

NRHM COMMON Review MISSION

Bihar Report

26th November to 5th December 2008

THE TEAM

The team members of the Common Review Mission (CRM) to Bihar visited state from 26th November to 2nd December 2008. The team consisted of Dr. T. Sunadaraman, Executive Director, NHSRC; Dr. G. N. V. Ramana, World Bank; Dr. Jagvir Singh, Joint Director & Head (DPD), NICD; Dr. P.K. Srivastava, Joint Director, NVBDCP; Dr. Rajesh Kumar, Professor & Head, Dept. of Comm. Med. PGI, Chandigarh & Mr. Billy Stewart, DFID India. The Team assembled in New Delhi on 25th November 2008 and attended the day long briefing at the National level by all the programme divisions & also had the state specific briefing. On 26th November 2008 the Team reached Patna & participated in a meeting at the office of State Health Society, Bihar (SHSB). Detailed presentation was made by Sri Abhay Kumar Singh, the Executive Director, SHSB, Patna regarding the activities undertaken and planned by the SHSB. The meeting was also attended by Sri Sanjay Priyadarshi, AO, SHSB, Dr. Varsha Singh, Consultant (MCH), SHSB, Dr. A. K. Tiwari (I/c IDSP & Infrastructure), Dr. Gopal Krishna (I/c State Immunization Division), Ms. Rashi Jaiswal, SPM, SHSB, Mr. Ranjit Samaiyar, Consultant, NRHM, SHSB, Mr. Pranav Kumar, Consultant, ASHA, SHSB and Dr. Manoranjan Jha, Sr. Medical Officer, ROHFW, GOI, Patna.

In the afternoon the Team members visited the State Level Data Centre at SHSB & reviewed their work.

In the afternoon the four (4) National Programmes (NVBDCP, RNTCP, NLEP & NPCB), now with the Dte. of Health Services, presented their programmes. The Director-in-chief Health Services, Govt. of Bihar (Dr. S. P. Singh) and Joint Director-cum-State Programme Officer, NVBDCP (Dr. R. N. Pandey) made the presentations.

Keeping in mind both logistics and health aspects we would like to focus on, the team chose to visit Muzzafarpur extensively and Vishali briefly in the north and Gaya intensively in the south. The high mortality and morbidity from kala azar in Muzaffarpur district (till October - 2008 – 3082 Kala-azar cases reported & 33 death reported, which was highest number of KA deaths reported from any district this year in the state) and the recent outbreaks of AES in Gaya district were the main reasons for choosing these districts.

Team – A: (comprising of Dr. T. Sunadaraman, Executive Director, NHSRC; Dr GNV Ramana, World Bank & Dr P.K. Srivastava, Joint Director, NVBDCP) visited Muzaffarpur and Vaishali Districts along with Dr. R.N. Pandey, SPO, NVBDCP, Bihar and Mr. Pranav Kumar, Consultant, ASHA, SHSB.

Team – B: (comprising of Dr Jagvir Singh, Joint Director & Head (DPD), NICD; Dr. Rajesh Kumar, Professor & Head, Dept. of Comm. Medicine, PGI, Chandigarh & Sh. Billy Stewart, DFID India) visited Gaya & Jehanabad Districts along with Mr. Ranjit Samaiyar, Consultant, NRHM, SHSB.

The field visits covered the Medical College Hospital/s, the District Hospital/s, Sub District Hospital/s, CHCs/Block PHCs, APHCs & Sub Centres and interaction with village communities in villages. Details of health facilities visited are given below:

1. Muzaffarpur
 - Sadar Hospital :
 - ANM Training School:
 - Bochaha PHC :
 - APHC- Kuffin:
 - APHC – Karza.
 - PHC – Marwan was also visited which was earlier a HSC of Kanti PHC.
 - AWC of Karza village.
 - HSC - Pokharaira of Saraiya PHC.
 - Community at Pokharaira village.
 - Referral Hospital, Saraiya: including Nutrition rehabilitation Centre (NRC) running at Referral Hospital, Saraiya with the support of UNICEF,
 - ASHA training camp at Referral Hospital, Saraiya
 - PHC. Paru
 - APHC – Dawoodpur:
 - HSC & AWC: Phulwariya.
 - Community visit: Village Bhagwanpur Sakara of Bhatwariya panchayat : where 28 KA cases were reported in 2008 till date as against 16 cases in 2007. Meeting with villagers, and ASHAs and AWW workers.
 - Kala Azar Medical Research (A unit of Sitaram memorial trust): pvt hospital.
 - DM, Muzaffarpur, Sh. Vipin Kumar,
 - Dt health society office and data center, Muzaffarpur.
2. Vaishali (29th Nov. 2008) :
 - a. Vaishali PHC:
 - b. PHC – cum – Referral Hospital, Lalganj
 - c. Sadar Hospital :
 - d. MSF, run ward in Sadar hospital Vaishali
 - e. Central District Drug Ware House
3. Gaya District:
 - a. PHC, Belaganj.
 - b. PHC Khijarsarai.
 - c. APHC, Kudwan.
 - d. PHC, Bodh Gaya.
 - e. PHC Mohanpur.
 - f. HSC and community in Lai.
 - g. Pilgrim Hospital.
 - h. Lady Elgin Zanana Hospital.

- i. ANMTC
- j. Magadh Medical College.
- k. District health society office.

Findings of the CRM, Bihar.

Part 1

Change in key aspects of Health delivery system

(i) Assessment of the case load being handled by the Public System at all levels

Progress has been made in many fronts in both provision of patient care facilities and in utilization of services and in quality of services provided. The increased utilization of services is reflected in increased number of persons provided every type of service that is available- be it outpatient care, be it in patient care, be it institutional delivery services or be it emergency services, or surgical services, laboratory services etc. The main reasons for this are in the improved human resources deployed. Every PHC visited has, as a rule, six doctors- three of which are regular and three are contractual. And the doctors are largely present at least during duty hours with at least one or two being available in the nights- along with one or two ANMs or nurses. Also central to this progress is the addition and very tight monitoring of doctor performances. There is a system of a BPO type institution gathering information daily by phone from every PHC and every district and sub-divisional hospital on utilization and a monthly break up is provided of number of patients seen by each doctor by name. Therefore in functional terms, the 24*7 PHC has been achieved in at least one facility per block and this is a huge step forward. The district hospitals are crowded. And so are most PHCs. This has in turn led to increased pressure to strengthen the APHCs. The figures of this are annexed.

(ii) Preparedness of Health Facilities for patient care and utilization of services and quality of services provided:

Patient satisfaction: Patient satisfaction was in almost all places very positive- the recent memory of a complete lack of services and the current changed situation being upper most in peoples minds. This came out in informal discussions at the village level and informal exit interviews with patients who had just used these services in almost all the services visited.

Provider satisfaction: Provider satisfaction was more qualified, but even then on the whole very positive. There was a strong and positive sense of change, of things having been achieved, of their being able to deliver more services. There was much dissatisfaction with service conditions and payments at all levels and with different issues related to support

services. One recurrent expression was “the work load has improved so much but there is little improvement in staff or facilities to manage this increased workload.”

Low equilibrium: The team however felt that given the problems of the past, expectations of provider and even of the public had been set at very modest levels. The system is in danger of stabilising at the this low level of expectations and outputs, and even as one appreciates the effort that has gone in to reach this level, there is a need to set the benchmarks higher. Much more that needs to be done, if the increased patient load and utilization of services was to manifest in increased outcomes.

Functional Facility density: Increase in services has been largely in the district hospital and to the PHC. Progress had almost completely missed the additional PHC. And at the sub-center though there was an increased impact on immunization and on antenatal care- but that was where it was limited. To a large part this is attributable to state strategy. The state had in 2006 consciously decided to focus on revitalizing the PHC and the district hospital first. In this they had succeeded and this had restored confidence in the public health system. Only now in response to the huge and unmanageable loads of the PHC was the system turning its face to address the primary care level – the additional PHC and the sub-center. Given the huge size of these blocks- 1.75 lakhs in Vaishali block, 2.54 lakhs in Lalganj block, 3.16 lakhs in Paroo block, 2.5 lakhs in Saraya block and 2.20 lakhs in Bochaha block, one PHC hardly gives adequate coverage. It is likely that patients further away from the block headquarters are still relatively underserved. The IPHS norm is for one such CHC for 1.2 lakh population. In Bihar the facility located at this level is called the PHC. During the debriefing, after our visit, the Mission Director informed us that all of these PHCs would be upgraded to 30 beds and with CHC equivalent staff. Of the 530 blocks, in the coming years 250 are being taken up. This is urgently needed considering the huge loads these facilities are handling. Land seems available at ever PHC, though human resource is going to be a big problem. There is also a plan to upgrade some of these to referral hospitals which are the same as the upgraded PHC except that there would be an effort to make them an FRU with specialists and functional operation theatre and blood storage and availability of comprehensive obstetric services. There is an overlap here that needs to be attended to- and some districts should not land up with a separate upgraded PHC and a referral hospital.

