). This situation led to involvement of the private sector in various forms, becoming a prime strategy for spending funds and delivering primary health services in poor performing states like Bihar (Gupta, n.d). NRHM provided an impetus⁴ through flexibility in planning and execution of such projects, which resulted in the emergence and proliferation of PPPs in many states (MOHFW, 2005).

The current study has tried to understand the performance of diagnostic service delivery in Bihar provided by the government through private sector. It makes an attempt to uncover the underlying reasons behind the outsourcing of diagnostic services to private sector and explores the impact of this PPP on the public health system. This study supplements the current literature on the factors that influence the involvement of PPPs in the diagnostic services under the NHM.

¹The United Progressive Alliance (UPA)-I was a coalition of centre-left political parties formed after 2004 General election. The policies of UPA-I government were guided by a common minimum programme (CMP) adopted by the coalition partners.

²Draft report on recommendation of task force on public private partnerships for the 11th five-year plan.

³High focus states consists of the eight Empowered Action Group States (EAG) namely Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Orissa, Rajasthan, Uttar Pradesh and Uttaranchal, eight North East (NE) states, Himachal Pradesh and Jammu and Kashmir, which have weak public health indicators and weak infrastructure.

⁴The National Health Mission constitutes its two sub-missions, the National Rural Health Mission (NRHM) and the newly launched National Urban Health Mission (NUHM) approved by the cabinet in May 2013. The NHM envisages achievement of universal access to equitable, affordable and quality health care services that are accountable and responsive to people's needs on the lines of two sub-missions. Moreover, it adopted the strategies for planning and implementation written in the two sub-mission. One of the important supplementary strategies of the NRHM is promotion of public private partnerships for achieving public health goals.

II. SETTING

Bihar is a low-income and third most populous state in India. It was one of the earliest states that involved the private sector in partnerships after the announcement of NRHM in 2005. During 2006-2007, PPP in Radiology (X-ray and ultrasound) were implemented and subsequently pathological services were also implemented through similar mode in the same year. These services have been provided across 38 districts, from primary health centre (PHC) to the district hospital (DH). Besides diagnostic services, some PPPs include outsourcing of ancillary services like hospital maintenance, 102 ambulance-emergency services, mobile medical unit (MMU), doctor on call, and preparation of district health action plan (DHAP).

The main objectives of the study were to: 1) identify the factors that influenced the origin and design of contracting to private partners in diagnostic services 2) explore the overall impact of privatization of diagnostic services on public health system, specifically in a remote district and 3) explore the methods of community participation in execution and monitoring of private diagnostic services. East Champaran district of north Bihar under Tirhut division, a remote district was selected for the study. One reason for the selection of this district is that it holds the lowest rank in district ranking¹ in Bihar.

¹ SHS, B published district ranking of 38 districts every month based on 47 indicators including penalties indicators. The recent ranking available for December 2015 shows Samastipur ranks 1st in this list while East Champaran ranks 38th in the list. There are eight penalties indicators mentioned in the letter SHSB/G.A/116/2006/13th/8367 dated on 21/12/2015. Further, the letter further explains that the eight Penalties are percentage of Janani Bal Suraksha Yojna (JBSY) payment, Number of qualified doctors including CEmOC trained doctors who have not conducted any Caesarean Section at First referral unit (FRUs) (SDH/RH/DH) during the reporting month, Number of surgeons doing <8 major surgeries per month in DH during reporting month, Number of empanelled doctor for family planning doing <60 children per day in the district during reporting month, Non-functional Sick new-born child care unit (SNCU) in the district during reporting month, Non performing facility for Postpartum Intrauterine contraceptive device (PPIUCD) and or Interval Intrauterine contraceptive device (IUCD) in the district during reporting month inspite of having trained staff for PPIUCD and/ or interval IUCD and percentage of total ANC registration in the reporting month against monthly ELA of pregnant women.

