

Dissertation

In



**Situation Analysis of District Hospital, Banka
& FFH Certification**

A Dissertation Proposal for

Post Graduate Diploma in Health and Hospital Management

by

**Anand
PG/10/004**



**International Institute of Health Management Research
New Delhi - -110075**

Date: 27-04-2012

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February - May, 2012

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March 2012

Certificate of Approval

The following dissertation titled “SITUATION ANALYSIS OF DISTRICT HOSPITAL, BANKA & FFH CERTIFICATION” is hereby approved as a certified study in management carried Out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of **Post- Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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Certificate from Dissertation Advisory Committee

This is to certify that **Anand** a graduate student of the **Post- Graduate Diploma in Health and Hospital Management**, has worked under our guidance and supervision. He is submitting this dissertation titled “**SITUATION ANALYSIS OF DISTRICT HOSPITAL, BANKA & FFH CERTIFICATION**” in partial fulfilment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Dr. Anupama Sharma

Assistant Professor

IIHMR

New Delhi

Date

Mr. Rajeev Kumar

MCH Expert

DFID, B-TAST

Patna, Bihar

Date

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ABBREVIATIONS

ANM	Auxiliary Nurse and Midwife
ANC	Antenatal care
APH	Antepartum haemorrhage
ARI	Acute Respiratory infection
BEmONC	Basic Emergency Obstetric & Neonatal Care
BEmOC	Basic emergency obstetric Care
BP	Blood Pressure
BSU	Blood Storage Unit
B-TAST	Bihar Technical assistance Support Team
CS	Caesarean Section
DFID	Department for International Development
DH	District Hospital
DOTS	Directly Observed Therapy Short course
DMC	Designated Microscopy Centre
EmOC	Emergency Obstetric Care
FFH	Family Friendly Hospital
FFHI	Family Friendly Hospital Initiative
FP	Family planning
GoI	Government of India
GoB	Government of Bihar
G & O	Gynecology & Obstetrics
GDA	General Duty Attendant
Hb	Hemoglobin
ICTC	Integrated Counseling & Testing Centre
IMNCI	Integrated Management of Neonatal & Childhood Illnesses
IEC	Information Education & Communication
IMR	Infant Mortality rate
ISO	International Organization of Standardization
JSY	Janani Suraksha Yojana
LR	Labour Room
LT	Laboratory Technician

LHV	Lady Health Visitor
LBW	Low Birth weight
MMR	Maternal Mortality Rate
MNCH	Maternal, Neonatal & Child Health
MVA	Manual Vacuum Aspiration
MTP	Medical Termination of Pregnancy
NHSRC	National Health System Resource Centre
NRHM	National Rural Health Mission
NSV	Non-scalpel vasectomy
OT	Operation Theatre
OPD	Out-Patient Department
PNC	Postnatal care
PPH	Postpartum hemorrhage
RH	Referral Hospital
RCH II	Reproductive and Child Health Programme Phase II
RNTCP	Revised National Tuberculosis Control Programme
SWASTH	Sector wide approach for strengthening Health
SBA	Skilled Birth Attendant
SNCU	Special newborn care Unit
TB	Tuberculosis
TU	Tuberculosis Unit

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ABOUT DFID



DFID (DEPARTMENT FOR INTERNATIONAL DEVELOPMENT), UK

Introduction:

Department for International Development (DFID) was set up in 1997, it made fighting world poverty its top priority. This marked a turning point for Britain's aid programme, which until then had mainly involved economic development. In its manifesto the government elected in May 1997 pledged to create a new department for international development headed by a cabinet minister. Previously the aid programme was managed by the Overseas Development Administration (ODA), a wing of the Foreign and Commonwealth Office. Among its key objectives, DFID set out to make global development a national priority and promote it to audiences in the UK and overseas, while fostering a new 'aid relationship' with governments of developing countries. Two acts of parliament have since helped to put development higher on the national agenda. The International Development Act 2002 clarified the purpose of aid spending as poverty reduction; while International Development (Reporting and Transparency) Act 2006 defined DFID's annual reporting to Parliament through its Annual Report.

- The Department for International Development (DFID) is created in May 1997 as a separate government department led by a cabinet minister.

Area of concern in India

- | | |
|----------------------------------|-----------------------------|
| • Agriculture | * Health, general |
| • Banking and financial services | * Industry |
| • Basic education | * Population Policies |
| • Business and other services | * Support NGO |
| • Construction | * Transport |
| • Disaster prevention | * Water Supply & Sanitation |
| • Energy | |

❖ Currently 70 projects are in the flow in India in above written areas of -concern.

Area of concern in health- Bihar

SWASTH (Sector wise Approach to Strengthening Health)

INTRODUCTION:

It is the convergent actions from at least three services delivery departments namely Health, Social welfare, Public health engineering department(PHED). This programme is based on wide consultation with UNICEF and water Aid. It also takes account of NRHM, ICDS and the Accelerated Rural Water Supply Programme. The duration is 6 years and is divided into three phases of two years each.

Goal:

“Increased use of Quality,Essential,Health,Nutrition,Water and sanitation services especially by poorest people and excluded ones.”

Funds:

The whole fund is funded by DFID itself. The total value is £ 145million. In this£ 145million, Upto £120 million is extended for financial aid and remaining £20 million is for technical co-operation fund.

Social Appraisal

The program will improve the quantity and quality of services available to the poor and excluded groups, reduce gender differentials and empower communities to demand services.

- Build accountability
- Tackle violence against women
- Ensure convergence at community level
- Change household practices
- **Improve access and quality**

During my tenure of internship period i was posted in Banka district of Bihar, where i have worked on project improve quality government facilities – DH Banka, Referral Hospital Amarpur & Bounsi & PHC Barahat for FFH certification.

Role - FFHI Consultant, to improve the quality of the facilities & to conduct weekly meeting.

Learning – *

- How to do liasioning with the government sector , PRI
- Understanding of the Fund flow from State level to HSC level
- How to utilise available fund (procedure)
- Understand the work of RKS

ABSTRACT

Introduction

Government of Bihar (GoB) in its bid to bring about a paradigm shift in healthcare delivery system across the state has undertaken initiative for quality improvement in the public health facilities with the active technical assistance of National Health Systems Resource Centre (NHSRC) & Department For International Development (DFID)- B-TAST, a technical support wing of Ministry of Health & Family Welfare, Govt. of India & DFID respectively.

Quality improvement in Public Health Facilities is to be initiated through implementation of FFH, ISO, etc Minimum Quality Essential Hospital Service Package Management Systems (MQEHSP) as per the FFH guideline & ISO 9001:2008 standards and the Indian Public Health Standards (IPHS).

Aim:

To build the system leading to Minimum Quality Essential Hospital Service Package Management Systems of the District Hospital, Banka for achieving FFH certification status.

Objectives of the study are:

1. To assess compliance to FFH standards
2. To identify gaps & prepare problem bank in all departments of the hospital.
3. To prepare action plan to fulfill the gaps, if any.

Methodology:

Methodology of the study includes the exploratory / descriptive type of study: there was an exploratory type of study by reviewing existing processes. And there would also be focussed group discussion with employees of the hospital. Quantitative study: this was done on the basis of checklist and datasheet.

Results and Recommendations

The study shows the gaps of each department of the hospital which include the process gaps, infrastructure gaps, equipment gaps and manpower gaps for the quality improvement for the FFH certification of the district hospital Banka. Also study includes the recommendation and action plan for the fulfilment of the gaps of the department. The result also includes the status of the compliance and the statutory requirement of the district hospital and its status for the quality improvement process.

Conclusion

Special consideration on gaps of the department is given and action plan is prepared and some of action taken by the hospital itself. But need to be monitor by the hospital's internal of expert consist of Matron , Resident Medical Officer, Civil surgeon and Nursing In Charge. It will help for the quality improvement process of the district hospital Banka as well as to get the FFH certification as soon as possible to become the first hospital in India to achieve this certificate.

CHAPTER- 1.0

INTRODUCTION

1.1 INTRODUCTION

Health status of population is one of the significant indicators of social and economic well being. Bihar, as one of the empowered action group states as well as 3rd most populous state of our country, continues to share a number of characteristics with other backward states of India such as high infant mortality, low immunization of children and expectant mothers, high mortality due to infectious and contagious diseases, high maternal mortality, and low institutional delivery. These coupled with poor accessibility and availability to health care facilities and high costs of treatment by households have made all achievements in health sector insignificant. Despite the National Rural Health Mission (NRHM) and Government's commitment to improve the availability of and access to quality health care by people, especially for those residing in rural area, the improvement in public health care services in the states has not shown marked improvement in public health indicators.

Despite progress, Bihar continues to have very high maternal mortality, infant mortality rates, high total fertility rate (TFR) & suffers from a high burden of communicable diseases. Bihar's MMR at 312 (RGI 2004-2006) is higher than the national figure of 254, IMR is still high at 56(SRS 2008) and Neonatal mortality rate stands at 31(SRS 2007).The Total fertility rate in Bihar remains very high at 3.9.

Ensuring delivery of quality reproductive and child health care services and services for prevention & control of major communicable diseases through the existing network of public health facilities and outreach sessions/camps is a priority area for Government of Bihar under National Rural Health Mission (NRHM)/RCH II programme. Major challenges include critical gaps in health infrastructure and manpower.

Everytime we are assessing the facility & coming with the almost same answer requirement of Human resource & infrastructure. Every time government or any other development partner doing the handholding & bringing the facility one step ahead in terms of quality. But these processes gradually takes a very long time as well as need additional financial resources which is also very important for the healthy society. The burden of treatment and care, thus increasing so requirement of self sustainable system is very much required & ensuring minimum quality standard is very much important to give best services to the people which will make healthier society & will also help into decrease the poverty.(25 % people are coming into BPL category

because of out of pocket expenditure on Health issue- source –Tendulkar Committee). So concept of FFHI is brought into picture to ensure the optimum utilisation of the available resources & also helping the facility to upgrade the quality of the service & preparing the facility for getting certification like ISO/NABH etc. The challenges are to make the public health system accountable, affordable and accessible by improved management of resources and community action. Health system is a set of inter-connected parts that must function together to be effective.