The Additional PHCs: The additional PHCs are very poorly functional, even perhaps non functional. Only about one in two of additional PHCs visited have a doctor and all of them have “notionally” two ANMs and a staff nurse- most of whom have been withdrawn to the PHC. The APHC at best works like a a sub-center plus an outpatient dispensary. There are efforts to bring back emphasis on making these functional- but there is no game plan on how to do so within the constraints of both human resource and monitoring. There is a need to reconceptualise this. Contracting out APHCs to NGOs has been one route tried. The first round of doing so did not do too well and this has been redone a second time with about 36 APHCs in the state as a whole outsources– a niche strategy at this stage. Better utilization of paramedical staff after multi-skilling them to provide a wider range of services, better

connectivity by phone and ambulance transport system, better drugs and diagnostics as appropriate to the paramedical level of care and a visiting doctor during working hours at least three if not six days a week may be the way forward. APHCs density should be one per 30,000 population. By which count the district should have about 120 APHCs at least. It has about half of this. The situation is similar in Gaya district.

Quality in district hospitals – Nursing gaps, and assessing the para-nurse approach: In the district hospital the beds are overflowing with over 100% bed occupancy. Muzzafarpur has 210 beds, and Vaishali has 120 beds and most of these beds are needed for obstetric cases or for kala-azar. The latter occupies 50% of beds in Vaishali under a partnership programme with MSF and in these 50% of beds the treatment is specially coordinated and well financed and it is visible in high, but not unaffordable level of care provision. In obstetric care the quality is seriously hampered by a lack of nurses and midwives- the ratios being extremely adverse- 13 nurses only to staff 60 beds with over 100% occupancy, to staff the heavy outpatient, and the obstetric room where only two nurses become available. In Muzzafarpur with 210 beds there are still only 19 nurses and midwives taken together and only two nurses in a labour room that could have upto 50 deliveries per day. The use of a woman health volunteer called Mamata , who would be paid per newborn she attends to is one innovation and the induction of traditional dais to help in the labour room is another. The nurse becomes thus supervisor to these para-nurses. One notes that the dai often brings many traditional practices into the modern hospital and remains major provider of care- albeit under supervision and with a back up available to manage complications. There is training inputs planned for these para-nurses, and even training of trainers which has been completed- but at that point the process faded out and as of date the training of the para-nurse has not taken place. There is no doubt in the teams mind that the addition of more trained and well supported nurses into this system would be the single most important step that could be done to improve quality.

Quality in PHCs : Lack of Beds and nurses: In PHCs there is a different set of issues that dominate. Central to this is the lack of beds. Bochaha provides outpatient care to almost 300 persons per day and conducts almost 15 deliveries per day- but has only 6 beds. Indeed delivery cases have to be sent home rapidly so as to accommodate new cases coming in. The medical officer in charge, an outstanding and very motivated officer has really no other choice. The problem is slightly ameliorated by the fact that he has an excellent outsourced ambulance service at his disposal and is able to transfer patients to higher centers. Every day almost four patients are so transferred- at reasonable costs but borne without distinction by the user. Not every PHC has this load but even one of the weakest we saw, Paroo had 6 deliveries per day- which means that it is not physically possible for a 48 hour post delivery stay in any of the facilities visited. This is the same situation in Gaya too. Belaganj PHC has about 6 deliveries per day. Khijarsaria has 7 deliveries per day, Mohanpur almost 15 deliveries per day. Increasing all these PHCs to 30 beds should not be delayed further, and all PHCs which manage more than 5 deliveries per day on an average should be prioritized this. Though lack of nurses should be a problem given the fact that there are only two ANMs posted here in Muzzafarpur district- in

practice it is not so. This is because almost all PHC MOICs have coped with the situation by either withdrawing nurses from the additional PHCs or even placing two ANMs on a 8 hour shift every day by withdrawing them in rotation for one day every week from the sub-center and using them here. It works. But for now. If the number of beds increases, or the APHCs become functional, it would break down. Also posting grade A nurses in additional PHCs where there are no inpatients even planned while providing no nurses for the PHC seems to be an oversight that should be corrected.

Quality in Referral Hospitals: Under utilization of beds: Of the PHCs , only two in each district have been upgraded to referral hospital status- Sahariyya and Kanti in Muzzafarpur and Lalganj and Mahua in Vaishali. The teams visited Sahariyya in Muzzafarpur and Lalganj in Vaishali. The referral hospital is broadly equivalent to the CHC of IPHS standards. In Sahariyya, two wards had been taken up by the NRC and the other beds were only now being established- and so it was much like the other PHCs. In Lalganj on the other hand the beds were not in use and in-patient admission even for institutional deliveries was not the rule. All referral hospitals have however only PHC level staff and not the recommended CHC level.

Standards of cleanliness: Standards of cleanliness would also require substantial improvement- though most providers report that in comparison to the past it has improved and some were even puzzled by the teams dissatisfaction with cleanliness levels. There was however a gradient- a center like Sarayya or Bochaha were relatively clean whereas Paroo would be dirty even by these standards. Part of the problem seems to be that there are no visual benchmarks of how clean a center could be- which the local health managements could relate to. The Nutritional Rehabilitation center of Sahariyya could have been said to have achieved this benchmark but the investments needed to achieve this was clearly visible. The outsourcing arrangement for cleanliness is an innovative step forward and it has been able to provide a solution to the staffing for sanitation without increasing government employment with all its attendant pressures- but it needs to deliver much more in the way of outputs. This could be for lack of systems to measures outputs of this services and building up mechanisms to monitor that these outputs and process indicators are in place. It could be because the terms of engagement are too tight to provide quality outputs. Either way this strategy could be tweaked to give better results.

Untied funds and patient amenities. In all facilities visited there are efforts to improve amenities- lighting, wiring, water supply, patient waiting halls, toilets, drainage etc- but unfortunately these are rather sporadic and neither driven by a sense of urgency or by the use of untied funds. The sub-center untied funds and the PHC untied funds were very poorly used in Muzzafarpur district, though at district hospital there was a better use of these funds. There is a lot of hesitation to use these funds though the needs are clearly there, and the powers to use it have been devolved. There seems to be an informal stay on use of these funds, till some further guidelines are issued. To avoid pressures to expend on centrally determined priorities, rather than facility level priorities, facilities need to be monitored to list their priorities and expend the funds within much shorter time spans. In Gaya the experience is of a brisk usage of untied funds and only about Rs 30,000 seems to be unspent

There is a systematic effort to provide generator support, pathology diagnostics, X- ray and soon ultrasound as well, ambulance services, laundry services, diet services and cleaning and sanitation services, and monitoring services by outsourcing each of these services. This has kick-started all these services, and today these services are available either from the outsourced person or from the facilities' own resources in the majority of facilities visited. The experience and viability of the outsourcing option is discussed later. But there is no doubt that the availability of all these services has rapidly increased in these last few years.

(iii) Utilisation of diagnostic facilities and their effectiveness –

Diagnostic services

The state has made sincere effort to improve access to quality diagnostic services through public private partnerships. Outsourcing models have been developed to contract-in private providers for offering clinical laboratory as well as X- ray services from the premises of public hospitals and PHCs. While these innovations are noteworthy and are in the right direction, some operational constraints were noted during the field visits.

Lack of interest to operate diagnostic labs from Block PHCs by private contractors: While this approach is quite innovative, the team observed that the agencies contracted, were not showing that much interest to operate from the Block PHCs where improved access to diagnostic services is most needed as they do not have other alternatives available. In Muzaffarpur, two out of the 4 block PHCs visited, the outsourced labs are not working. Similarly no private party came forward to operate X-ray services in any of the Block PHCs visited. However, in Gaya 3 out of the 4 block PHCs visited had Laboratories and X ray plants under operation by the private contractors. Despite the providing dedicated new blocks by the State Government in Paroo and Lalgunj the private contractors so far did not start services.

Co-existence of Public and Private Labs: In the district hospital Muzaffarpur, both public and private labs (pathology and X ray) are functioning in parallel. Despite having 3 technicians and one pathologist, the public lab is not able to function optimally due to grossly inadequate funding for lab consumables (Rs. 3000 per year) and one mono-ocular microscope which is in urgent need for maintenance. The private pathology lab is located inside the hospital and as a result their staff are having problems to bring patients from OPD for testing. The situation is reversed in case of X ray laboratory.

Non availability of regular lab technicians: None of the PHCs visited had regular lab technicians. Despite MOHFW's guidance on using services of the contractual lab technician recruited under the TB program for providing basic laboratory services, such practice was visible in only few PHCs. A trained male health worker is being used by some PHCs for performing RK 39 test for Kala Azar.

Inadequate attention to quality and bio-medical waste management: One critical observation was that basic quality protocols required was lacking in both public and private laboratories visited and bio-medical waste management practices are non-existent.



Exemption for the Poor: In the district hospital Muzafarpur, the team noted that the X- ray charges of government unit are more than the private lab (Rs. 78 vs Rs. 75 per one large film) due to a 1998 GO which requires a 10% annual increase in user charges for services offered by government X ray labs. A review of the records revealed that very few patients (around 2%) were actually exempted from user charges.