III. METHODOLOGY

This was a qualitative study, using the case study method. Data collection was undertaken through review of existing documents, and interviews with stakeholders in East Champaran district. A previous study (Kumar, 2013) on the diagnostics PPP in Bihar by one of the co-researchers had evaluated the initiative in Patna district and therefore in the current study a more remote district was selected.

The documents reviewed included contractual agreements; government decisions related to diagnostic services (Table 1), NHM policies, NHM annual reports, other related documents and media reports. Programme data could not be obtained due to reluctance of the facilities and the health administration to share the data. A state level official, whom the research team had gone to meet in order to orient him about the study, said that he would not give 'permission' for the study as such a study may have political implications. Not having access to programme data restricted the scope of the study.

Table 1: List of Government documents reviewed

S.No.	Documents Reviewed
1	Newspaper advertisement by State Health Society, Bihar. 2007. Tender bid for setting up ultra-modern diagnostic centre through Public Private Partnership (PPP) in Regional Diagnostic Centres and all Government Medical College Hospital of Bihar.
2	State Health Society, Bihar. 2008. Tender Bid Invitation from Companies/Firms/Agencies/Institutions for Setting Up & Operationalising Dialysis Units through Public Private Partnership (PPP) in District Hospitals & Medical College Hospitals of Bihar.
3	State Health Society Bihar, DoHFW. PPP initiatives in Bihar. Presentation on 5th June 2008
4	Best Practices: PPP initiatives in the health sector in Bihar. State Health Society, Bihar (undated) ¹ .
5	Cabinet Decision on Organization and Monitoring of Monthly meetings of VHNSC for year 2011-12
6	Bihar Medical Services and Infrastructure Corporation Limited, Patna. 2013. Invitation for Bids for Procurement of Radiology and Pathology Equipments.
7	Letter from Secretary-Health Co-executive Director to Regional Deputy Director Health Services in February 2013.
8	State Health Society, Bihar. 2013. Equipment-wise Evaluation of Bids Received Against Tender Ref No. SHSB/2012-13/RAD-PATH-001.
9	Bihar Medical Services & Infrastructure Corporation (BMSICL). 2014. Expression of Interest (Eoi) For Public-Private Partnership for Managing Diagnostic Services at Medical Colleges and Hospitals in Bihar.
10	State Health Society, Bihar. 2014. Expression of Interest (Eoi) for Installation, Operationalization and Maintenance of Digital X-Ray Machines in Imaging Centres at 159 Locations in Bihar on PPP Mode. State Health Society, Bihar. 2014
11	State Health Society, Bihar. 2015. Cancellation of Eoi on establishment and functioning of X-Ray Services in PPP mode.

The interviews were conducted in February and March 2016. Two Community Health Centres (CHCs) newly upgraded from Primary Health Center (PHC), one Sub-Divisional Hospital (SDH) recently upgraded from PHC, and one District Hospital (DH) located in Mothihari were selected for the study. Open-ended semi-structured in-depth interviews were conducted with the health administrators. A group discussion (GD) was also undertaken with ten ASHAs to explore their role in the planning and implementation of radiology facilities through PPP and their perspectives on the same.

¹<http://health.bih.nic.in/docs/hd-bestpractices-ppp-initiatives.pdf> (n.d)

The considerations for selection of health facilities and number of beneficiaries at health facilities included existing time frame, distance, and the presence of administrators in health facilities. Three health administrators and 33 beneficiaries were interviewed (Table 2). More than half (17) of the beneficiary respondents were women. Informed consent was taken verbally from all the respondents.

Table 2: Number of respondents

Type of Facility	DH, Motihari	CHC, Tilkauria	SDH, Pakridayal	CHC, Ghorasan	Total
Health Manager/ Hospital Manager	-	1	1	-	2
Medical officer In-charge	-	-	1	-	1
Beneficiaries	12	8	7	6	33

All qualitative data obtained through in-depth interview were handwritten verbatim. Qualitative data analysis was done in a stepwise manner through domain formation and finally summary of the data was made. Semi-quantitative qualifiers were used for analysis. Adjectives were used, for instance, 'some' was used for responses less than 25 percent; 'almost half' for 25-50 percent responses; 'majority' for 50-70 percent; 'most' for 75-90 percent and 'almost all' were used for more than 90 percent (Dasgupta et al: 2008).