1.2 OBJECTIVE

General Objective:

This study is an attempt to study the situation of health infrastructure at District Hospital, Banka District Bihar to develop the self sustainable model of working & for optimum utilisation of the available resources. Because Banka district is lagging behind & situated in the border of Jharkhand & also situated very far from the capital of both state so, responsibility on the shoulder of this hospital is quite high.

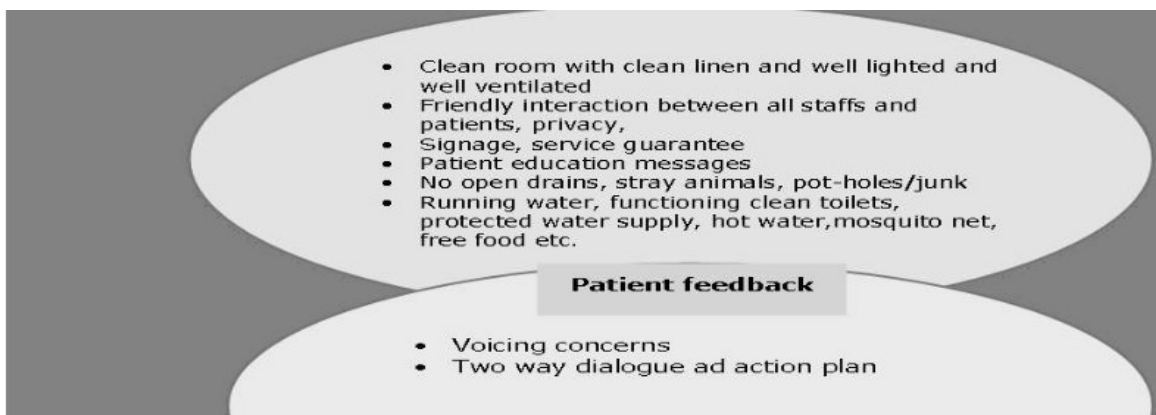
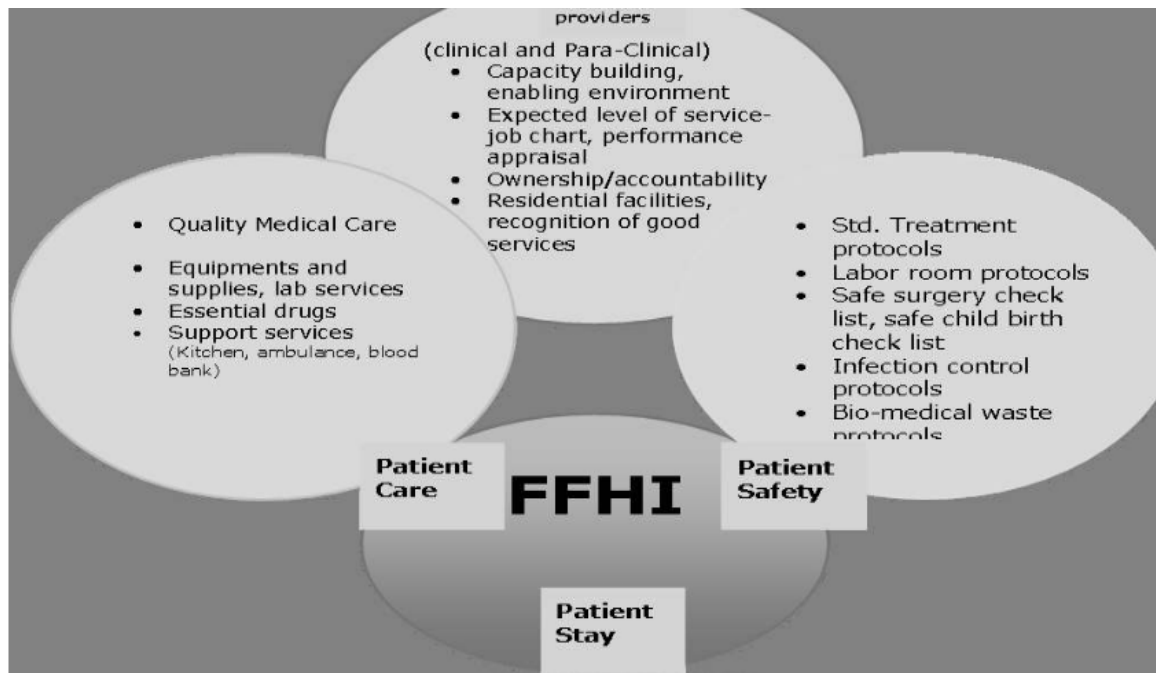
Specific Objective:

- To ensure the optimum utilisation of the available resources
- To identify the gaps as per FFHI norms & guideline in related facilities
- To implement plan of action based on assessment.
- To develop a self sustainable model.

1.3 Overview of FFHI (Family Friendly Hospital Initiative)

“A Family friendly Hospital is a health care facility where the service providers offer quality care by following evidence based protocols and check lists for all the beneficiaries with special focus on women and babies to ensure patient safety. The hospital environment will be made conducive for the beneficiaries to stay comfortably in the institution. The institution will also provide enabling environment for the service providers to provide quality standards.”

1.4 Components of FFHI



- Access to the public health services has witnessed tremendous improvement since the inception of National Rural Health Mission. But many health facilities are not implementing the evidence based labour room and operation theatre protocols. If these protocols are implemented, they would bring down the maternal and neonatal mortality & morbidity substantially in addition to improving the quality of maternal and newborn care and enhancing the patient safety. For example , implementation of active management of labour protocol alone would cut down the PPH incidence by 40 % thereby reducing the maternal deaths due to PPH. Management of severe anemia by intravenous Iron Sucrose

would cut down the maternal deaths substantially. The standard protocols, safe child birth check lists, infection prevention protocols, safe surgery check lists already available are to be put into use by training the service providers and monitoring the use of protocols.

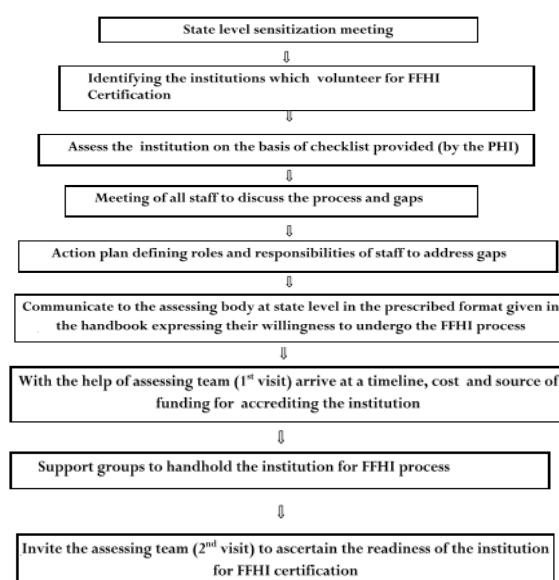
- The certification of Family Friendly Hospital (FFH) will provide a formal acknowledgement to the service standards already available at those facilities. The FFH do not focus more on the major infrastructure support or additional human resources immediately. FFH mainly focus on the effective utilization of the available resources eg. RKS funds, maintenance grants etc. and building capacity among the service providers to deliver quality services. Since the procedure for certification of FFH do not take longer period, many health facilities can get certified within the shorter period. These certified hospitals can consider moving to next higher level of accreditation for IPHS/ISO/NABH at a later date. The FFH certification would cut down the preparatory period for ISO/NABH certification and also would encourage more certified Family Friendly Hospital to opt for ISO/NABH certification.
- The FFH verification is one of the ways to ensure improvement in quality services. The certification process will not only create quality institutions but also ensure substances of the services offered, once certify. The active participation of all service provider in the gap analysis, preparation of action plan and implementation of quality protocols for FFH certification would create a ownership, accountability and pride which will be a driving force for the sustenance of quality standards in the FFH certified institutions.
- The number of certified institutions in a district could also be a criterion for computing district ranking which would create healthy competition among the District health managers.
- It is very important to observe the delivered mother and baby for a minimum period of 48 hours as 60% of the complications occur in the mother and baby duo during that period. The health facilities should also have basic facilities like running water, functioning toilets, warm water, clean linen, blankets, food etc. which would encourage the women to stay in the health facilities for 48 hours. The FFH certification cover other patient amenities also. The provision of good ambience, good food, client friendly services would encourage more women to come to facility for availing the services.
- The health facilities should have the essential drugs and equipments to provide basic care and to provide first aid in case of complications. It is also to be ensured that standard treatment and infection control protocols are available and the staffs are trained to use the

protocols. FFH certification would assess the competency of the service providers in the implementation of standard protocols

- The establishment of Quality assurance cell in the State Health Society and formation FFH support groups would provide constant mentoring support to the institutions to ensure the quality standards. Additional funding support and autonomy to the Family Friendly Certified Hospitals would encourage more CHCs and Hospitals to opt for the certification programme. Initially the certification may be on voluntary basis and after two years it would be mandatory for all the public hospitals to improve the quality standards by way of the FFH certification.

Accreditation process

The accreditation process in a State is fully facilitated by state officials. The steps to be followed is as mentioned below.



The team will handhold the public health institution until it is accredited. An institution, once accredited, will have to maintain the standards, which will be ensured by the team by way of surprise visits. If, on such visits, it was found out that the institution is not maintaining the requisite standards, the team will recommend withdrawal of the certification.

Such institutions, can then approach the assessing team for a revisit. The revisits by the assessing team, in such cases, have to be done in three months time, of the quality assurance office receiving the application.