Suggestions:

- Consider enhancing the range of beneficiaries exempted from user fee for lab services (for example, pregnant women, children below 5 years, Kala Azar and trauma cases etc) in addition to BPL and monitor the use of such exemptions both at district and state levels.
- Ensure priority to Block PHCs in providing private laboratory services either through renegotiation of contracts with private providers or alternately through strengthening public laboratories by recruiting lab technicians including the option of using services of existing TB lab technicians for other lab services during the interim period.
- Enforce compliance to bio-medical waste management guidelines in the contracts of all outsourced laboratory services and implement a phased plan for implementing bio-medical waste management procedures in all public facilities including their linkage to a common treatment facility.
- Explore options for networking district hospital labs (both public and private) with ongoing external quality assurance programs

(iv) **Drugs and Supplies-**

Improved supply of essential drugs is the most notable achievement by the State and this has significantly contributed to the increased use of public facilities noted during the past few years. The new rate contracting system and enforcing the presence of distribution depots of the suppliers within the state through which the districts place orders has tremendously improved the availability of essential drugs at public facilities. In Gaya it was observed that generally 15 are available in most facilities and the most common drugs reported out of stock were paracetamol and antibiotics. There were no drug supplies available at sub centre level where treatment for ARI and diarrhea are required. Quality testing of all batches procured through state rate contracting is also in place and the team is

pleased to note the practice of withholding of batches that were tested to be of low quality. However due to frequent stock outs or other reasons, the district surgeons are also undertaking local procurement following the established tendering process. However, the quality assurance mechanisms for such decentralized procurement are not as robust as the state level system and due to shortage of time, without the results of quality testing, the supplies are being used.

Need for enhanced state expenditure on pharmaceuticals: Despite steep increase in state expenditure on pharmaceuticals during the past few years, the per capita public expenditure on pharmaceuticals (around Rs. 8 per capita) is too low compared to the about Rs 49 per capita (USD 1) recommended by WHO.

Improvements required for minimizing stock-outs: Due to initial attention given to establish a basic system to ensure flow of essential pharmaceuticals to the public health facilities, not much focus has been given to systematic estimation of actual pharmaceutical needs. The team observed that due to lack of advance planning, lag time taken by the suppliers, and poor supply chain logistics there are stock-outs of some essential drugs.

More efficient supply chain logistics required: The team is pleased to note the efforts started by the state to improve supply chain systems and recently a district warehouse has been built at Vaishali. However, this warehouse is only handling the state supplies while supplies for the national programs are still routed through respective district program managers as a result the Blocks have to collect their supplies from multiple points. The present design of fixed storage spaces will be inflexible and upper shelves are difficult to access. Arrangements for loading and unloading also need adequate attention. The systems for monitoring the stocks are manual and no bin cards are being used. There is no space earmarked for storage of supplies requiring cool chain. There is no system in place wherein stocks in facilities are monitored and every facility has an assured supply of drugs without interruption.

Suggestions:

1. Now that the basic supply chain and monitoring systems are in place, it should be possible to quantify the actual use of pharmaceuticals for advance planning. Further, to minimize the stock-out situations, a minimum level of buffer stock for each essential pharmaceutical may be defined to kick start advance ordering.
2. With the availability of computer services at all major health facilities, the state may consider engaging an agency to develop and implement a simple logistics management information system quickly for more efficient monitoring, reallocations between districts and advance ordering.
3. Both the design and stock management at the drug warehouse requires a careful review before further scaling-up of warehouse infrastructure to other districts. There is lot of scope for improvements in the design and functioning of warehouse such as more efficient use of space through flexible staking arrangements, use of mechanical tools, bin cards and simple logistic management information systems. Some good warehouse plans are available in Tamil Nadu and the state may acquire them.
4. It is important to ensure an integrated supply chain management for all health programs at district level with adequate focus to items requiring cool chain.

(v) Health Human Resource Planning –

The availability of human resources has increased substantially in HSCs, PHCs, DHs, and Medical Colleges. This has been achieved by pooling/ deputation of doctors and ANMs from Additional PHCs to higher level as well as by the contract appointment of large number of Nurse Aids (*mamta*), ANMs, Nurses, and Doctors including some specialist doctors. For example, in Gaya district the Belaganj block PHC has 3 regular and 4 contract doctors, in the remote block PHC Mohanpur there are 2 regular and 3 contract doctors. There is a shortage of specialist doctors, nurses and laboratory technicians still exists.

A policy for revision of the pay scales, time bound promotion, separation of the cadre for administrative, specialist, generalist doctors, and contractual appointment of doctors for 2 year in rural area in the district cadre before selection in regular cadre has been prepared. However, transfer policy is still not clear. Private medical, nursing and laboratory practice is allowed which may compromise the delivery of quality service in public institutions.

Contractual appointment policy is in place. Advertisements are issued at state level and selection and appointments are done at district level using the guidelines from the state. The policy of deputation/rotation of staff from between institutions of the district by the District Magistrate/Civil Surgeon seems to be working well and has minimized interruption in service delivery. Fund flow for salaries has improved as both contract and permanent staff is regularly paid now. However, contractual staff is laid off for few days every year to have a break in the service.

The requirement of staff positions at various level of service delivery has been estimated and plans have been made to augment the training capacity in the state to meet the increased requirement, i.e., establishment of 3 new medical colleges and re-starting of 6 nursing colleges and 16 ANM schools (five of these in private sector). Strengthening of the medical college departments is being attempted to start post graduate courses in various specialties. However, these plans do not seem to include other para medicals such as laboratory technicians, OT technician etc.

State Health Department has control over both medical and paramedical education and health service. Additional Commissioner looks after medical education in 6 medical colleges whereas Nursing Education is under the Directorate of Health Services. Most of the Nursing Schools (the nursing school at Gaya has building and teaching staff but no regular students since 1998 but is involved in short term training such as IMNCI) and Four Regional Health and Family Welfare Centers are non-functional. However, the State Institute of Health and Family Welfare is still functioning which conducts only short term training courses. Most of the medical colleges also impart education in the field of nursing, laboratory and other para-medical course such as laboratory and operation theater technicians.

Integration for performing multiple tasks related to various vertical programs has not been done yet. In some institutions where private diagnostic centers have been established, TB/Malaria technician do only limited amount of work as they are required to do only the work of the program to which they have been assigned, e.g., TB or Malaria, whereas in remote PHCs such as Mohanpur in Gaya district neither

the diagnostic center functions nor state service TB or Malaria technicians are available. Even test for Hb for sterilization cases are done by private laboratory as diagnostic center will give report on the next day and state govt. technician do not do these test even if they are available such as the TB technician in Kizersarai PHC. The direction for integration of TB and Malaria laboratory technicians work has not percolated down.

The problem of human resources is most acute in nursing. This has been described earlier in respect to quality of services in facilities. There are we must note three types of human resource scarcity – one a scarcity due to lack of vacancies not being filled up. Another because there are not enough posts created in the facilities that are existing and thirdly because there are not enough facilities created. In Bihar the first type of vacancy is relatively low for nursing- but the other two types of gaps are large.

Thus for example in Mohanpur there are 17 regular and 5 contract ANMs for a 1.77 lakhs population. There are 21 HSCs- so there is one ANM per sub-center. By earlier standards and by formal sanctions this is a nil vacancy. But by IPHS there should be at least two ANMs in place- which would mean a 50% vacancy. Again there should be 32 sub-centers which means a 33% gap. In other words only one thirds of the ANMs required for sub-centers are in place. If we add what is required for APHCs, and the PHC the gap would become even higher. The first point therefore is to massively increase nursing education and medical and paramedical education facilities. The situation in Muzzafarpur would be even more challenging as the population per block is larger.

Suggestions

- I. In a phased manner the vacant sanctioned staff positions particularly that of male health workers and health inspectors/lady health visitors need to be filled from state budget. The allotment of 2211 by MOHFW GOI to the state treasury should be regularly utilized. Staff positions at various levels also should be increased in the state budget to meet the requirements of IPHS standard.
- II. A transparent transfer/deputation/placement policy should be formulated on the lines of Tamil Nadu Health Services which takes into account the length of service at a particular place of posting, performance indicators, and options to get a choice posting for a specific period.
- III. A concerted action needs to be taken to prepare a medium and long term policy for the production of human resources for health including for short term training for Anesthesia, Emergency Obstetric Care, Skill Birth Attendant, IMNCI, blood storage etc. State Health and Family Welfare Center or a consultancy should be engaged to prepare a comprehensive human resource training plan.
- IV. Multi-tasking of medical, nursing and paramedical staff can solve some of the pressing problems of service delivery in sub-district institutions. Laboratory work of TB can be linked with Malaria and other routine tests etc. skilled birth training can be linked with newborn care and IMNCI, HIV with TB, surgery with obstetrics, pathology with blood bank, Public Health Management and Epidemiology, Family Medicine/ Nurse Practitioners etc.
- V. A system of bridge courses to upgrade ASHA to AWW to ANM to Graduate Nurse and to Postgraduate Nurse should be set up as an incentive for better performance and for career progression.

- VI. A separate Public Health Cadre also needs to be created, arrangement for training for this cadre to the level of diploma or masters degree in public health need to be made, and they should be posted in each block and district as per the IPHS standard.
- VII. The needs of state/regional public health laboratory should be assessed, and laboratory technicians need to be rationally distributed and optimally utilized.
- VIII. Personnel information and management system should be established by the Directorate of Health Service/State Health Society which should also include contract positions created by different projects/ programs and this system should be accessible to the districts for use/tracking/updating etc.

Infrastructure

The state has taken a pledge to ensure basic health infrastructure for its citizens an infrastructure wing has been created under the State Health Society to facilitate this . Despite such strong political commitment and after depositing Rs. 200 crore with the state PWD, the implementation progress in this area has been tardy. The state health department is now seriously considering different options for accelerating the implementation of works program including the use of state corporations for infrastructure creation. The team is impressed with the initiative taken by the State Health Society to create portable structures for establishing generic medical stores at Block PHCs. There is also improvements in supply of water and electricity to facilities. The quality of construction of an add on structure being created at Vaishali PHC was observed to be poor. For example, the depth for the pillars and the strength of steel being used appeared to be inadequate.