IV. FINDINGS AND DISCUSSION

1. Context for public private partnerships in diagnostics

Existing gaps in services being provided by the public health system in Bihar

At the time NRHM was introduced, there were severe issues of availability of government health services in Bihar. The study in Patna district found that the infrastructure for diagnostic services was highly inadequate and diagnostic services were not available in many health facilities at that time (Kumar, 2013). Respondents in the current study also narrated how diagnostic services were lacking in the facilities.

"As far as I know radiology services were not functional in this facility. Ultrasound facility was not available and X-ray machine was not functional" (Block Health Manager, Community Health Centre).

Moreover, the state government was dependent on funds from the Government of India (GoI) to finance its plan spending. However, it failed to spend the money available for them (Matthew & Moore, 2011). In almost all flagship programmes funds remained unspent (GoB, 2006). The percentage of expenditure in 2005-06 was just 3.08 percent, which subsequently increased to 57.73 percent in 2014-15 (SHS, Bihar, 2015-16).

Shortage of human resources and equipments needed for providing diagnostic services

Though even today in Bihar there is shortage of doctors and para medical staff in government health services, prior to 2005-06, the situation was alarming. The White Paper on State Finances and Development in 2006 states that Bihar had a 90% shortage of doctors and 95% of para medical staff in government health services against national norms (GoB, 2006). The interviews also revealed that there was previously a shortage of human resources, that continues till now. In some cases, absenteeism of doctors and para medical staff add to this problem (GoB, 2006).

"Even today there are acute shortages of staff in every health facilities across the state. Even after new recruitments, doctors and para medical staffs are still insufficient to run this facility" (Block Health Manager, Community Health Centre).

"We need more staff here because we are overburdened with work and managing double to our capacity. This SDH is new one and we have enough space but we are lacking in human resources as per SDH norms" (Hospital Manager, Sub-Divisional Hospital).

The interviews also revealed that in addition to a shortage of human resources, the infrastructure needed for running diagnostic facilities was not available in most of the health facilities. The equipment required for X-ray and pathology were either not supplied regularly or were not repaired on time in most of the places. One hospital administrator recounts that earlier electricity was also a major roadblock in proper functioning of X-ray even though the X-ray machine may have been available. Under the PPP, generators were being used to ensure services when there was no electricity.

Popular mandate for the new government

A new government was formed in Bihar in 2005, with high expectations from its constituency. This could be one reason that led the government to adopt certain health reforms through PPPs. As per the statements given by a health official, the new government was under pressure to perform on every front, especially in the social sector (including health and education) (Kumar, 2013). The NRHM assisted in this by providing both ideas, like suggesting the strategy of involving private partners, and increased budget allocation (Kumar, 2013). Moreover, the state was witnessing a mushrooming of private health services. The Patna study (Kumar, 2013) reveals that emphasis on providing health services, including diagnostic services, helped the government in four ways: firstly, it helped the government to consolidate their constituency, secondly it led to the restoration of

diagnostic services and public health services, thirdly it resulted in an increase in patients accessing the public system leading to increased OPD and IPD numbers and finally it ensured utilization of NRHM funds. Therefore, the finances and reforms coming through NHM helped the state government to implement its popular agenda and attempt to fulfill the expectations of the people.

2. Implementation of the initiative

The outsourcing of radiology (X-ray and ultrasound) services in Bihar was done in 2006-2007. These services were provided across 38 districts, from the level of Primary Health Centres (PHC) to District Hospitals (DH).