CHAPTER- 2.0

LITERATURE REVIEW

2.1 Background

The growing concern over the high mortality and morbidity, costs and organisation of the health services have focused the attention of Legislative, professional and public towards Quality of health care. Globally each year more than 585,000 million women die due to pregnancy and child birth related preventable causes (UNFPA 2004); of these deaths 99% occurs in developing countries and about 1% occurs in developed countries (WHO 2001). In India Maternal mortality ratio is 540/100,000 live births (WHO 2006) and that of Bihar state is approximately 451/100,000 (in 1997); (RGI,SRS,1997-98). This is very high compared to the international scenario like Sweden (8) , UK(11) , Greece(10),and even in neighbouring countries like Sri Lanka (92), China(56) and Thailand (44)/100,000 , (WHO 2006).

Similarly, global figure for Infant mortality is about 7.1 million deaths each year; of these deaths half die in the first 28 days after birth (neonatal period). Of the infants dying in the neonatal period about 75% die in the first week after birth (Lawn J.E, et al, 2005). In India, about 2.1 million child death occurs every year, which is the highest number in a single country. (UNICEF 2004). The national under five mortality rate of India is around 85/1000 live births (UNICEF 2006) although there is wide variation between states. In Bihar state, the under five mortality rate is 62/1000 live births (NFHS-3 2005-06).

Fourth and fifth millennium development Goals (signed by 189 countries); demands reduction in infant and Maternal Mortality ratio respectively by 2015 ,which has not been possible even after so many years of safe motherhood interventions (initiated in 1987) in developing countries (WHO 1994). Similarly, the condition of Bihar too improving but not upto expected level, even after interventions like child survival safe motherhood programme (CSSM) started in 1992 and Reproductive & Child health programme (RCH) started in 1996-97; still the infant mortality ratio and fertility rate shows a rising trend in comparison to India; where also the situation is not very comfortable. The fertility rate of Bihar is still 3.9. This means increase in life time risk in women and only 5% Facilities give EmOC facility round the clock , so more risk of maternal death.

Therefore, it's important to find what will reduce maternal and infant mortality in the population of Bihar inspite of increased OPD on yearly basis after the launching the NRHM .

This study focuses on quality assessment of services and facilities at district hospital to get FFH certification.

2.2 Overview of Banka

Banka was carved out of Bhagalpur District in 1993 and is situated on the Eastern side of south-east of Bihar. Banka's bordering districts are, Bhagalpur to the north; Deogarh and Munger. With Banka as district headquarter; Banka has 11 Blocks (NFHS-2, 1998-99). A large area of Banka is covered by river & forests, rich in enormous amount of hydro power.

2.3: Demographic characteristics of Banka

Banka is predominantly a rural district with 91 percent of its population living in villages. Only 9 percent of its population lives two cities Amarpur & Banka. Literacy difference between Banka (65.6%) and Bihar (63.%) and worse with females (38.5%) of Bihar (53 % approx)

2.4 Concept of quality in Health Care:

In health, quality of care means 'the excellence' in reference to improvement in health status (Gilson, 1995). According to Donabedian, 2003, Quality has been defined as the extent to which application of medical science and technology is expected to achieve the most favourable balance between risks and benefits, were as Roemer and Montoya – Aguilar, 1988 agree that quality is a degree to which resources for health care or the services correspond to specified standards that are accepted to lead to desired results. The institute of Medicine, Washington DC defines Quality as "The extent to which health services for the individual and population increases the likelihood of desired health outcome and are consistent with the current professional Knowledge" (Institute of Medicine, 1990).

CHAPTER – 3.0

APPROACH

&

METHODOLOGY

3.1 The research design selected for the study included an integrated quantitative and qualitative approach. The District Hospital of the Banka was the focus of the study. Assessment of this DH was carried out in two phases. The evaluation of the existing facilities with respect to infrastructure components, services, and availability of trained manpower, equipment, medicines and drugs formed the framework of research in this study, to ensure the optimum utilisation & develop self sustainable model.

3.2 Study Period:

- Three month (Jan 15 to April 15)

3.3 Study Area

- District Hospital, Banka

3.4 Study Units

- Labour room, NBCC, SNCU , Immunization Unit, Out sourced Departments, Eye Department, &
- All available Human resources.

3.5 Sampling technique & sample Size:

All department of Hospital assessed as per FFHI standard, & FGD was conducted with entire hospital staff.

3.6 Description of Tool used for data collection

- FGD
- FFHI Standard guideline &
- Secondary data

3.7 Data analysis

- Data collected in the hospital through FFHI / IPHS template and questionnaires were entered in Microsoft excel sheet and category wise it was analyzed
- Problem Bank prepared by hospital staffs & gravity of problem got decided by staffs & hospital administration.

4.0 SITUATION ANALYSIS & ACTION PLAN

In order to comprehend the functional aspects of the DH & to bring the hospital till FFH certification, it was essential to study various parameters that impact service provisions in a hospital. It was necessary to determine the population of healthcare seekers and thereby the adequacy of the infrastructure, services, level of technology, manpower, etc. to service the demand.

Currently the hospital receives referrals from primary levels of healthcare facilities such as PHCs, etc. The district also has a high footfall of walk-in patients. The spectrum of ailments that patients come with is respiratory problems due to seasonal variation, road traffic accidents, diarrhoea& vomiting, TB, HIV/STI infections, normal deliveries, cerebro vascular accidents, neurological cases etc. However, patients are referred out in case of neurological problems, major surgeries, complicated deliveries, eye surgeries, dental treatments, etc. These cases are mostly referred out to private / tertiary care centres either in Bhagalpur or Patna, as the DH, Banka does not have necessary facilities to manage such cases.

Since DH, Banka has shifted into new hospital structure in 2010, there are many positive changes noticed in the hospital, e.g.

Appropriate signage

- Improved level of cleanliness
- List of drugs
- Available doctors list
- Diet chart
- List of available services.



As the DH, Banka gets upgraded to meet the FFH & subsequently IPHS and ISO requirements, several additional services will be offered here resulting in more inbound referrals. The referred out cases would by and large comprise more complex and above secondary level cases.

4.1 INFRASTRUCTURE

The District Hospital, Banka is situated on an approximately 5.5 acre campus, housing 80 beds in a single building. DH Banka has 100 sanctioned beds but currently 80 beds are in position. The current bed capacity is inadequate to service the increasing patient load. The State Health Society has sanctioned 300 beds for DH, Banka. In order to implement these expansion plans, the hospital would have to plan a phased upgradation with the support of the SHS and in keeping with IPHS norms at all times

HOSPITAL CAMPUS:

The current facility is a new building offering multiple services in a single building. However this new building could use proper medical planning for better functioning, service delivery and judicious space utilization.



The hospital campus is huge, spread over several acres of land. Moreover, it houses a single building structure i.e. the new hospital building. The rest of the campus remains unutilized and vacant. This land could be used judiciously to expand the hospital building to house 300 beds and to build quarters for medical, para medical staff and Grade IV staff.

BOUNDARY WALL

Although the campus has a boundary wall all around, which is in a good condition, the hospital authorities mentioned that the height needs to be increased for better security.

RAMPS & GRILLS

The new building has ramps on all the entrances of the building for the convenience of patients and relatives especially physically handicapped patients.



In DH Banka grills are provided at appropriate places for patient safety.

ELECTRICITY & DG

Continuous power for the hospital is mandatory. Whilst a 30 KVA silent DG set is working in the hospital currently, there is a back up 25 KVA silent DG also present in hospital campus. This service is outsourced to M/S Vivekanand Singh, Bhagalpur who are paid Rs. 240/- per hour. However, there is a need to support essential and critical equipment and services too.



STAFF RESIDENTIAL QUARTERS

The hospital management has mentioned the acute need for staff quarters. At present, residential quarters are not available for any of the medical, para medical and Grade IV staff.

DRAINAGE

There is an absence of a covered drainage system in DH, Banka.

Gutters all around the new hospital building are clogged with sewage.



DISPLAY & SIGNAGE

A positive observation about DH, Banka is that there are numerous signage; social messages, etc. displayed throughout the hospital. These help patients to locate the departments with ease. The social messages have a positive impact on the patients and help in patient education.

According to IPHS (and in some cases FFHI) guidelines the following signage are required to be displayed in hospital campus. The ones highlighted in bold are available presently.

- **Layout of the hospital**
- **Well lit display of the name of the hospital and the Emergency Medicine Services Dept. (Casualty)**
- **Prominent display boards in local language stating the guaranteed services that are available in the hospital.**
- **List of OPD & IPD drugs**
- **Diet chart**
- **Citizens Charter.**
- **PNDT act**
- **MTP act**
- **RTI act**
- **Timings of the services**
- **List of staff with designation**
- **List of RKS members**
- **List of responsible persons in the hospital with their contact numbers**



Action Plan-Infrastructure

Issues related to the following need to be quickly addressed:

- *Boundary Wall – Increase its height*
- *Street Lights – add more*
- *Ground Area leveling to be done*
- *Repair approach road to the hospital*
- *Drainage System – close and improve*
- *Staff Residential*
- *Electricity –DG & UPS should be sufficient*
- *Signage to be put up*

4.2 SERVICES

The assessment of the current hospital services has been categorized under different heads. The observations on direct patient related services are reported below. These are bifurcated under OPD and IPD (general services and facilities), diagnostic services, para-clinical clinical services and support services.

OPD

The Out Patient Department is on the ground floor of the hospital. Presently the OPDs are conducted in five consulting rooms exclusively assigned to Medicine, Ophthalmology, ENT, Pediatric and Gynecology. No Dental OPD is conducted in this hospital due to lack of specialists and requisite infrastructure. Leprosy, T.B., Family planning & AIDS counseling clinics are conducted in separate dedicated rooms to avoid unnecessary crowding in the main OPD area.

OPD services are conducted from 8.00 am to 12.00 pm and 4.00 pm to 6.00 pm in summers whereas in winters the timings are from 9.00 am to 1.00 pm and 3.00 pm to 5.00 pm.

On an average the hospital receives 300-350 out patients per day. The OPD patient load for the years 2009 to 2011 are given in Table 2 below.