Suggestions:

1. Due to chronic neglect of infrastructure over several years, a phased approach is required for infrastructure development. First, priority attention is required to provide basic amenities like electricity and running water at all health facilities, Second, making the labor rooms attached to block PHCs fully functional ensuring adequate privacy through minor repairs including provision of toilets and maternity wards and Third to focus on repairs and renovations of other existing structures. All these activities need to be undertaken at district level and require dedicated management arrangements either through deputation of one engineer from PWD to health department or through creation of an infrastructure cell with a dedicated engineer under the district health society.
2. It is important to use few districts/ or some facilities in each district as models to demonstrate the feasibility of creating quality health infrastructure.
3. For smaller facilities like sub centers, additional PHCs and CHCs, standard type designs are available with MOHFW (Central PWD), standards developed by ISI and few states (Andhra Pradesh) could be used.
4. For district and teaching hospitals, the state may consider hiring consultants for a cluster of districts for undertaking a detailed survey (documented by video recording and photos), and preparing detailed facility renovation plans (as these facilities do not have standard design and over the years several small structures were created under different schemes some of which are no longer in habitable condition), preliminary cost estimates and bid documents. The agency identified by the state can undertake bidding and implementation while the consultants can continue monitor the implementation.

5. The infrastructure cell can establish a web based monitoring of facility development using photographs at different phases of development and the Block Health Manager could be given the responsibility of taking these photographs every month and transmitting to them through the computer cell to enable the state level monitoring.
6. A system of local community monitoring during critical phases of construction (foundation, lenti, roof etc) would also help local participation and promote quality.

(vi) Empowerment for effective decentralization and flexibility for local action-

The following aspects and programme components would be considered:

1. The role of panchayats.
2. The functioning of RKS
3. The functioning of DHS
4. VHSCs

The Role of Panchayats:

Panchayats are represented in the RKS and in district health societies. The team did not have the time to interact with panchayat leaders and cannot fully comment on this. The perception however was that the involvement of the panchayat in the NRHM process had yet to gain priority. There was grave doubts expressed about the role they had played in ASHA selection. In the RKS they were at best seen as indifferent or as unhelpful and they were not heard of at any level. Since our interaction was only with the health staff, such a view is unsurprising, and one needs to get more work done in this area before we can comment on it. Since the VHSCs have not been formed and are not in place, one of the potentially largest scope of involvement of the local elected member and head of the panchayat has not yet begun.

The functioning of RKS:

Rogi Kalyan samitis are formed and with one exception are very functional. Records of their meetings exist and key decisions are taken in meetings. The RKS had a composition of the BDO in the chair, with the MOIC as secretary, the janpad panchayat head as one member, and two representatives of male patients, two representatives of female patients and one NGO representative. How the latter five was chosen was not quite clear. The current trend is to see the BDO as a problem especially in terms of time availability, and the state is in the process of replacing the BDO as a signatory by another doctors. The team was cautious and concerned about it, though all officers talked with found this as desirable.

The RKS were making payments for the block health manager and the data entry cum accounts person. This itself made it essential for the RKS to meet. However untied funds were not being discussed and over-all facility development plans had not yet been brought onto its agenda. All RKS are well funded as of now. The lowest we encountered in the 8 we visited was 1.5 lakhs and on average they had 2.5 lakhs

at the PHC level and about 10 lakhs at the district hospital. In Gaya the pattern of expenditure is much better. On an average there was about Rs 30,000 in balance, the rest having been expended on amenities. About one fifth to one thirds of the RKS income was from user fees- the major part was from grants and this represents an important shift. However they were not feeling empowered to spend this money – and were waiting for guidelines, which district authorities claimed had been issued. The reluctance to spend is partly due to lack of confidence and fear of getting caught out by rules, partly the reluctance of having to publicly discuss it and pass it in a structure like the RKS and perhaps partly a go slow and go safe signal from the supervisory staff.

Still, despite these problems, the RKS is a viable mechanism of fund flow and payments to contractors and contractual staff and has a higher degree of accountability and participation and planning than any other alternative proposed or possible. The latter needs to be built on as fund flow increases rather than diluted in the name of faster funds flows. There were no specific plans in place or tools for building up the capacity of the RKS. With a slight bit of push, this would be one area where major gains could be scored in a couple of months.

The district health societies and the district health plan:

The district health societies are chaired by the DM with the civil surgeon as the secretary. They have both panchayat representation and NGO representation, though these may be more symbolic now. The committee meets and its proceedings are well recorded and it does make the key decisions.

The district planning process has not however kicked in to give this body a larger meaning. There have been district plans made by an external agency who were hired in for this task, but this agreement broke down and is now mired in case proceedings. The latent planning and management skills of the district team itself has hitherto been untapped for this process – but this is expected to change in the coming year as a training and mentoring on planning starts up.

Community Processes under NRHM & Assessment of non-governmental partnerships for public health goals –

The Village Health and Sanitation Committee:

Village health and sanitation committees have not started up at any level or in any form. There is a policy or strategy level constraint at the state level that needs to be understood further by this team

ASHA

Every facility we visited the ASHA programme is in place and the ASHAs are almost without exception enthusiastic and functional . In most facilities they were seen in the labour rooms and maternity wards with patients they had accompanied. In the villages, one had to ask for them and the village knew who they were and could call them- and almost without exception they were well informed us the key health events they were asking us about. One ASHA in a village took us to the patient with Kala-azar.

Payments had not been made since February or May in both the districts visited. District level arrears were now over 30 lakhs. A fund had been received in November with the instruction that it was to be

used for prospective payment, whereas for arrears an actual statement had to be compiled, submitted and it would be reimbursed. This set of instructions has its reasons but also concerns expressed.

The moot point is that this ASHA performance is in the face of such a crippling constraint. Clearly ASHAs are articulating the point – that if it is so difficult for the system to make such a performance based payment, why should it not instead make a fixed payment. If performance based payments have to be adhered to greater accountability at every level to ensure timely payment is a must. The Muskaan payment has set the bar for payment to ASHAs much higher and though it would help with outcomes, it is not adequate as a compensation mechanism for ASHAs.

The other crippling aspect of the programme is the complete cessation of training efforts of the ASHA programme. After the first round of training that had been completed before the last CRM, no further round has taken place. A training module integrating modules 2, 3 and 4 were prepared and it was decided to outsource the training to an NGO called Pranjal which is a PHED related para-statal resource center. There seems to have been no experience in Pranjal of ever being associated with community health workers or of building cascade type training systems. Also Pranjal would have control only over the first step of the cascade- it could never be expected to manage all other levels unless there is an entire new strategy put in place- and indeed that is what has happened. A few trainers were trained and the whole thing stopped there – for over an year. There has been thus no ASHA resource center put in place in Bihar, no district level community mobilisers recruited or deployed, no block level facilitators or block level NGOs deployed for support. The experience in all states with ASHA has been that the first round of training is achieved by drawing in staff from all other tasks. Then, rather belatedly, the realization dawns that this training is a recurrent event and that it would need to be accompanied by a fairly intensive on the job support. Without deploying more human resource than what is available in human resource depleted departments, such a huge workforce and community mobilisation effort cannot be supported or trained. Once this is recognized these support structures are created and the work resumes- after a completely needless and costly interruption in the schedule. The difference between Bihar and the other states, is that this realization has not yet happened. Also in Bihar, the difference between training community health workers and other cadres of regular employees and the meaning and methods of community mobilization have also not quite been grasped. Some start has been made by putting in place the ASHA mentoring group – but there is still a long way to go.

What therefore needs explanation is how then does the ASHA programme do so well. Partly because of local innovation. In Bochaha the best PHC that the northern team visited the MOIC, had divided the block into two two halves and was holding an ASHA divas for all the ASHAs of each half on one day every month. This he used for making payments, for delivering training on key local health priorities and for sustaining their enthusiasms. Even this much had been enough to make a huge difference. Unfortunately he had stopped for the last two months- he had no funds to pay the TA and no authority to do so and perhaps was getting tired of so much personal initiative that we being required.

Others were not having ASHA divas but they were holding cluster meetings of ASHAs on occasion for specific programme goals. ANMs and local medical officers also offer support. Also the way that ASHA has caught the community imagination and the space it provides for local recognition has helped in no

small measure. Finally the Muskaan programme and the JSBY provides specific tasks which acts as a glue that keeps her in close interaction with the system. Because of all this the programme is still in a position where it can be strengthened- it cannot survive against such odds indefinitely. Also one has to recognize that except for improving immunization and institutional delivery scores it would be able to do very little more – which is such a waste of the immense potential this programme has.