Absence of a situational analysis or involvement of stakeholders in designing the initiative

Planning for the PPP seems to have been done without a market survey for availability of services and its cost, and the government's previous experience in executing projects in service delivery through PPP was not taken into consideration (Gupta, n.d, p.7). Moreover, planning seemed to be centralized and the government does not seem to have undertaken any study or pilot project before implementing it all across the state (Gupta, n.d; Kumar, 2013).

The objectives mentioned in the contractual agreement¹ were

(i) To provide "cost effective radiological (X-ray) facilities at the government hospitals based on assessment of the local communities' needs and available resources"; (ii) "Establish ability of the public health system to respond to the health needs of the people at affordable cost" and (iii) "To increase confidence of the community in the public health services". The agreement also stated that this is being done to "deliver speedier services to reduce incidence of complications due to delays in diagnosis".

Sub-contracting

The strategy adopted by the Government of Bihar (GoB) in providing these services was called sub-contracting. Subcontractors are third party under the contract relationship for providing services. They are the interface between the private agency and the public health system. This is a complex contract relationship where their accountability to the private agency (second party) is more in comparison to the government (first party). The private agency appoints them with the government not expected to play any role in appointing them. The specific task contract between the State Health Society Bihar, GoB and IGE Medical System for providing X-ray services in Bihar, points that out:

"The specific task contract shall be completed by IGE Medical System, Silvassa and if subcontracted further, in part of in whole to any other agency or individual would be the responsibility and concern of the second party. State Health Society, Bihar would sign contract only with IGEMS, Silvassa and hold it responsible for all the initiatives and operations" (Clause 21, 2006).

The 2009 contract was between the same parties as in 2006, but in 2009, the contract included X-ray and ultrasound, both through PPPs in government hospitals in Bihar. The 2009 contract agreement comes with one modification in sub-contracting clause. Para (1.11) of the contract mentions that the appointment of the sub-contractors by the second party (IGE Medical Services), is subject to approval from the first party (Government of Bihar). However, the contractual agreement fails to mention about the accountability towards the public system. Interview with one health manager also revealed that in most of the cases these sub-contractors are local and politically influential. Many times they used to put pressure on hospital administration and also ignore the suggestions made by hospital administration (Health Manager).

Status of outsourcing in East Champaran

In the sample district, East Champaran, this PPP was implemented in 19 facilities (Table 3).

¹ Contractual agreement between State health society Bihar (SHS, B) under department of health and family welfare, Government of Bihar (GoB) and IGE medical system was held done on 26th April 2006 for providing Radiology (X-ray) and ultrasound services in government hospitals of Bihar.

Table 3: Number of facilities with X-ray and ultrasound PPP (Facility wise information in Annexure 1)

Type of facility	Total no. of facilities in district	No. of facilities with X-Ray PPP	No. of facilities with ultrasound PPP
Referral Hospital	5	5	5
District Hospital	1	1	1
CHC	15	11	12
PHC	7	2	1
Total	28	19	19

Source: District Health Society, East Champaran

3. Performance of the private agencies in providing radiology services in government facilities

Provision and availability of free radiology services

In 2012, the Bihar government decided that the X-ray and ultrasound services would be provided free of cost in all public health facilities, through IGE Medical Services. The State Program Implementation Plan (SPIP, 2012-13) stated that radiology services provided in government hospitals of the state are benefitting thousands of poor patients every month. It showed that the number of beneficiaries till December 2011 was around 2.75 million, with a target of reaching 4 million in 2012-13 (State PIP 2012-13).

The study tried to explore the perception of beneficiaries after utilizing the diagnostic services. The researchers observed that more women were coming to avail diagnostic facilities, especially during pregnancy. The health managers in all facilities that were visited corroborated this. Fourteen of the seventeen women interviewed had utilized ultrasound facilities provided by the PPP. Except for two respondents all these women were pregnant and had utilized ultrasound facility during antenatal period. They seemed to be satisfied with the service as it was free of cost and provided inside the health facilities. However, discussions with the ASHAs revealed that often X-ray and ultrasound reports were often delayed and many patients had to travel long distances to collect the report. There were no complaints regarding behavior of the private staff members in the health facilities surveyed.