Year	OPD (New Cases)
2009	1,23,058
2010	94,956
2011	1,04,990

Table : OPD Volume

A 30% decline is recorded in the total patient load between the years 2009 and 2010. However, a 10% hike was noticed in the OPD patient load in the year 2011. This decline in the year 2010 shows that more and more patients are seeking healthcare outside this hospital in private healthcare setups. Hence it is imperative to provide good quality services as well as a diverse

spectrum of facilities to encourage more people to avail of the services here. Seasonal variation in OPD patient load was observed in this hospital.

As per IPHS guidelines each clinic should have the following facilities:

1. Examination table with storage
2. Screen
3. X-ray view box
4. Hand washing facilities
5. Covered dust bin



Registration Counter

There is a single registration counter situated in the main entrance lobby with two separate window (for Male & Female).



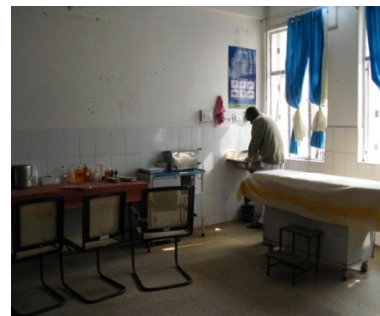
Waiting area

Whilst a well lit, ventilated waiting space is available in the main entrance lobby, the seating arrangement for patients and their relatives appears to be insufficient. Additional seating arrangement should be provided in the existing corridor where there is sufficient space.



Dressing room:

Due to lack of staff in DH, Banka, the current Minor OT in the EMS doubles up as a dressing room. There are two examination tables, screens, shadow less light, crash cart, suction machine, oxygen concentrator, BP machine and waste segregation buckets. Moreover, the room is neat and clean.



As per IPHS, the dressing room houses a clean cot with linen, a table, foot-stand, spirit, antiseptic lotions/ ointment, medicines and supplies such as gloves, sterilized cotton and gauze etc. and autoclaved instruments which are pre-requisites for a dressing room.

Immunization Room:

This unit is operational during OPD hours and receives 20-25 children per day for vaccinations. 2 ANM nurses trained in BMW management are present during the OPD hours. A needle cutter and waste disposal basket is present and is used by the staff posted here. An ILR is used for storage of vaccines. A Register is maintained and the nurses keep it up to date.

IPD

Operational beds in DH Banka are 80 whilst the sanctioned number of beds is 100. There is no clear bed distribution seen in this hospital as it varies according to the patient load. It was observed that most of the beds remain non-functional due to lack of staff. It was also noticed that most of the beds were occupied by female (labour ward) patients. As per the hospital staff the average bed occupancy rate in the DH is around 60%.

Year	IPD Cases
2009	5286
2010	4917
Growth over previous year	-8%
2011	8690
Growth over previous year	43%

IPD Volume

Yearly Patient Volume

The average occupancy rate is 50-60%, which is fairly low. Taking the in-patient load of 8,690 (2011) serviced by 80 beds, the average length of stay (ALOS) works out to 3 days. Such a low ALOS in general medicine and general surgery is something all hospitals would like to ideally achieve. However, in the case of DH, Banka this can be ascribed to the relative primary nature of the surgeries and interventions performed here owing to lack of specialist surgeons, equipment and instruments. When more specialists are empanelled, advanced types of surgeries could be performed and concerted efforts made to keep a low ALOS resulting in lower dependency on high bed volume.

Currently the inpatient wards are situated on the first and second floor of the new building. Wards are divided into rooms of six beds, four beds and twin sharing. There is provision for paying wards in the form of twin sharing rooms but currently they are being used as general non-paying wards as the permission to start paying ward facility is awaited.

The wards are well ventilated and they are clean rooms and in good condition. Patient beds in wards are in good condition. However, the space between two beds is not always adequate and the wards appear to be cramped. Ideally the space between two beds should be approximately 3ft. to 3.5 ft. as is also recommended by IPHS.

Furthermore every bed should be provided with an I.V. stand, bedside locker and a stool for the attendant and the floor space should be as un-clustered as possible. A few screens should be available in the wards for patient privacy during examination and bedside procedures.



There are no nursing stations or sub-stations in the wards themselves. Nurses on duty here are stationed at the nurse duty room. This room is situated at the end of the corridor on each floor and also acts a place for nurses to rest in. The nurse station should be located in the ward itself to enable a good vigil over the ailing patients. The practice of them making ward rounds every hour on an average or as and when a patient attendant summons them would then not be warranted.

The absence of Dirty Utility (DU room) and Janitor's room is marked. This is essential as per IPHS. The patient toilets on each floor have to be kept clean with 24 hour running water, this being the most basic facility that any patient ward should offer. Toilets for patients, attendants and staff should all be separate. IPHS recommends separate toilets for male and female patients in the OPD, IPD and common areas (one for each floor) with monitoring sheets specifying the cleaning schedules.

Positive observation in this hospital is that electrical cables and wires were not exposed and not found hanging. Yet the MCBs (Mechanical Circuit Breakers) were fixed on the wall within reasonable, reachable height. For safety of all, these should be placed at a greater height.

EMERGENCY MEDICAL SERVICES (EMS) / CASUALTY:

There are six dedicated beds for emergency services, moreover, the Minor OT is situated in the EMS area and is considered a part of emergency services. It was given to understand that most of the admissions are done through the EMS where the average, daily patient load is 15-20 patients

The EMS is operational 24*7, in three shifts but the manpower is inadequate. Two dressers are managing the Minor OT in the EMS. Although separate emergency beds are available, resuscitation area, observation area and separate waiting area are desired.

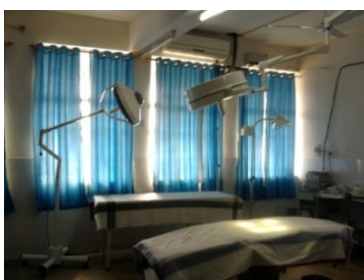
As per IPHS guidelines the following should be available in the EMS and hence have to be provided here:

Operation Theatres (OT)

Year	Surgery Cases
2009	284
2010	188
Growth over previous year	-51%
2011	323
Growth over previous year	42%

Surgery Volume

As per the Daily Report of 2009-2011, it is evident that number of surgeries performed is inconsistent and there has been a 51% drop in the year 2010 as compared to year 2009. When compared to year 2010, year 2011 show 42% growth.



There is one General OT which is maintained in a very good condition. This functional OT houses three operation tables, out of which two are hydraulic tables, shadow less lights, ceiling suspended pendant light and scrub.

A practice of multiple surgeries being performed in one OT room could cause cross infection and should be avoided by providing multiple, single table OTs as per the patient load.

DH Banka is equipped with C – Arm machine and Endoscopy equipment. Both these equipment are lying unused in separate rooms. These are never used since they are bought; the reason behind this is lack of specialist/trained staff.



General surgeries performed are by and large of minor to intermediate category. Surgeries like hydrocele, hernia, appendicectomy, cholecystectomy, hysterectomy etc. are usually performed. IPHS norms specify the following number of OTs (Table 4) and surgical support services that appear in Table 5. The latter Table also shows the gaps in the current OT facility.

Type	Quantity
Elective OT-Major	1
Emergency OT/FW OT	1
Ophthalmology /ENT OT	1

No. and Type of OT's

Operation Theatre	Yes	No
Piped suction available		No
Medical Gas System available in OTs		No
Adequate electric supply (from mains power source / DG)	Yes	
Uninterrupted Power Supply (UPS)		No
Air-conditioning available (type- window/split/centralized)	Yes	
Zoning maintained in side OT Complex (sterile environment as given below)		No
• Protective Zone		No
• Clean Zone		No
• Aseptic or Sterile Zone (OT)	Yes	
• Disposal or Dirty Zone		No
Preparation Room available		No
Pre-operative Room available (mention no. of beds)		No
Post Operative Resting Room (mention no. of beds)	Yes	
Dust-proof and moisture proof OT complex		No
Scrub-up room available with sinks having elbow or knee operated taps	Yes	
Laminar flow of air available		No
Single leaf door with self closing device		No
Viewing window		No
IS CSSD/TSSU attached to the operation theatre?	Yes	
Provision for separate exit for dirty linen		No

Surgical Support Services

The above table embodies the status of the current operating room and the allied services. It can be seen that several, essential facilities are absent. Although OTs are provided with split ACs, they are non functional due to unavailability of uninterrupted electricity.

The importance of some these requirements are highlighted below and the new hospital will need to incorporate all the above features so as to qualify as an accepted, standard operation theatre zone as well as to meet with IPHS.

- Zoning in an operation theatre complex is paramount from the sterility point of view and to keep any form of infection causing bacteria out of the main operating room. Hence the zoning is in the form of distinct sections as stated above
- Air-conditioning is important as it increases the efficacy of the operating room itself and the positive pressure in this area keeps lesser clean air and airborne bacteria out of this critical zone
- Medical Gas System (MGS) is essential as it nullifies the dependence on individual gas cylinders and devices and renders gas delivery centralized, effective and dependable. The MGS should include two outlets for oxygen and one each for nitrous oxide, air (for pneumatic equipment and anaesthesia machine/ventilator) and suction/vacuum
- Keeping in view the critical nature of the operating room functions, it is very important to have an uninterrupted power supply that serves various medical and non-medical devices in the OT viz. shadow less light, Boyle's apparatus/anaesthesia machine, electrocautery, cardiac monitor, etc. Back up energy in the form of DG set should be further fortified by a UPS for essential and critical devices
- Scrub should be given adequate importance as hand wash is considered very essential before and after any patient contact. The scrub should be designed keeping standards in mind and facilitate both knee and elbow operation
- A Pre Op room enables patients to be prepared and induced prior to surgery. This reduces the time on the table as the patient is ready for the intervention the moment he enters the operating room
- A Post Op room serves as a post surgery recovery area, where a surgical patient stabilizes post surgery and under the surgeon's vigil before being sent to the ward

CSSD /TSSU

A CSSD serves the entire hospital's sterile material requirements and can be located in close proximity to the OT complex as well as the ICU. The sterile material can be stored in the CSSD itself as well as in sub-stores created in the OT and ICU. Many a times sterile instruments would also be required in other patient care areas such as OPD and IPD. In case of the OPD, individual consulting rooms could stock sterile material for immediate use. As far as the patient nursing units are concerned, sterile material could be stored in sub-stores created at the nursing stations. Finally, the CSSD should use proper electrically operated autoclaves rather than unconventional devices such as kitchen cookers, gas fired cooking vessels, etc.