The Outsourcing approach to improved ancillary services. One of the key measures that Bihar has taken to improve quality of services is to outsource all these services from the district health society with contracts being signed for each service for each PHC. Wherever possible a single supplier being able to provide multiple services seems to have been preferred. The services so outsourced are given in the table below along with comments on some key features of these:

Service	By whom	Levels of functionality	comments
Generator services	By DHS – Payment by RKS	4/8	Many places had an own generator also. Satisfaction was varied. Provided 4 to 6 hours of back up every day.
Pathology - diagnostics	By SHS- User fee with full cost recovery	4/8	Many places had own services also
X-ray services	By SHS- User fee with full cost recovery	3/8	Dts had their own services also. In most PHCs this was not established- but in the plan.
Laundry services	By DHS- payment by RKS	6/8	Difficult to establish quality or intensity of use- but no complaints.
Diet services	By DHS- Payment by DHS through RKS	4/8	There was satisfaction with it for being working at least – though quality seemed neither expected nor delivered- but this was seen as due to costs provided.
Cleaning and Maintenance services	By DHS- payment by RKS	7/8	Varied degree of back up by own services. Not having a working arrangement was often an excuse to do little on their own.
Gardening and maintenance of surroundings	By RKS	0/8	In the pipeline.
Ambulance services	By DHS- rent paid by DHS, fuel paid by user fees with small margin accruing to RKS. Full running cost	3/8	Very it is working it seem very effective- in terms of utilization and value addition it provides.

	recovered		
Data center	By DHS	8/8	Discussed along with monitoring.

This table relates to Muzzafarpur district only. And the two district hospitals visited are included in this.

To sum up this experience we could state:

Strengths:

Have started up these services in scale across the state in a very short time.

Have contributed in a major way to patient satisfaction with facilities.

It seems to work adequately though with duplication at the district hospital level.

Weaknesses:

Effectiveness at PHC level is more varied. We need more time before we can conclude that it is working at this level. At district level it is working.

Largely based on full cost recovery and in practice – though not in principle- almost no exemptions to BPL are being given. For ambulance services an assured referral transport mechanism is put in place – but at costs comparable to what is available commercially and without any value addition in the form of skills.

Poor systems in place for monitoring outputs or quality.

Contract terms often set so low- that quality and sustainability and worker remuneration are all compromised.

Questions:

Is it duplication if there is in parallel a government provided services or does it lead to a back up and a better continuity in service.

To what extent can systems delivery improve with better contract management inputs to block and district programme managers.

To what extent is such a strategy sustainable- In each of these -should we build in direction of strengthening and sustaining this approach or should we push back to state provided services?

Systems of financial management –

Health Management Information System and its effectiveness.

The HMIS in Bihar has taken a different form and it is important to understand the logic of its development. The most important and most visible of these is the data centers at state and district and block level. At the state level one IT firm has been given a contract to run a monitoring center where about 18 call center type operators daily ring up the mobile phone numbers of all the district data centers and the block data centers and collect information on close to 30 parameters. This they enter directly into a simple screen on the computer. This is computed and the information is fed to the state health society for action. At the district and block level in a room or even in the corner of a room a person usually a young girl operates what is called a data center. This is a computer with fax machine and printer and internet connectivity. These are purchased with her own funds and cost her close to Rs 40,000. She is given a 11 month contract, wherein she is paid Rs 5200 per month and asked to daily respond to the phone from the state and to similarly ring up the blocks below her. She goes around the different sections of the district hospital, collects the necessary information and when the state rings her up she gives the numbers over the phone. This happens every day. This same system of outsourcing at this same rate of Rs 5200 per month occurs at the block level also- though at the end of the month they also submit a block data sheet which consolidates these parameters with one additional parameter- relating to the break up of how many patients each individual doctor attended on.

The strengths of this system seem to be

- a) It gives the state manager the feeling of being able to look at key progress indicators in every district on a daily basis – and though in practice there is not enough occasion to do so- it still is a feeling that is important.
- b) It gives the health provider in the block PHC and district the awareness that he is being watched on a daily basis and even a single days absence will not go unnoticed. In one district the state has already field tested a biometric gadget which would be able to ensure that attendance is not faked.
- c) It acts as a ready channel for the state to contact any district or even block official.
- d) It is not limited to RCH but to health systems as a whole and therefore it gives a lot of emphasis on general and comprehensive care without losing sight of national priorities.
- e) Because it is phone based and daily- and incredible load, the parameters have been pared down to the minimum and it is worth looking at the few that finally made it.

The weaknesses are

- a. There is little evidence that in practice there is any system of making out the gaps and react to it even on a monthly basis, let alone daily. In particular district managers and block managers know that the information has been transmitted- but they would not know the figures or the implications. The exception is on OPD attendance and institutional delivery which everyone refers to and everyone knows well.
- b. There is little dialogue with the NRHM HMIS formats which proceed in parallel. There is as a result of attention to this system, even less attention paid to the HMIS formats and what the data there is indicating.

- c. The data centers in the block and district are really low budget operations and it is difficult to make out how they work at such low margins even as of today, let alone how they would be sustained.

The two other systems in place are the NRHM- HMIS system with its form 6, form 7 and form 9. These do not pass through the data center but they have a staff called data entry operators at the block PHC and the district level. This distinction between data center operator and data entry operator was emphasized to us. These forms are planned for revision. The district reports regular dispatch of these forms to the state level, though at the state level they are not as easily traced and not currently reaching Delhi either as state consolidation or as individual districts. The HMIS system came under the RCH officers.

There is also the RIMS form and the immunization officer told us that they have just completed training in so many districts and would be taking it forward to the other districts. He was not impressed when informed him that the form had been discontinued. He did not argue the point with us but clearly he had an understanding that the RIMS form needed to continue despite recent NRHM efforts to the contrary. RIMS came under the immunization officer and that was distinct from RCH.

It is difficult to decide on the next move but certain steps that could take place is to call the data entry operators and RCH officers to the state and help them understand and use the new formats of HMIS and the need to fill in the web-portal data capturing form. After an exercise of doing so and some more discussion on the potentials of HMIS, the state could consider the software options available and the strategy it needs for integrating its HMIS with the national systems, without disrupting the strengths of their current system.

The Health Sub-center and Community Level Outreach Programmes:

Health sub-centers are sites from which ANMs work. As a rule, with very rare exceptions all sub-centers have an ANM in place and about 60% have a second contractual ANMs in place. There is an intention to fill the remaining also- but the constraint seems to be a lack of ANMs. Also in districts visited some contractual ANMs have been redeployed at higher levels to cope with the increased load of work.

The untied fund has been given, but is not yet utilized. There is poor confidence in use of funds and guidelines are awaited.

The equipment in the sub-centers have not been recently refurbished or renewed. The entire focus of the ANM is now on Muskaan, the immunization programme- and conducting one or two immunization sessions per week. Or about 6 sessions per month. With the ASHA and anganwadi support and incentives built in for all three- Muskaan is making a significant difference. The immunization session is known as the village health and nutrition day, but more often it is simply the immunization day.

Antenatal care has also reported to have improved. The other problem that ANMs were facing is that RCH kits have not reached them. Even vaccines were in short supply for a number of months. However some supply from the PHC supply is provided to them locally and this helps them cope.

The kala azar and malaria spraying operations have been described elsewhere. One important issue is the almost complete lack of both male multipurpose health workers in the sub-center and of supervisors in the sector or even block level. Also of all other cadre of male staff like compounders, dressers etc which usually are seen in additional PHCs levels to provide support to the curative services offered there. Even at the PHC these categories of support staff seem depleted.

Thrust on difficult areas and vulnerable social groups-

There is a need to do more here especially in exemption in user fees , more so for the outsourced services.

The preventive and promotive health aspects with special reference to inter-sectoral convergence and effect on social determinants of health–

There is an important piece of work going on in nutrition rehabilitation programmes.

There is also an emphasis on micronutrient management esp vitamin A. Other interventions were not noted during the brief visit.

Effectiveness of the disease control programmes including vector control programmes–

The state is implementing all national disease control programs. Based on the current burden of disease, three of these programs remain high priority for Bihar and these include, Kala Azar Elimination, Polio Eradication and Leprosy Elimination. Other national programs especially TB and HIV/AIDS also remain important.

Till recently, all disease control programs were being managed by the State Health Society from the state level. The recent decision to shift this responsibility of implementing 4 national health programs (TB, VBD, Leprosy and Blindness Control) to technical divisions in the Directorate of Health Services is a welcome development. However, these divisions do not have financial delegation nor adequate managerial and infrastructure support (Accountants, transport etc) to play this role effectively. As a result, funds flow and supervision of otherwise well run programs like TB have come to stand still during the past 4 months and this issue requires quick resolution.

Kala Azar:

Bihar contributes to over 80% of National kala azar burden and 31 out of 38 districts report kala azar. Being a disease affecting the poorest of the poor, improved kala azar cure reflects effective reach of public health services to the poor. Further, progress made by Bihar remains critical for National KA elimination goal set for 2010 by GOI.

There are two aspects of kala azar control,

- First “*effective case management*” to promptly diagnose all suspected cases using rapid diagnostic kits (RDK) and provide complete treatment so that these cases get cured and remain non-infective to others; and
- Second “*vector control*” by identifying high risk villages reporting KA cases and undertake two rounds of high quality in-door residual spray (IRS) during the months of March/April and

June/July every year. Active case search in these villages is also important to identify new cases as well as those who still remain infective after treatment.

In view of the elimination target, GOI is providing 100% financial support for this program including the spray wages and other inputs such as RDKs, anti KA drugs and other consumables.