The hospital administration was of the opinion that free X-ray and ultrasound services are good for any health institution. The free services helped in increasing the number of outpatient department (OPD)/ In-patient department (IPD) in public health facilities.

"X-ray and ultrasound are provided in this health facility and they are doing good job. Patients are benefitted in rural areas and hugely benefitted from it because private is very costly" (Block Health Manager, Community Health Centre).

"The X-ray and ultrasound services have been benefitting patients since 2012. Most of the beneficiaries belong to lower income group and are from rural areas" (Hospital Manager, Sub-Divisional Hospital).

However, one health manager said that sometimes, the agency does not listen to requests made on behalf of the patients. Moreover, state's Economic Survey 2015-16 states that the monthly average number of patients visiting government hospitals declined by 5.8 % in 2014, lack of drugs and diagnostic services being one of the reasons for it. According to the CAG report for 2014-15, pathology services were available in 54% of the Referral Hospitals (RH) and 31% of the Primary Health Centers (PHCs), while sonography facility was available in 14% of Referral Hospitals and 9% PHCs. This could not be corroborated during the study, as there was no access to the data of the sampled facilities.

Quality of services being provided

The hospital administrators in their interviews said that though they see the current diagnostic services as filling the gap, they also find that the private contractors were not there for providing better services, but to earn profit from the PPP. They expressed their concerns on the quality of services being provided.

"Outcome is good and strengthening the public health system. But quality of services provided here requires urgent attention" (Block Health Manager, Community Health Centre).

Observations made during visit to the facilities reveal that none of the X-ray and ultrasound services adhered strictly to the agreement. For instance, in 2012, the Executive Director (ED, SHS, Bihar) wrote to all civil surgeons (Member Secretary, DHS) regarding adoption of Atomic Energy Regulatory Board (AERB) operational guidelines by providers of X-ray services. However, even after four years, none of the X-Ray centres have adopted the guidelines mentioned in the agreement or in the 2012 letter. Moreover, a health administrator complained that under-qualified staff were employed, who work without adopting proper safety measures as mentioned in the agreement. He also said that the X-ray and ultrasound machines in his facility were old and needed upgradation. It was also observed that these services run only during the OPD timings, which is against the contract where it has been mentioned that services need to be provided 24x7. One health administrator put it succinctly:

"Private is more punctual in comparison to public but in terms of quality, government is better in comparison to private".

During data collection, the problem of over use of radiology services was also observed due to patient-induced demand. There were instances when patients demanded radiology services and pressurised doctors to prescribe these services. One hospital administrator had a similar concern:

"[This is] Good for public health system presently in the context of Bihar but the only thing is to design a mechanism for monitoring and ensuring benefit for the needy patients only. In the last few months the utilization of radiology services has exceeded budgetary allocation" (Hospital Manager, Sub-Divisional Hospital).

The 6th Common Review Mission to Bihar was extremely critical of the diagnostics PPP initiative and lists some quality concerns (6th CRM, Bihar 2012:15):

- a) Personnel managing X-ray machines and laboratory services are not qualified as per prescribed norms. As a result, accuracy and reliability of test results is doubtful.
- b) Personal safety is not being adhered to. E. g. Usage of TLD badges and lead aprons.
- c) X-ray machines are non-compliant to AERB norms.
- d) Site approval for Radiology Departments are not available
- e) Kidney function tests and liver function tests are paid services at the visited facilities for all categories of beneficiaries.
- f) Long turn-around time."