A TSSU, on the other hand is meant to address only the operating room's needs. A separate TSSU room with an appropriate autoclave (size and numbers based on the work load) should be available in the OT complex (separate room). Since autoclaves are all electrically operated, the need for boilers is no longer felt for this service.

This hospital has a very basic TSSU attached to the General OT. Hospital authorities wish to upgrade and organize this service into a well equipped CSSD which could cater to all the concerned departments.

4.3 DIAGNOSTIC SERVICES

Radiology

Background: SHS, Govt. of Bihar has contracted with IGE Medical Systems, Silvasa for setting up the radiology and imaging departments for xray and ultrasound (sonography) services. This contract is valid for a period of ten years up to 2018. These have been established in 151 Govt. hospitals in Bihar, at all levels right from PHCs to District Hospitals, through a Public Private Partnership modality. Additional 100 units had to be set up by February 2010 as per the agreement. The Radiology Centre is meant to function 24x7 as per the agreement. A schedule of charges for the services provided has been fixed by the SHS. All individual patient billing details are to be submitted to SHS for reimbursement to IGE. All radiology and imaging equipment were to be connected / interfaced with a CRS (Central Reporting System) on the lines of Telemedicine network. The CRS networking has not been implemented as yet.

IPHS requires the Radiology Dept. to have the following facilities and features:

Radiology Services
X-Ray Room
X-Ray room should be accessible to OPD, Wards and Operation Theatre
Sub-waiting area with toilet facility
Change room facility
Dark room
Reporting Room
Lead Aprons and Thermo Luminescent Dosimeters (TLD) badges

Radiology Services

Imaging

In the DH Banka Ultrasonography service is in-house. X-ray technicians are trained to do ultra sound, they perform the procedure but reporting is done by the doctor. Medical officers are also trained to perform USG but due to lack of staff they are busy with OPD's.



On an average 90-100 USGs are performed per month. The majority patient load in this hospital comes for MCH services and it is a routine practice to perform USGs during the ANC period to monitor the growth of foetus. As the hospital has a definite need for more MOs and specialists it would be useful if one or two female MOs out of these are trained in sonography so that a full time trained clinician is available at all times. Since a large number of patients are female, it is necessary to have an ANM at all times during female examination.

IPHS requires the Imaging Dept. to have the following facilities and features:

Imaging Services
Ultrasound (Sonography) machine available in hospital
Ultrasound room to be accessible to OPD, Wards and Operation Theatre
Sub-waiting area with toilet facility available
Change room facility

Imaging Services

E.C.G. Room

In DH Banka, the ECG room is situated in the OPD area. X-ray technicians are trained to perform ECGs. This room is well maintained and is neat, clean and well ventilate.



Clinical Laboratory

In DH Banka, clinical laboratory services are outsourced to Central Diagnostics since year 2007. SHS has contracted with Central Diagnostic Patna. This lab will perform the following tests: biochemistry; hematology; pathology; microbiology; serology and clinical pathology. 18 different types of tests have been identified and will be charged as per the agreed tariff schedule.

The space is provided by the DH and Central Diagnostics have provided the staff, equipment, computers, fax machines, reagents etc. The State has prescribed tests that are to be performed in this lab. In case of some advanced tests, samples are sent to their central lab in Patna

Daily workload of both OPD and IPD patients is approximately 100 - 120 tests.

One lab technician is employed by Central Diagnostics who is running the service 24*7. The space provided for the lab services by the DH is inadequate. The outsourced lab should send their samples out to accredited labs for assessment and validation of the hospital's test results.

4.4 CLINICAL SERVICES

Clinical services that are mandatory as per IPHS have been listed below. Those provided by the current hospital have also been highlighted here under the second and third columns.

Services	Yes	No
General Medicine	Yes	
General Surgery	Yes	
Critical care / Intensive Care (ICU)		No
Obstetrics / Gynaecology	Yes	
FP services like IUCD, N.S.V., Minilap, and lap sterilization	Yes	
Paediatrics including Neonatology and immunization.	Yes	
Emergency Services	Yes	
Blood Bank & Blood Storage Facility	Yes	
Integrated Counseling and Testing Centre; STI Clinic;	Yes	
Anesthesia	Yes	
Ophthalmology	Yes	
Otorhinolaryngology (ENT)		No
Dermatology and Venereology (Skin & VD) RTI/STI	Yes	
Orthopaedics	Yes	
Radiology including ultrasonologist	Yes (outsourced)	

Psychiatry		No
Health promotion and Counseling Services		No
Tobacco Cessation Services		No
Dialysis Services		No
Physical Medicine and Rehabilitation services		No
Dental care		No
Public Health Management		No
DOT centre	Yes	
Designated Microscopy centre		No
AYUSH services		No
A.R.T. Centre	YES	L-ART
Disability Certification Services	Yes	
Services under Other National Health Programmes	Yes	

Clinical Services

16 of the 28 (61%) essential services listed above are available at the current hospital. It is clearly seen that most of these services can be incorporated within the available infrastructure except for dialysis services and ICU, which could be started once qualified and trained staff are engaged by the hospital.

Obstetrics & Gynaecology:

- OPD: Obstetrics & Gynaecology OPD is conducted in a dedicated Consulting Room earmarked for this activity from Monday to Saturday from 8.00 am to 12.00 pm and 4.00 pm

to 6.00 pm in summers. In winters the OPD timings are 9.00 am to 1.00 pm and 3.00 pm to 5.00 pm. The Gynaecologist in the hospital conducts this OPD. The Hospital authorities mentioned that although they were managing the services with the current staff, they need more female MOs and a qualified MD Gynaecology & Obstetrics as this department receives a very large patient load every day (on an average 150-200 patients/day). The OPD room is well maintained and is neat and clean. It is also well ventilated and illuminated.

Basic amenities like screen, examination table with storage, Table and chair for the Gynecologist etc. are available. However screen, hand washing facility, X- Ray view box, colour coded waste baskets etc. are not provided. The sub-waiting area is inside the OPD and should be moved outside the clinic room into the corridor so that the doctor can examine patients in the clinic in privacy. Moreover, a nurse should be always present in the clinic room to assist the doctor during examination.

- ANC Clinic: In DH, Banka there is no separate ANC clinic dedicated to a screening process before the patient visits the Gynaecologist. This is desirable so as to provide better service to the expectant mothers. Basic amenities like screen, examination table, hand washing facility and waste collection dust bin, instruments like B.P machine, weighing machine are required in the ANC clinic. This clinic could be run by a Grade A nurse during OPD hours.

- Labour Room: The positive observation is that the labour room and labour wards are not only well maintained but are also well ventilated and illuminated. Moreover, the basic amenities in the Labour Ward are available and there are three labour tables with screens.



Year	No. of Deliveries
2010- 2011	2753
April- Dec 2011	3019

A New Born Baby Corner is present and is equipped with one radiant warmer, one phototherapy unit, an oxygen concentrator and a weighing machine. Additionally, there was a crash cart, a wheel chair, hand wash facilities and a stretcher. However, colour coded dustbins for BMW management were found wanting.

As per the Yearly Reports of 2010-2011, on an average 7 to 10 deliveries are conducted per day. There is an increase of 10% in the number of deliveries conducted between Apr 2010-Mar 2011 and April- Dec 2011. As compared to other DHs, which were studied, DH, Banka shows fairly low number of deliveries conducted per year. Efforts should be undertaken to improve the services and encourage more expectant mothers to undergo institutional deliveries in DH, Banka. This, undoubtedly, is one of the most crucial service offered in the hospital hence it is even more important to improve and maintain this facility according to IPHS.

The labour room is staffed with two A Grade nurses per shift. Occasionally ANM nurse are given labour room duty to take care of absenteeism of the A Grade nurses.

The labour ward is not divided into ANC and PNC room. This practice should be adopted for better management of patient load in this department. The current shortfalls can be easily met. The IPHS specifies the following facilities / infrastructure for a Delivery Suite Unit.

ENT:

The ENT OPD is conducted by an ENT specialist from Monday to Saturday from 9.00 am to 1.00 pm and from 3.00 pm to 5.00 pm. The clinic itself is well maintained and is neat and clean. The daily patient volume for this OPD is 15 to 20 patients. Only minor ailments are treated at OPD level in the ENT Department and these are mostly symptomatic in nature. Procedures required to be performed in a DH as per IPHS guidelines are enumerated in the Annexure 52.

OPHTHALMOLOGY



The Dept. of Ophthalmology is managed under the policies of the National Blindness Control Programme (NBCP). Basic equipment e.g.

vision chart, screen, examination table, patient load is approximately 20 to 25 cupboard for instrument storage etc. are patients/day.

available in the OPD. The Ophthalmology

There are two ophthalmic assistants (one on deputation) to conduct screening process during OPD hours wherein the patients are tested for vision acuity, cataract screening etc. Thereafter the patients who are suspected for any vision abnormality or cataract are further evaluated by the ophthalmologist. Although there is one ophthalmologist in DH Banka, he has already applied for VRS and is very irregular. This has affected the functioning of the Ophthalmology Department. Moreover, only minor ailments are treated and symptomatic treatment is given under this service. Procedures required to be performed in a DH as per IPHS guidelines are enumerated in the Annexure 51.

General Medicine

The ENT OPD is conducted by the physician from Monday to Saturday from 9.00 am to 1.00 pm and from 3.00 pm to 5.00 pm. On an average 200 patients per day are seen in this OPD. The Dept. of General Medicine offers secondary care, symptomatic treatment at both OPD and IPD levels. Procedures required to be performed in a DH as per IPHS guidelines.