Key observations during the field visits:

Case management:

1. The supply of anti KA drugs has improved and none of the facilities visited reported stock-outs. In the facilities visited, compensation for lost wage is being paid and records of payment are being maintained. At district hospital, diet services are also being provided to the patient and one attendant during the hospitalization.
2. However, the supply of pharmaceuticals and other commodities was not consistent and different first line drugs are being supplied at different points. None of the facilities have printed registers, new treatment cards and line listing of cases.
3. There is lot of inconsistency in treatment protocols partly due to inconstant supply and partly due to non adherence to patient-wise allocation of pharmaceuticals at the time of treatment initiation.
4. Another serious concern was non familiarity of treating doctors with the current program treatment guidelines which is a serious lapse. The team noted that Amphotericin B is being given daily in one facility instead of alternate days recommended under the program and instances where half way through the treatment, the drug was changed from SAG to miltefosine were also noted.

Vector Control:

1. In the districts visited, only one round of spray operation was undertaken and the quality was poor due to lack of adequate supervision. As the spray wages could not be paid, the second round of IRS could not be undertaken.
2. In a village that reported increase in KA cases during this year (from 16 to 28) under Paroo PHC, no spray operations were undertaken this year as sanction for spray period was over and this village could not be covered during the sanction period. This raises serious concerns in applying the criteria for identification of high risk villages and prioritizing IRS operations in villages reporting increase in cases.
3. Social mobilization of communities for IRS to ensure full compliance of all households and monitoring the quality at village level remains a priority and ASHAs could be considered for this role.

Program Management:

1. The state has recently designated a state program officer located in Directorate of Health services. However, he is new to the program and does not have much infrastructure and staff to manage that high priority national program.
2. Delayed payments to spray workers was due to delayed release of funds from the centre consequent to non submission of utilization certificates for FY 2006-07 and 2007-08 and state's inability to use the funds available due to recent changes in program management.
3. To strengthen the program monitoring and supervision at district level, a new cadre of Kala Azar Technical Supervisor (KTS) has been approved by MOHFW. Each endemic district is supposed to have 6 such supervisors to support effective vector control and case management. But the state has not so far taken required approvals and none of the preparatory actions for recruitment and training have been started.

Tuberculosis:

In one of the districts visited the team was informed that the case detection rates have come down to less than 50% due to shortage of laboratory consumables. This is attributed to non availability of funds for operating costs during the last 4 months. However, cure rates of over 80% among the detected cases is being sustained and no shortage of anti TB drugs was reported. Contractual lab technicians recruited under TB program were available in all Microscopy centers visited. However, as noted in the last CRM, these TB lab technicians were not performing the general laboratory services. This is an important integration issue needs to be addressed at the national level.

Blindness Control:

The ophthalmic assistants were available in few Block PHCs and they are undertaking screening. However, as pointed in the previous CRM, cataract surgeries are not being regularly undertaken at the district hospitals due to various reasons such as defective operating microscope or non availability of staff. This aspects needs to be carefully reviewed at the state level by reviewing implementation bottlenecks at each district hospital and a time bound action plan could be prepared to make all these facilities offer cataract surgeries during the next one year.

Leprosy control:

In the facilities visited, no shortage of leprosy drugs was reported. However, reporting of 4 cases under 14 among the 41 cases reported by the Block PHC Sarayia is a concern and requires follow-up by the district leprosy officer. To identify the new cases more active involvement of ASHAs may be considered in future.

Integrated Disease Control Program:

This program is being managed from the state health society and the additional CS has been designated as district surveillance officer. In the districts visited the team noted that so far the progress has been very slow. The reporting units have not been listed and no training activities have been undertaken. The IT inputs envisaged under the program have been supplied, but not yet made functional as the infrastructure is yet to be created.

Suggestions:

1. Enhance functional coordination between the state society and the program divisions immediately. The funds flow for all programs should be from state society to district society as recommended by NRHM in consultation with the Directorate of health services. The program management units from the Directorate should be accountable for providing supportive supervision and technical guidance to (a) ensure that annual district plans are prepared as per the national program guidelines; (b) provide supportive supervision covering technical aspects of the program; and (c) undertake state level activities like recruitment of contractual staff, training, quality assurance and IEC.
2. Some pro active actions are required at all levels (centre, state and district) for KA elimination as progress in Bihar is critical for achieving the National goal. These include completion of recruitment of Kala Azar Technical Supervisors by January 2009, preparation of annual line listing of Kala Azar cases and GIS maps to identify and monitor high risk villages for IRS operations, and printing and distribution of new treatment cards, laboratory registers and treatment guidelines. Also, strengthening partnership with agencies already actively involved in KA treatment and awareness generation activities (MSF and Sitram Memorial Trust) needs to be seriously considered. The program can immensely benefit from the IEC tools developed by these organizations to implement local IEC programs and train ASHAs and medical officers. Similarly, the NVBDCP should consider providing anti kala azar drugs to these institutions treating over 2000 cases each every year as they already share list of patients treated.
3. Ensure active involvement of ASHAs and Village Health and Sanitation Committees is important for promoting community level actions to control diseases as these institutions get established.
4. Start rolling out IDSP by identifying the reporting units and training the field staff. To start with the laboratories attached to 6 medical colleges could be used as reference labs with each lab covering around 6 districts.

Performance of Maternal Health, Child Health and Family Planning Activities seen in terms of availability of quality of services at various levels

The mission found that the operationalisation of block level PHCs and the increased focus on additional PHCs was providing a platform from which access to maternal health, child health and family planning services had been expanded. Service utilization for some services is increasing as is the range of services which are accessible. However, unmet need remains significant and the challenge now is to broaden

the range of services available, as well as to develop mechanisms for monitoring and improving quality at different levels.

Maternal health

The proportion of births attended by medical personnel is increasing due to the remarkable increase in deliveries at PHC and district level. For some PHCs this was already leading to a congestion of existing beds, meaning that women were not able to stay for the full 48 hours post delivery. Over the medium term some APHCs should be identified to be upgraded to perform deliveries, in order to reduce congestion at block PHC level. In doing this attention will need to be paid to availability of referral transport at the APHC in the event of complications. A call-out ambulance facility from the block PHC could be contracted to cover this. The skills of nurses in these APHCs will require development through SBA training.

The increase in institutional deliveries is clearly linked to payments under the JSBY scheme. Although the team that traveled to Gaya found that JSBY payments appeared to be being made relatively promptly, in Vaishali there had been significant delays, with funds not having been available to make payment for some months after February 2008. Even where funds are available, in many facilities families are required to come back on certain days to receive payment.

PPP arrangements to contract ambulance facilities which are in place at block PHC level are providing increased access to referral transport in the event of complications.

Some issues were noted with regard to availability and quality of services. Basic emergency obstetric care is not fully available at block PHC, with lack of some supplies (magnesium sulphate, oxytocin) observed, and limited roll out of training on skilled birth attendance. Availability of comprehensive emergency obstetric care, as well as MTP, is limited to district level due to lack of other FRUs. Yet, at district level, despite increased referral transport, the expected increased provision of c-sections was not evidenced, indicating substantial remaining unmet need and underutilized capacity at that level. Some staff with specialist skills are currently placed in facilities where they are unable to use these skills, e.g. in Muzaffarpur some medical officers trained in EmOC were posted in additional PHC, and one MO with a diploma in anaesthesia was posted at APHC level.

Medical colleges are providing some increased capacity for EmOC within the system, and their involvement in governance of NRHM could be strengthened through linkages to district health societies. Use of partographs for monitoring the progress of labour has not yet been begun in the facilities visited.

Child health

The Muskan Ek Abhyas immunization programme had reached through to sub-centre/AWC level and appeared to be operating well. Fixed weekly immunization days have been being held in AWCs and sub-centres. Courier systems appeared to be helping support delivery of vaccines down to sub-centres/AWCs. However, the cold chain is in need of further extending beyond the block level if levels of immunization coverage are to be enhanced further. Also, the team noticed that deep freezers are

currently out of order with only ice lined refrigerators available. This will impact on the quality of vaccines (e.g. measles) which need to be stored in deep freeze. In addition, immunization cards seemed to be out of stock in some places and not actively used for monitoring drop-outs.

However, other child health interventions are not consistently emphasised, and supplies (including ORS) were not uniformly available in all centres visited. ASHAs have been selected and trained in the first module in most places, but village health and nutrition days are not taking place, so that first contact with health services and the opportunity these provide for improving health care seeking for childhood illness and for providing behaviour change communications is constrained. As VHNDs are rolled out, the fixed day immunization service could be used as a means to actively provide information and education on other child health issues.

There is a need to ensure essential knowledge and skills of ANMs and other staff, through accelerating the roll-out of IMNCI training. There is an urgent need to calculate the training load for IMNCI training, and to build up district level training teams in each district through training of master trainers. Existing capacity in nursing training centres could be better harnessed to accelerate IMNCI training. In each district the district hospital has sufficient caseload to provide practical training opportunities. Refresher training for ANMs on entry to service which is given in Muzaffarpur could be expanded to other districts.

A very low level of newborn care was observed, pediatrics skills were limited and equipment for facility based care was uneven. The MAMTA scheme has been established to augment nursing capacity at district level for support to behavioural interventions for newborns, and to promote breastfeeding. However, the skills of MAMTAs need to be ensured through induction training, to ensure that they have the right knowledge to impart to mothers.

Family planning

Minilap services were observed to be available on a camp basis through block PHCs, and on a routine basis in district hospitals, and seemed to be popular. NSV services were also seen to be available at district level. Spacing methods however had very patchy availability, with gaps in availability of condoms and oral pills at APHC level, and little availability of IUDs – indicating there is likely to be significant unmet need. IUD training yet to roll out at state level, though training of trainers is planned. Nurses and ANMs had basic knowledge of family planning, but did not appear to be actively building demand, or to have confidence and skills in IUD insertion.