Weak performance monitoring

The study revealed a huge gap in monitoring of the diagnostics PPP. The 2006 contract agreement states that the "X-ray centres will function under the overall supervision and operational control of District Health Society (DHS), headed by the District Magistrate of the concerned district. Further, the X-ray centres will subsequently function under the overall supervision of the hospital management society (Rogi Kalyan samiti) of the respective Hospital". Clause 4 (ii) in 2009 contract explicitly states that; "The SHS, Bihar or the District Health Society (DHS) shall have power to inspect any records of the agency at any point of time and get independent audit of the agency conducted". Though the DHS has a prime role in monitoring of PPPs in every district, the interviews with officials revealed that this role has not been played very effectively. Further queries revealed the possible reasons for weak monitoring as follows: firstly the sub-contractors are local persons and politically influential; secondly, the block health managers expressed the problem of lack of technical skills required for proper monitoring; thirdly, the DHS staff are already overburdened with other work; fourthly, many of the health managers are not aware

of the conditions of the contract and finally there are issues of collusion due to which effective monitoring does not take place. The Rogi Kalyan Samiti (RKS) was supposed to play a role in monitoring, but that too plays a limited role. Though the hospital administration has to monitor the private agency on daily basis, interviews revealed that they are also unaware about various technical aspects mentioned in the guidelines sent by the state. However, many health officials are also hesitant to take action because they do not want to invite any political interference.

The health administrators interviewed articulated the need for a robust independent monitoring system and the need for training for the health managers, both on the technical aspects and on the actual PPP agreement and its conditions.

"For proper and neutral monitoring, I think the government should monitor all services by independent agency" (Medical officer in-charge, Sub-Divisional Hospital).

"It needs a state level monitoring agency which is capable to monitor technical aspects of it" (Hospital Manager, Sub-Divisional Hospital).

No role for ASHAs or community in monitoring or planning

There is no role of ASHAs or the community in planning and monitoring of these services. The role of ASHAs in implementation has been limited to generating awareness and mobilizing women to come to the facility for ANC, including ultrasound. Almost all ASHAs during the group discussion said that they were aware about X-ray and ultrasound services in government health facilities, though they expressed concern at the non-availability of drugs and pathology services in the hospital.

"Free of cost radiology services spread goodwill message about the government hospitals in the community. These services are quite useful in building good reputation and only reason patients coming here in government facilities. It will be good if patients coming here get drugs on regular basis" (ASHA GD Ghorasahan Block).

Debilitating effect on the public health system

During the study, it was observed that in a CHC, though the required set-up for diagnostics was available with the facility, basic pathology tests were not being done. Human resources had been recruited and lab equipments were available, including a semi auto-analyser given by the State two years back, which had not yet been used. The government lab only did tests for RNTCP, Kalazhar, AIDS and RCH programmes. The patients had to go outside to private labs for simple pathological tests.

The 6th Common Review Mission of NRHM highlighted the impact of the diagnostics PPP on the public health system: "The services were contracted out to provide those diagnostic tests, which are not conducted at the facilities' lab. However, now PPP labs are conducting same tests, which are done by the in-house lab. This has led to under-utilization and even dysfunction of in-house labs, leaving the government lab technicians without their professional work and are being sub-optimally used" (6th CRM, Bihar 2012: 14).

One health administrator opined: *"My one recommendation is that these services should now be made a part of the public health system instead of PPP. In the long run the PPP services are not good and diagnostic services need to be strengthened and become a part of the public health system".*

The 6th CRM similarly recommends that: "The hospital should operationalise its own laboratories, which are practically non-functional now because of existing arrangement for diagnostic services under the PPP mode. Out-sourced services should supplement the existing structure and public services, not become its substitute" (ibid: 72-73).

V. CONCLUSION

Coming from a situation where no diagnostic services were available, the introduction of free radiology services (X-ray and ultrasound) through PPPs did increase the accessibility to such services to an extent, especially for people in rural areas. However, the study points to serious issues in the quality of the services and non-adherence to the contractual agreement.