General Surgery

In DH, Banka no separate surgical OPD is conducted. Surgical patients are either seen in the EMS or the dressing room or referred for surgeries if needed. A list of surgeries as per IPHS standards is given in Annexure 55.

Orthopaedic Surgery

In this hospital, no orthopaedic surgeries/procedures are performed as the post of an orthopaedic surgeon is vacant. Basic procedures like POP application, closed reduction etc. also are not performed. IPHS guidelines for surgical interventions for this department.

Intensive Care Unit (ICU)

The hospital does not have ICU service. As per IPHS guidelines a district hospital of 100 beds should provide ICU services. However these services are not available due to non-availability of equipment and trained staff.

Sick New Born Care Unit

DH, Banka has a well equipped SNCU with the following equipment in functional condition:

- Radiant Warmers
- Bassinets on trolley
- Oxygen Hood
- Bilirubinometer
- Glucometer
- Syringe Pumps
- Pulse Oximeter
- Oxygen Concentrator



However, despite receiving all the above mentioned equipment, the department is non-functional due to lack of qualified pediatrician and trained nursing staff. As a consequence, the equipments received by SHS are just lying in the hospital and are not being used by the hospital authorities.

4.5 Para clinical Services

Pharmacy - Drugs / Medicines

Pharmacy is an in-house service rendered by the DH. There is no computerisation either in the Pharmacy or in the drug store. Computerisation is desirable for better management of the service.

During peak hours and summers, long queues are common seen outside the drug distribution counter. Measures to avoid these long queues and crowding should be undertaken. There should also be separate windows for males and females, which will help in distributing the crowd.



The Pharmacy is required to stock 33 different types of medicines at the OPD level as per the essential drugs list formulated by the Dept. of Health, Bihar Govt. Similarly at the IPD level, the Pharmacy is expected to maintain 112 categories of medicines.

Currently there is no qualified pharmacist with DH, Banka. Moreover, two Grade A nurses in the morning and evening shift are manning the drug distribution counter. This arrangement is not justified as the hospital is already facing a shortage of nursing staff. There should be two windows at the drug dispensing unit, one each for males and females. The Pharmacy should also follow computerized inventory management to facilitate proper stock keeping and retrieval.

This would also enable following the FIFO method, tracking the expiry dates and preventing pilferage. The pharmacy staff should be trained well and should follow applicable SOPs.

Though branded, these drugs are manufactured by lesser known companies. Often there are delays in supplies in the eventuality that a vendor is unable to service the demands for one reason or another. At times instances of irregular supplies leading to stock outs were reported.

The quantum and types of drugs to be supplied to the DH is decided by the SHS. Many a times these are not commensurate with the hospital's requirements both in terms of quantities and types. This often leads to extreme situations of either excess stock or stock outs.

It was given to understand that disposal of expired drugs is done by crushing them and burying them in pits. This is not the best and safest method and can lead to soil pollution. It is recommended that these drugs should be destroyed and incinerated

Blood Bank



DH, Banka does not have an outsourced blood bank but is running the in-house blood storage unit. The facility itself is neat, clean and properly maintained which gives a positive impression to the visitors. They maintain a respectable spectrum of blood types. On an average 8 to 10 units of blood are stored here whereas there is a provision for storage of 300 units.

Blood units are ordered from Jawaharlal Nehru Medical College, Bhagalpur based on the consumption. Only whole blood is available in this Blood Bank and in case a patient requires components, the same has to be sourced from Patna.

Whilst the hospital patients can avail of blood from this Blood Bank at no charge, but on replacement basis, outside entities have to pay a sum of Rs.350 and are also required to replace the blood issued to them. In the eventuality of any of the blood units reaching an expiry date, the same is sent to Blood Banks in Bhagalpur or Patna. This Blood Storage Unit is operational 24*7 and a technician is available on call during night time. There is no lab in the blood storage unit and blood grouping and cross matching is done at the Central Diagnostics lab in the hospital before issuing the blood units to patients.

4.6 Counselling services:

Counselling services should be provided for domestic violence, gender violence, adolescence, etc. The MSW (Medical Social Worker), who is currently an RKS member, could be made responsible for this role.

4.7 ANCILLARY & SUPPORT SERVICES

Dietary services

The dietary services are outsourced to 'Jay Mata Di Canteen services', Banka. The food services are meant only for the inpatients who are provided breakfast, lunch, evening snacks and dinner free of cost. In the case of Kala-Azar patients, even one relative is provided food free of cost along with the patient. There is no dietician in the hospital and the same food is given to all categories of patients. Whilst the food is free for the patients, the hospital pays the service provided Rs.49.50/- per patient per day. A diet chart is displayed in the hospital for patient information.

In DH Banka, hospital authorities have provided dedicated space for a kitchen in the hospital building on ground floor. Apart from providing diet to inpatients, this agency runs canteen services for the hospital staff and patient attendants in the same area. It was given to understand by the hospital authorities that both the inpatient diet and canteen services were of satisfactory quality but during the visit of the research team lack of cleanliness was observed in the cooking and washing areas in the kitchen.



Food should be served in proper vessels on trolleys as is part of good practice. The plates and glasses too had to be brought by the patients. Moreover, there is no dietician in the hospital and it was given to understand that hospital authorities on duty conducted quality checks on diet but annual medical examination of the cook was not conducted.

It is seen that the hospital receives a large number of patients with different ailments. In the absence of a regular dietician it may be useful to plan out a few standard diets for patients under food restrictions according to their ailments. The kitchen and dietary services need to maintain cleanliness and proper storage for all materials used in the process.

Laundry services

Laundry services are outsourced to Raj Informatics Constructions. DH, Banka pays Rs. 14,000/- for laundry services. Although according to the TOR the outsourced agency is supposed to establish commercial washing machine in the hospital campus, the outsourced agency has not complied till date.

Housekeeping services

This service is outsourced to M/S Vivekanand Singh for the housekeeping of the hospital building at a rate of Rs. 0.25 per sq. meter whereas the cleaning and maintenance of hospital campus and garden is outsourced to Raj Informatics Constructions at Rs. 12,000 per month. The hospital campus is relatively clean and the new building itself and the front area of the campus is fairly well maintained. However, the rear end of the hospital building, especially near the boundary wall, is neglected and remains unattended by the housekeeping staff.

Security services

Security services are outsourced to Home Guards. Currently eight home guards plus two in-charge are present on the campus who are working in three shifts. This service leaves a lot to be desired as the number of security guards was negligible and places of duties did not appear to be well defined. Despite the presence of home guards, theft of hospital property like bulbs, taps, chairs etc. is a common occurrence. The authorities mentioned the need for hiring private security services which would prove more efficient and reliable. Looking at the campus area the current security guards number is inadequate.

Bio Medical Waste Management (BWM)

BMW services are outsourced to Synergy Waste Management Pvt. Ltd, Bhagalpur since December 2011. The hospital authorities mentioned that the services were very irregular but have improved recently and now the BMW is collected from the hospital every alternate day. The hospital staff especially, in the OTs, Labour Room and Dressing Room/EMS is given training for BMW management and boards explaining the segregation of bio medical waste are also displayed in these departments. But the staff following these instructions diligently is questionable. Currently, due to irregular schedule of outsourced agency Synergy Waste

Management Pvt. Ltd, Bhagalpur, the hospital is using deep burial method for disposal of BMW, which is being dumped in an open pit exposed to the environment.

Medical Records Department (MRD)

Medical records are being maintained manually for only the IPD patients and they are stored with the in-charges of the respective wards. RKS data is independently maintained by dedicated staff and is computerized. This data comprises statistical information related to the patient throughput for OPD, IPD, Surgery, MCH services, Diagnostic services, immunization services and services under various national health programmes.

Post-mortem Centre & Mortuary

In DH Banka, the Post Mortem Centre is constructed recently and is situated at the rear end of hospital campus. Although it is a new structure there is no mortuary with storage facility for dead bodies. Also the viscera are stored on open shelves in glass jars in a small room adjoining the PM room. Appropriate body storage cabinets should be installed for atleast two bodies. The postmortem room currently acts as a mortuary too and is used for storing unclaimed dead bodies for approximately two days after which they are disposed off. The PM centre should be provided with the following articles as recommended by IPHS



Ambulance services

The hospital has three ambulances parked in the campus. Two 102 ambulances belong to the hospital whereas one 108 is outsourced. There is no dedicated parking space / shed for the ambulances and they are currently parked in a space near the main hospital building.

Under s decision by the Rogi Kalyan Samiti, 102 Ambulance service is available for the patients at the rate of Rs.8.50 per kilometer.



Fire fighting equipment (IPHS)

Few fire extinguishers are installed sporadically in two to three places. However, the working condition of these equipment is not checked periodically.