There are clear opportunities existing for post partum counselling, with the increase seen in institutional deliveries at PHC level. FP supplies should be integrated into work to strengthening commodity supply chains, and warehousing so that spacing methods supplies are routinely available.

Other issues

For all services the current human resources capacity could be better utilized to expand the range of services available. This will require attention to building up of district capacity to roll-out training and to strengthening systems to provide supplies and minimize stockouts, for all supplies. Infrastructural

capacity will come under increasing pressure, and PHCs where a large number of births happening should be prioritized for improvements.

At the same time mechanisms for monitoring and improving service quality need to be developed and consolidated. Internal monitoring systems are well developed, with data entry officers in most block PHCs, and at district level. Emphasis on selected indicators – for example number of c-sections - could help identify bottlenecks in provision and uptake of emergency obstetric care.

Over the medium term external methods of reviewing service quality are in need of development. Although a decision has been taken in principle to extend the mandate of district quality assurance committees to include other aspects of RCH service delivery, committees are infrequently meeting. There is an opportunity to use protocols available from national pilots conducted under RCH II to expand the functioning of these committees.

Finally, other than through the incentive of JSBY, interventions to increase demand, improve care seeking, and change behaviours are at a very basic stage, and village health and nutrition days are not taking place. Accelerating ASHA and IMNCI training and mentoring will be a major part of this, and existing training capacity could be better utilized. At the same time, BCC and IEC materials or job aids for ASHAs and ANMs are not currently available. This could be an area where the state level capacity for contracting in services - e.g. development and printing of materials - could be used.

Suggestions

- Identify districts where JSBY funds have suffered gaps and ensure payments are brought up to date.
- For block PHCs, calculate the bed requirements for current and projected numbers of institutional deliveries, taking into account a 48 hour post partum stay in the facility, in order to prioritise necessary investments in increasing the availability of labour wards.
- Identify APHCs for strengthening to perform institutional deliveries, and plan for skills upgradation and provision of referral transport.
- Rationalise placements of staff with specialist skills for maternal health (anaesthesia and EmOC) so that they are placed in facilities where they can use their skills.
- Ensure the availability of immunization cards in all districts.
- Develop district training teams to roll out IMNCI training, two teams at district level could be called out alternately to minimize the opportunity costs of training.
- Integrate family planning supplies (for spacing methods) into supply chains, to ensure their availability at all levels.
- Develop small quality assessment teams to report to district quality assurance committees on the quality of services.
- Contract in support to the development of job aids and IEC materials to improve the counseling ability of ASHAs and ANMs.

(i) Assessment of programme management structure at district and state level –

The societies of the disease control programs have been merged with the health society at state and district level. Rogi Kalyan simities have also been constituted and registered in most of the institutions, however, village health and sanitation committees are yet to be constituted, though a joint account has been opened for SHC untied funds with ANM and female ward member as co-signatories. Health societies and RKS have started functioning with a secretarial support of PMUs.

Program management units have been established at state, district and block level with the full time contractual appointment of a program manager and an accountant. The data management has been contracted out in such a way that computer operator and computer with printer and internet connection is available uninterrupted. These units are functioning and have taken charge of executing the national rural health mission under the direction of health society.

There are two accounts at the PHC level, one for the programs and the other for the RKS which are operated by the MO I/C and first MO. The transfer of funds to the program account is for various disease control program. At times it become difficult to identify the funds for specific programs as at the time of fund transfer name of program is not clearly mentioned for which the fund was transferred.

At the state level, the funds for the three disease control programs, i.e., TB, Leprosy and NVBDCP have been transferred to the Directorate of Health Services. Joint bank accounts have been opened; however, the guidelines for operating these accounts have not been decided by the committee appointed for this purpose, resulting in non-utilization of these funds in the last three months. The coordination between State Health Society and Directorate of Health needs to be enhanced for consolidation of the recently achieved gains. The capacity of the Directorate of Health Service should be strengthened for planning, implementation, supervision, monitoring and evaluation of the health services.

The capacity for program planning is limited at district level. An attempt was made to prepare the plans at or below district level by an outside agency in Gaya, however, these plans were not available. There is very little effort for planning at the local level. Most of the activities have been planned at the state level and are handed down to lower formations for implementation.

The performance appraisal of institutions/organization by ranking, using objective criteria, is a step in the right direction which needs to be displayed on the website to encourage community monitoring. The performance of HSC and PHCs for routine immunization (*muscan*) has also been linked to financial incentives. Frequent appraisals of JSY have also pushed up the performance of institutions.

Supportive supervision has been successfully operationalized for routine immunization (*muscan*), which can be expanded to include other critical parameters. The provision to hire a vehicle at each PHC for supervision of *muscan* for few days in a week is a welcome addition. Daily reporting to the data center from PHC to the state about the availability of staff, supplies and performance reports of the outputs is a novel supervisory mechanism. However, it can not replace the traditional onsite visits by supervisors to assess the cause of problems for finding appropriate solution jointly with the local staff. Very few supervisors, i.e., health inspectors and lady health visitors exist at present due to vacancies. The capacity

of DPM and BPM unit staff also needs to be built for supportive supervision and a plan for supervision needs to be made and circulated.

Ancillary services such as ambulance, cleaning, laundry, meals etc. have been contracted out. The terms and conditions of the contracts formulated at the state are executed by the districts for the PHCs. The contracts for the meals have not yet become operational as no one at the local level has agreed to provide food within the cost specified at the district level. The laundry contractor washes only cloths that do not have blood on it, hence these have to be washed by hospital staff, which may not be in position, leading to less use of hospital bed sheets and blankets. The cleaning contracts some time only include the cleaning of open areas only leaving the unused parts of the campus of the hospital/PHC full of wild weed growth as well as the dusting/cleaning of equipment, rooms etc. PHC managers and MO in-charge do not feel empowered to manage these contracts, hence, supervisory mechanisms from district level is also required.

Large number of un-repairable equipment and inhabitable buildings are occupying lot of space at PHC and district hospital. The condemnation board has not held meetings for a long time. Construction and maintenance of buildings is the responsibility of PWD rather with the Health Department leading on to delays in construction and maintenance.

Suggestions

- I. District Health Society as well as the Rogi Kalyan Samiti of the DH should have governing councils and executive committees. CS should be the chairperson for executive committee which can meet more frequently to take decisions. Governing councils should delegate some of the functions such as purchases upto a certain limit to the executive committee.
- II. A copy of the contacts with terms and conditions must be with the local in-charge and his/her capacity should be built to manage these contracts including how to assess/record performance for imposing penalties or for terminating the contracts.
- III. A structured supervisory mechanism needs to be specified from state to district and from district to block level. Vacancies of supervisory cadre such as health inspectors and lady health visitors should be filled. Senior ANMs can be given this responsibility in the interim period after undertaking a short-term training.
- IV. Administrative procedures for condemnation of un-repairable equipment and buildings need to be simplified and delegated to various levels.
- V. Instead of outsourcing plan formulation to an outside agency, capacity of health services should be strengthened so that they can prepare their plans at various levels.
- VI. The coordination between state health society and directorate of health services needs to be enhanced. The capacity of the state health directorate for programme development and management should be strengthened.

NRHM COMMON Review MISSION

Tour Report Team A

26th November to 5th December 2008

THE SCHEDULE

On 26th November 2008 the Team reached Patna & participated in a meeting at the office of State Health Society, Bihar (SHSB). Detailed presentation was made by Sri Abhay Kumar Singh, the Executive Director, SHSB, Patna regarding the activities undertaken and planned by the SHSB. The meeting was also attended by Sri Sanjay Priyadarshi, AO, SHSB, Dr. Varsha Singh, Consultant (MCH), SHSB, Dr. A. K. Tiwari (I/c IDSP & Infrastructure), Dr. Gopal Krishna (I/c State Immunization Division), Ms. Rashi Jaiswal, SPM, SHSB, Mr. Ranjit Samaiyar, Consultant, NRHM, SHSB, Mr. Pranav Kumar, Consultant, ASHA, SHSB and Dr. Manoranjan Jha, Sr. Medical Officer, ROHFW, GOI, Patna.

In the afternoon the Team members visited the State Level Data Centre (outsourced) at SHSB & reviewed their work.

It was informed to the team that as per the decision of Govt. of Bihar, four (4) National Programmes (NVBDCP, RNTCP, NLEP & NPCB) have been shifted from SHSB to The Dte. of Health Services, Govt. of Bihar for its implementation in the state. The Director-in-chief Health Services, Govt. of Bihar (Dr. S. P. Singh) and Joint Director-cum-State Programme Officer, NVBDCP (Dr. R. N. Pandey) met the team in the afternoon and briefed about the status of implementation of the said national programmes. It was learnt that the respective funds of these four national programmes were transferred to another new joint account (Operable jointly by The Director-in-chief Health Services, Govt. of Bihar & the respective SPOs), but, they had still to get the appropriate G.O. to operate the same and this was expressed as the main hurdle in proper implementation of these programmes in the state. They also elaborated on the structure of Dte. of Health Services in Bihar and its reporting system. However, both the officers appreciated well about the positive changes occurring in Health Services Deliveries under NRHM in the state. They also acknowledged the improved faith of people in the public health system in Bihar.