The NHM Common Review Missions (CRM, 2008 to 2012) to Bihar too have all expressed concern over the issues related to quality, management, payment, human resources, violation of norms, monitoring and regulation on outsourced diagnostic services. The fifth common review mission report pointed to the need for strengthening diagnostic services through rigorous monitoring and regulation of agencies to whom the provision of services is outsourced. The sixth CRM¹ was most scathing in its criticism of outsourcing the diagnostic services. All the CRM reports observed setbacks in three crucial areas of PPPs- regulation, monitoring and violation of norms. The study similarly finds that gaps in monitoring and regulation by the health administration and absence of any systems of community based monitoring of the diagnostic services have further exacerbated the situation. Other reports point to the negative impact of outsourcing of a core function of the public health system like diagnostics, on the health of the system itself. The 6th CRM report says: "However, instead of strengthening of public health system, outsourcing has resulted into closure of hospital laboratory and X-ray facilities at almost every facility. Thus, the regular staff (laboratory technician, x-ray technician/ radiographer) has become redundant" (6th CRM, Bihar 2012).

The study also throws up other gaps in the public sector, like non-availability of drugs, basic pathology services and human resources. In order to improve the health of people in Bihar and ensure quality and free health services, all these gaps need to be plugged in a comprehensive and sustainable manner. This is only possible through higher commitment and higher investment into the government health system.

¹ Report of the 6th Common Review Mission - Bihar, 2012

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VI. ANNEXURES

Annexure 1

Status of outsourcing of radiology services in East Champaran district

S. No.	Facility Name	Type of facility	X-Ray	Ultrasound
1	Turkaulia	CHC	Yes	Yes
2	Chakiya	Referral	Yes	Yes
3	Sadar Hospital	District Hospital	Yes	Yes
4	Dhaka	Referral	Yes	Yes
5	Kesariya	CHC	Yes	Yes
6	Patahi	CHC	Yes	Yes
7	Sadar Block	CHC	No	No
8	Harsiddhi	CHC	Yes	Yes
9	Kalyanpur	CHC	No	No
10	Adapur	CHC	Yes	Yes
11	Areraj	Referral	Yes	Yes
12	Paharpur	CHC	Yes	Yes
13	Sugauli	CHC	Yes	Yes
14	Ghorasahan	CHC	Yes	Yes
15	Mehsi	CHC	No	Yes
16	Chraiya	CHC	Yes	Yes
17	Ramgarhwa	CHC	Yes	Yes
18	Pakaridayal	Referral	Yes	Yes
19	Madhuban	CHC	No	No
20	Raxaul	Referral	Yes	Yes
21	Chhauradano	CHC	Yes	Yes
22	Kotwa	PHC	Yes	No
23	Banjariya	PHC	No	No
24	Piprakothe	PHC	No	No
25	Bankatwa	PHC	No	No
26	Sangrampur	PHC	Yes	Yes
27	Tetariya	PHC	No	No
28	Fenhara	PHC	No	No

Source: District Health Society, East Champaran

PUBLIC HEALTH RESOURCE NETWORK

Public Health Resource Network (PHRN) is a network of individuals and organizations with the perspective of strengthening technical and management capacities to take action towards the common goal of 'Health for All'. Its main objective is to contribute and strengthen all efforts directed towards the goal of 'Health for All' through promotion of public health, social justice and human rights related to the provision and distribution of health services, especially for those who are generally left underserved.

JAN SWASTHYA ABHIYAN

Jan Swasthya Abhiyan is the Indian circle of the People's Health Movement, a worldwide movement to establish health and equitable development as top priorities through comprehensive primary health care and action on the social determinants of health. The Jan Swasthya Abhiyan coalition consists of over 20 networks and 1000 organisations as well as a large number of individuals that endorse the Indian People's Health Charter.

OXFAM INDIA

Oxfam is marking its 67th year in India this year. In 1951, Oxfam Great Britain came to India during the Bihar famine to launch its first full-scale humanitarian response in a developing country. Over the past 66 years, Oxfam has supported civil society organisations across the length and breadth of the country. In 2008, all Oxfams working in India came together to form Oxfam India, a fully independent Indian organisation (with Indian staff and an Indian Board), which is a member of the global confederation of 18 Oxfams.



Jan Swasthya Abhiyan
People's Health Movement-India