Fire fighting equipment should be provided by every staircase and at approximately 45 metres distances as per standard building norms. These should cover:

- OPD area
- Nursing units (IPD)
- Diagnostic service areas
- Support service areas such as kitchen, laundry, stores, etc.
- Critical care areas and operation theatre corridors



Action Plan-Services

Issues related to the following need to be quickly addressed:

- **OPD-** *OPD chambers: Medical Equipment & Patient Related Furniture ;Signage; BMW management in OPDs; Provision for injection room; Provision for OPD Manager*
- **IPD-** *Inpatient Wards: Infrastructure, Medical Equipment & Patient Related Furniture ;Nursing station, Dirty Utility, Janitor Room , Separate Male & female toilets*
- **EMS-** *Medical Equipment & Patient Related Furniture*
- **OT-** *Appointment of MS Surgeon, Orthopaedic surgeon, Anesthetist and OT Assistant. Infrastructure, Medical Equipment & Patient Related Furniture*
- **CSSD/TSSU-** *Provision for well equipped CSSD*
- **Diagnostic Services:**
 - **Radiology** – *Infrastructure ;Qualified & trained manpower; Signage & Safety measures*
 - **Imaging** – *Signage for PNDT Act*
 - **Clinical Lab-** *Validation of test results by Accredited Lab*
- **Clinical Services :**
 - **Obstetrics & Gynaecology** – *Provision for qualified MD Gynaecology & Obstetrics(OPD), Infrastructure, Medical Equipment & Patient Related Furniture (Labour Room& Delivery Suite Unit)*
 - **ENT-** *OPD –Infrastructure, Medical Equipment & Patient Related Furniture;*
 - **Ophthalmology & Orthopedics-** *Appointment of Ophthalmologist, Trained staff; Provision for increased no. of services*
 - **ICU-** *needs to be set up. Medical Equipment; Trained staff*
 - **Sick New Born Care Unit-** *Appointment of Paediatrician,trained & competent nursing staff; Maintenance of medical equipment*
- **Para- Clinical Services:**
 - **Pharmacy-***Appointment of qualified Pharmacist, Labeling & storage of drugs; Computerization of inventory management, SOP's for Department; disposal of drugs*

- **Counseling Services** – Provision of services for domestic violence, gender violence, adolescence etc.,
- **Ancillary & Support Services:**
 - **Dietary-** Provision for dietician and adequate staff; Kitchen infrastructure: Need for cleanliness
 - **Laundry-** Mechanized Laundry equipment & hygienic processes
 - **Security-** Adequate staff & security arrangements
 - **Biomedical Waste Management-** Trained staff, BMW segregation at source, Outsourcing BMW Management to reliable agency
 - **General Store-** Provision for general store
 - **MRD-** Provision for HIMS
 - **Post Mortem & Mortuary-** Infrastructure, cold storage facility
 - **Mechanical Engineering Services:** Provision for lift, water coolers/filters(OPD& IPD areas); air coolers, room heating & hot air convectors (patient care areas), fire fighting equipment; medical gas system (OT, & EMS), good communications network (Landline/intercom etc.,)

Action Plan-Medical Equipment & Patient Related Furniture

Issues related to the following need to be quickly addressed:

- *OPD- Dental Unit ,ENT Unit, Obstetrics & Gynaecology*
- *IPD*
- *ICCU*
- *Diagnostics- Xray, USG, CR System EMS*
- *OT*
- *CSSD/TSSU*
- *General & Medical Stores*
- *MRD*
- *Post Mortem & Mortuary Rooms*
- *Medical Gas System- OT, ICCU and EMS*

5.0 HUMAN RESOURCES (MANPOWER)

As is the case with most District Hospitals in the State of Bihar, the manpower status in DH, Banka too is wanting. There are several posts that are either not created or are vacant. The State has a paucity of qualified and trained staff in all categories, however, this shortage is felt most in the skilled staff category viz. doctors, clinical specialists, Grade A nurses, technicians, pharmacists, etc.

The staff matrix of DH, Banka along with the IPHS stipulations with regards to staff required for a 100-bed hospital is given under the Chapter 7 'Procurement'. Tables 17 to 22 enlist category-wise staff and their current numbers in the hospital. However, since DH, has been sanctioned 100 beds, the requirement of staff for this capacity will increase as the bed strength gets enhanced. The IPHS norms should be kept in view when this happens.

Due to constant efforts of the hospital management, a few specialists are available to provide OPD, IPD and OT services up to some extent. But this medical manpower is not adequate by any means. It was given understand that there are only two general surgeons currently working in the hospital and there is no orthopaedic surgeon, dental surgeon, qualified MD Gynaecology & Obstetrics, qualified anesthetist, radiologist, pediatrician. Moreover, the ophthalmic surgeon is also approaching his retirement age hence there is acute need for these specialists. It is seen that the many a times the MOs offer services for interventional procedures although they are not truly qualified for the work. In some cases medical officers, especially in the areas of obstetrics and gynaecology, have received short-term training after which they practice as specialists in these fields in the hospital. Considering the shortage of specialists, this appears to be the only avenue on hand. However, keeping in view the fact that the DH is to undergo upgradation as per IPHS standards, this practice would not fall within the purview of the standards and hence the hospital would fall short of the requisite needs for accreditation. This calls for a long-term solution, the obvious being to improve the infrastructure and facilities in the current DH so as to offer a congenial environment to the specialists practicing elsewhere to come and work in this hospital. This would also entail an attractive remuneration and housing facilities for the specialists.

One of the points of discussion was Non Practicing Allowance (NPA) for the doctors and whether this practice should be adopted in order to attract and retain clinicians at the DH.

Hospital authorities specified that there is an acute shortage of nursing staff and despite of repeated requisitions to the concerned authorities this issue is not being addressed.

Training is an essential part of any human resource management. Just as doctors have the convenience of attending CMEs (Continuing Medical Education) programs held round the year, nursing and paramedical staff should also be given continuing training in their fields of specialization so as to remain current at all times. In case nurses have to undergo training in SBA, RI, etc. they are required to go outside the DH and during this time the hospital is deprived of the nurses when they are already under duress owing to shortage of nursing staff.

Action Plan-Human Resources

- ***Medical Staff - Medical & Surgery Specialists; Obstetrician & Gynecologist; Dermatologist/ Venereologist; Pediatrician; Anesthetist; Orthopedic surgeon, ENT Surgeon, General Duty Doctors; Forensic Specialist ; AYUSH physician; Public Health Manager & Pathologist***
- ***Para- Medical Staff- Staff Nurses (Grade A & ANM's) ; ECG Technician; Lab Technician; Pharmacists: Matron & Asst. Matron; Physiotherapist; Statistical Asst.; MRD officer; Electrician, Plumber; Audiometry Technician; OT staff nurse & OT Assistant***
- ***Administrative Staff- Accountant; Computer Operator; Driver; Peon; Junior Administrative Officer***

6.0 DISASTER MANAGEMENT

IPHS guidelines recommend this activity under integrated disease surveillance, epidemic investigation and emergency response.

The hospital should be prepared for these. In addition, it is necessary that the hospital has trained manpower for fire fighting, floods and other management of natural calamities.

Infection control

The hospital could follow better infection control policies to improve the level of healthcare delivery. Although hygienic and sanitary conditions were not near satisfactory in many of the departments and the hospital campus, critical departments such as OT, labour room, etc. which require high infection control standards were oblivious to infection control policies.

<i>Action Plan-Safety Measures</i>
<p><i>Issues related to the following need to be quickly addressed:</i></p> <ul style="list-style-type: none">• <i>Usage of personal protection - disposable gloves, masks</i>• <i>Training of staff – universal precautionary measures</i>• <i>Infection Control policies</i>

STEPS TOWARDS FFH CERTIFICATION

Apart from the situation analysis as per the FFHI/ IPHS norms, under the FFHI hospital started to make the problem bank from all departments separately along with the solution of that problem from the concerned staff of that particular or concerned department. This process helped to sensitised to all departments regarding concerned problems.

New Initiative Based on the discussion with the Hospital Staffs & their Requirement for the FFH certification.

- Formation of the problem bank
- Sharing of the responsibility

- Division of problem on different level like at facility level, district level, & State Level
- Addition & Reduction of the problem in every meeting
- Structured questionnaire filled by Mamta in ward, & payment of the canteen based on that. This is to control / reduce the MMR, unnecessary payment to the canteen & develop a self sustainable model
- Starting of the Autoclaving verification
- Concept of the digitalization in the some basic instrument like B.P & baby weighing machine.
- Digitalisation in the registration computer.
- HMIS implementation only in the Pharmacy.
- Training of the ANM on MCTS

7.0 DISCUSSION

- Country has conceptualised to deliver quality of health care to the last people and for that NRHM has been launched. NRHM is aimed to bring correction in public health infrastructure. To bring the change government has provided untied fund, but situation is like even untied fund is not being utilised. Authority responsible to utilise these fund don't involve him because they complain that they don't have clear guidelines to utilize these funds. The result indicates shortage of medicines which can't be happen if untied fund have been utilised. In the absence of range of medicine poor paediatric patient are forced to have tablet form of medicine which are not standardised dose for them.
- Emergency facility are not well equipped not even with basic emergency drugs like PAM, ATROPINE etc. How can a district hospital that is called to be specialist and referral hospital can't manage these things even when are committed to provide emergency health care. During visit to site author observed that disposable gloves are being re-used in female OPD and gloves are asked to purchase from outside in labour room. Poor patient for whom government is running a scheme JANANI SURAKSHA YOJNA with intention to provide financial assistance to mother how these types of system can be justified.
- Quality of care needs system approach in which everything is linked to others. This approach is not followed at government hospital that can be easily seen in these set up. For example government supplies modern equipments but not make arrangement for its use like training or staffs, for that reason these equipments remain idle and service delivery hampers. Baby warmer was present in the hospital but nursing staff are not trained to use it.
- Support services which includes maintenance departments, housekeeping's etc are called as back bone of main services but hospital has wide gap in this area. Because of this gap hospital is not able to utilise its available resources.
- The result of survey in the field of process is very bad hospital is not following aseptic precaution in OT/ dressing room/ labour room. If this is the situation then how can people living in the last can think of getting quality of health care? This is the situation where resources come first and with priority and people believe it is apex body in health care delivery system where they can approach easily. What will be the situation in remote area where modern facility can be reached easily?
- Looking in the result of outcomes we can observe that majority of the patients are not satisfied with the services. In patients are not satisfied with the attitude of ward attendants with whom they interact throughout their stay. Out patients are mostly not satisfied with the availability of medicines and information related to services.

8.0 Conclusions and Recommendation:

The overall health status of facilities at district hospital is very poor. The reasons for the poor health facility status are not hard to find with the results. Major factor hindering access to quality health services are lack of or non existing inter-sectoral linkages between different stake holders. This phenomenon is also found between different Government Departments. Here the role of panchayati raj institutions and civil society organisations becomes pertinent as one of the important stakeholder. Existence of services in terms of structure will never ensure its utilization to fullest unless and until there is proper channel between different stake-holders which can link people to these services. It requires concerted public action to establish an accountable and affordable public health system, in partnership with nongovernmental providers. It requires participation of democratic institutions (Panchayats, user groups, Rogi Kalyan Samitis, women's groups, NGOs) in health delivery from public and non-governmental providers. Such health sector reforms require higher order of management of resources.