Team – A: (comprising of Dr. T. Sundararaman, Executive Director, NHSRC; Dr GNV Ramana, World Bank & DR P.K. Srivastava, Joint Director, NVBDCP) visited Muzaffarpur and Vaishali Districts along with Dr. R.N. Pandey, SPO, NVBDCP, Bihar and Mr. Pranav Kumar, Consultant, ASHA, SHSB.

Field visit of Team – A:

Muzaffarpur

- Sadar Hospital : There was large number of patients attending the OPD, which was expressed mainly due to the availability of drugs and services. The innovation made by the state in diagnosis was by outsourcing, however, the space was provided for the purpose in the premise. The labour room, Operation Theatre etc. needs attention for proper functioning. It was informed that efforts are being made for improvement. In

general the cleanliness inside the wards was satisfactory which was also said to be outsourced. However, the waste disposal system needs improvement as the used syringes and cotton and other medical wastes were littered here and there.

- ANM Training School: has six faculties and only 3 students were undergoing the training. This institute requires immediate attention as the living condition in the building is very bad.
- The district is highly endemic for Kala Azar (in all 14 PHCs) (till October - 2008 – 3082 Kala-azar cases were reported & 33 deaths reported, which was the highest number of KA deaths reported from any district this year in the state). In the district Oral anti Kala-Azar drug (Miltefosine), Inj. SAG, Inj. Amphotericine-B and rK39 diagnostic test for KA is available. The increase in cases are said to be mainly due to free availability of drugs in public health system along with free diet to the admitted patients and one of the attendant and payment of loss of wages (@ Rs. 50 /- per day) from the local RKS. However, the payment was held up due to non-availability of funds.
- IRS against KA was planned for two rounds in **100** highly affected villages. 1st round was undertaken in March 2008. However, the second round (scheduled in June 2008) was not done properly.
- Bochaha PHC : has population of 2,20,000 with three APHCs, 26 HSCs and 125 villages. 184 ASHAs have been recruited.
 - Anti Kala Azar drugs and rK39 was available adequately in the PHC. The health worker is trained and is being utilized for use in rK39 as well as record keeping. The treatment card was maintained and kept at the PHC, but, the treatment is being provided not as per drug policy and due to shortage of supplies, treatment regimes are being changed in between.
 - Infrastructure improvement was visible and maintained in the PHC along with water supply and toilet facilities.
- APHC- Kuffin: is running in a donated building by the local person. The ASHA and ANM were present at the time of visit (at 07.00PM). On an average 50-70 out patients are being seen daily and out patient records were well maintained. ASHAs were being involved in all the programmes.
- APHC – Karza was visited, but, to the surprise it was not opened till 9.30 AM on 28th Nov. 08 and not even a single staff was present. However, while returning from the field, it was revisited and the enquiries were made with the doctor, ANM and other staff. The team showed it's displeasure on the functioning of the APHC.

- The newly constructed building of PHC – Marwan was also visited which was earlier a HSC of Kanti PHC. It was informed that it will be made functional shortly.
- AWC of Karza village was also visited and it was informed that the immunization was over on 1st Friday of the month.
- Pokharaira HSC of Saraiya PHC was visited and found to be closed.
- Pokharaira village was visited which has a population of about seven thousand. The ANM and ASHA were present in the village. In this village the KA patients, who completed the treatment were met and the treatment card was seen.
- Referral Hospital, Saraiya was visited where Routine Immunization was going on. It was informed that DPT and TT vaccines were not available. Treatment of KA patients is being provided, but, some are treated with Miltefosine and some with Inj. SAG depending upon the availability of the drugs. The Patient wise treatment boxes were not maintained at the centre, which was advised to be followed strictly to avoid any incomplete treatment. Ophthalmic assistant was present and the cataract cases were being registered for operation. Out of 41 leprosy cases registered at the Referral Hospital, Saraiya, 4 cases were of less than 14 years of age.
One Nutrition rehabilitation Centre (NRC) was running at Referral Hospital, Saraiya with the support of UNICEF, where in a planned way malnourished children from the age of 1 to 5 years along with their mothers were admitted for 15 days and supervised nutrition and antihelmenthic (Albendazole) provided to them. Mothers are oriented for further nursing at their homes.
- At Referral Hospital, Saraiya – cum – PHC Saraiya, the training for the first module of the ASHAs were going on. The group of ASHAs were found to be from all the communities in the area.
 - Paru PHC has population of 3,16,000 with 5 APHCs, 30 HSCs and 126 villages. 264 ASHAs have been recruited.
 - Anti Kala Azar drugs (60 vials of SAG and 120 vials of Inj. Amphotericine –B) and rK39 was available adequately in the PHC. KA affected villages are 68. 3 surveys have been done and one round of focal IRS with DDT was done from 16th June to 04th July 08. Only 7 villages could be sprayed out of 41 villages planned due to the problems in payment of wages of the spray workers.
 - Labour room was in a very bad state. General cleanliness was also not satisfactory.
- APHC – Dawoodpur: one doctor was available and the waste disposal system needs improvement as the used syringes, cotton and other medical wastes were littered here and there.
- HSC: Phulwariya : was visited and it was revealed that in the same building AWC was also functioning. The sevika was present but, the ANM was not present.
- Village Bhagwanpur Sakara of Bhatwaliya panchayat where 28 KA cases were reported in 2008 till date as against 16 cases in 2007. The 4 patients were met out of which 2 children

were from one family and one was treated with SAG while another with Miltefosine. The treatment card was verified. IRS was not done in this village.

- Kala Azar Medical Research (A unit of Sitaram memorial trust) was visited which is running a hospital of 100 beds. The treatment is given to all patients as In-patient, ensuring the complete treatment. It was also informed that in summer they get about 50 – 60 OPD cases everyday, whereas in winter it is about 5- 6 cases per day and out of these about 50-60% are of Kala Azar. They use Amphotericine – B as the drug in all cases (except Miltefosine in some). The manager requested for the free drug from programme for facilitating free treatment.

The DM, Muzaffarpur, Sh. Vipin Kumar, IAS was briefed by the team about the visit and the situation of the health services deliveries in the district. He was informed that though by and large the improvement in infrastructure, facility and people's confidence in public health facilities have improved considerably, there are certain areas which needs immediate attention such as – IRS in KA affected villages, maintenance of Patient wise boxes of drugs for treatment of KA, ensuring cleanliness and waste disposal system in hospitals/ PHCs and proper utilization of funds available unspent with the PHCs.

Vaishali (29th Nov. 2008) :

- I. Vaishali PHC: has population of 1,75,000 with 3 APHCs and 19 HSCs.
- m. MSF, an NGO is working under MoU for treatment of Kala Azar cases with Inj. Ambisome (Liposomal Amphotericine). It was informed that drug and rK39 was provided by this NGO adequately in the PHC. 19 patients were undergoing treatment for KA in the PHC. However, only one was seen during the visit. The payment for loss of wages was being done.
- n. PHC – cum – Referral Hospital, Lalganj caters to the population of 254228 with 2 APHCs, 31 HSCs and 21 Panchayats. It was revealed that 63 KA patients were reported. The treatment with Amphotericin B was being given daily instead of alternate days. The treatment cards were not maintained. At this site, the vials were found to be kept in fridge which was appreciated.
- o. Sadar Hospital : The functioning of MSF – the NGO was seen who were providing treatment well. The separate ward for Male, female and children were provided in sadar hospital, Hajipur. They are doing health education in certain areas. They are also

providing two bednets (Permanet) one at the time of hospitalization and another at discharge.

- p. Central District Drug Ware House was also visited and the records of drug was seen which was maintained in the registers. Suggestions were given for using BIN cards for stores.

Officials met by Team A

1. Sri Abhay Kumar Singh, the Executive Director, SHSB, Patna
2. Sri Sanjay Priyadarshi, AO, SHSB,
3. Dr. Varsha Singh, Consultant (MCH), SHSB,
4. Dr. A. K. Tiwari (I/c IDSP & Infrastructure)
5. Dr. Gopal Krishna (I/c State Immunization Division)
6. Ms. Rashi Jaiswal, SPM, SHSB,
7. Mr. Ranjit Samaiyar, Consultant, NRHM, SHSB,
8. Mr. Pranav Kumar, Consultant, ASHA, SHSB
9. Dr. Manoranjan Jha, Sr. Medical Officer, ROHFW, GOI, Patna
10. Sr. S.P.Singh, Director –in-Chief
11. Dr. R.N.Pandey, Joint Director, VBD
12. Dr. B.Paswan, CS, Muzaffarpur
13. Dr.B.K.Varma, DMO, Muzaffarpur
14. Sh Asit Ranjan, DPM, Muzaffarpur
15. PHC MO/IC Bochaha
16. I/C Referral Hospital Sarrayia
17. Dr. Umesh Chand Sharma, MO/IC PHC Paroo
18. Sh. Sanjeev Prasad, Manager, Kala Azar Research
19. Dr. Deepak, Medcal officer Kala Azar Research
20. Sh Vipin Kumar, District Magistrate, Muzaffarpur
21. Dr. A.K.Sinha, CS, Vaishali
22. Dr. Mahanand Singh, Mo Vaishali
23. Dr. Anil Kumar sinha, MO
24. Dr. Poonam Sinha, MO
25. Dr. Vasant Kumar singh, MO
26. Dr. Anju Sinha, MO
27. Dr. S.B.Prasad, MO/IC, Lalganj
28. Dr. Ganesh Singh, MO
29. Ms Renu Kumari, Block Health Manager