Even though much of the responsibility for efficient working of the public health system lies upon the government, the people also need to assert their rights. To address the issues related to quality health care services, capacity building of health service providers, accountability and use of right to information for improving the quality of health care services are very critical factors. It is a challenge to the PRI and civil society institutions to make a difference in improving the access to primary health care services and contribute in ensuring access and utilization of services in their area.

To improve the services of the hospital, author recommends following strategies to be implied in every field:

Area	Strategies
Structure	<ul style="list-style-type: none">• Stream line the process of purchasing medicines and take corrective action to utilize untied funds fully and properly so that material could not get out of the stock any time.• Regular maintenance of the equipments.• Regular training of all medical/ paramedical staffs• Restructuring the various department as per the standards to maintain quality• Maintain adequate staff at every point of service.• Increase the accountability of the staff by proper monitoring by involving local bodies
Process	<ul style="list-style-type: none">• Improves the service delivery process• Regular collection of feedback from service recipients'• Regular process audits
Outcomes	<ul style="list-style-type: none">• Take corrective action against the feedback collected• Inform the service recipients about the services well

9.0 LIMITATIONS OF STUDY

- 1) The result of this study i.e, the Situation analysis of the Health Services of the all departments of DH, which was assessed can't be generalized because some departments like Eye, Immunization, cold chain Maintenance are good performing on physical verification and generalization of the analysis will be a biased one
- 2) In some cases the information was not filled for the particular data element so the other data element which was depended on that particular data element was also not generated.
- 3) Time constraint for completing the paper

10.0 References

- Donabedian A: (2003): An introduction to Quality assurance in health care
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- Kumar, Sudesh and Singh, Janet: An action plan to assess the current situation of maternal & newborn care at government health facilities in Bihar, India (2007)
- Dr John Ovretveit, Dr Abdul Al Serouri- Evaluation of Quality Management System in District Hospitals; 2005
- www.mohfw.com
- FFHI booklet
- Financial guidelines by Bihar government
- PIP report 2012-13 Banka district.
- IPHS standard guideline

Annexure 1

Example of Problem Bank

OPD

- 1) Drug / medicine as per the expectation of patient
- 2) Availability of drug in proper quantity.
- 3) List of drug should be available from district.
- 4) Unavailability of fund in RKS.

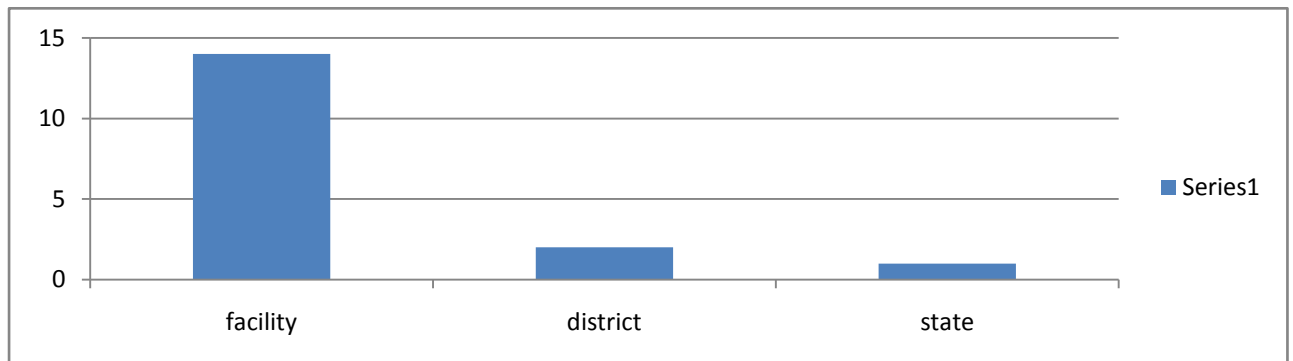
Department	Problem identified/facing by staff	Probable solution (after having discussion with particular person/ department & administration)	Person who got assigned to do solve the problem	Time allotted for Solution	
OPD	Sacarcity/ not regular supply of the Drug/ Medicine	VED analysis to be done by the doctors	Pharmacist (Ensure availability of list of drug) to Doctors & collection of filled list	End of March	Current scenario-(27/03/12) List of drug is prepared
		Preparation & maintenance of Passbook	HM & FFHI Consultant for preparation of passbook & first transaction, After that pharmacist will take care of that in supervision of BHM	After VED analysis / from first procurement in next financial year	

		Ensure the availability of V category durg	BHM & MOIB	After the procurement of drug	
				<i>Note:</i> MOIC & BHM will Supervise to ensure the availability of drug throughout the month	
			Get drug inventory software from SDH Danapur	HM & FFHI Consultant will help to arrange this as soon as possible	System are not compatable for this software,so looking for some other software(current status-27/03/12)

Annexure – 2

Gravity of Problem

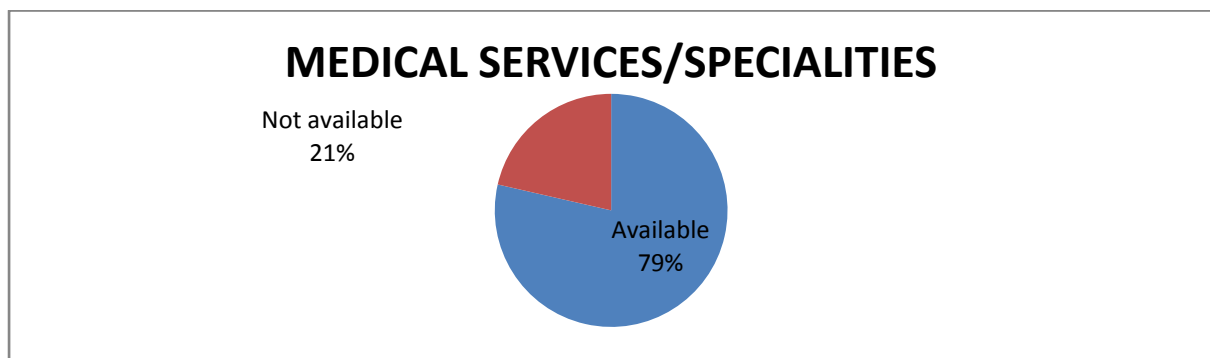
As per our problem bank prepared by staffs of the facility only, around 70-75 % of the problem were associated with the facility only & only 5-10 % for the state.



MEDICAL SERVICES/SPECIALITIES

A survey result indicates 39% of medical services are not available against the standards.

Facilities	As per IPHS	Available	Not available
MEIDICAL SERVICES/SPECIALITIES	14	11	3



PARA CLINICAL SERVICES:

In Para clinical service 73% of services were found not available

Facilities	As per IPHS	Available	Not available
PARA -CLINICAL SERVICES	8	3	1

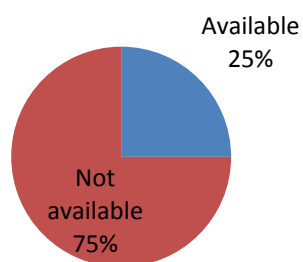


SUPPORT SERVICES:

Support services are the back bone of all clinical services but in this the percentage of non availability is very high and it accounts to 75%.

Facilities	As per IPHS	Available	Not available
SUPPORT SERVICES	20	5	15

SUPPORT SERVICES

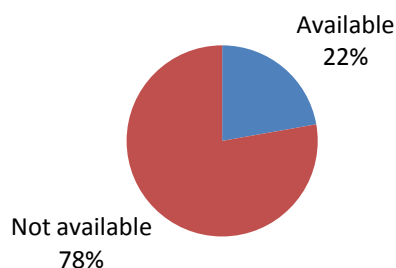


ADMINISTRATIVE SERVICES:

Hospital is managed by administration but at present hospital have only two administrative positions against the required 9.

Facilities	IPHS NORMS	Available	Not available
ADMINISTRATIVE SERVICES	9	2	7

ADMINISTRATIVE SERVICES

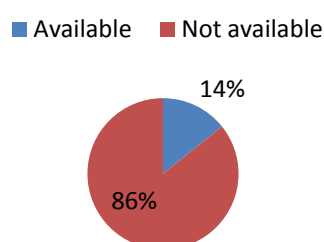


PAEDIATRIC PROCEDURE:

Bihar is low performing state in the child health and mortality rate is very high but district hospital doesn't have enough facility in this field.

Facilities	Available	Not available
PAEDIATRIC PROCEDURE	2	12

PAEDIATRIC PROCEDURE

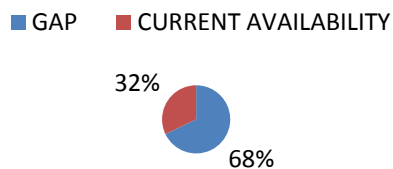


LAB TEST:

Lab investigation provides support in diagnosis but only 32% of total investigations are done here

Facilities	GAP	CURRENT AVAILABILITY
LAB TEST	55	26

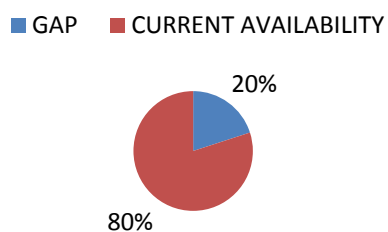
LAB TEST



ENT & OPHTHALMOLOGY INVESTIGATION:

In this area only 20% of investigations are absent, but the services are being provided due to absence of advance equipments

ENT & OPHTHALMOLOGY INVESTIGATION



DRUGS:

There is wide gap in the availability of medicines only 18% of the standards are available. But most of the essential drugs which are required on urgent basis are not available.

Facilities	GAP	CURRENT AVAILABILITY
DRUGS	322	70

