Dissertation

At

NATIONAL RURAL HEALTH MISSION, BIHAR

(FEB 19th–MAY 26th, 2013)

A DISSERTATION REPORT ON

IMPLEMENTING QUALITY STANDARD IN GOVT. HOSPITAL

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(PG/11/120)

POST-GRADUATE DIPLOMA IN HOSPITAL & HEALTH MANAGEMENT,

NEW DELHI 2011-13

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARH, NEW DELHI

2013

Certificate from Dissertation Advisory Committee

This is to certify that **Mr. VIKAS KUMAR GUPTA**, 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 **"IMPLEMENTING QUALITY STANDARD IN SUB-DIVISIONAL HOSPITAL, MAHUA (VAISHALI), BIHAR"** in partial fulfillment 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.

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Date: 30/4/2013

TO WHOM IT MAY CONCERN

This is to certify that **Vikas Kumar Gupta** has successfully completed his 14 February 2013 to 26 April dissertation in our organization. During this intern he has worked on IMPLEMENTING QUALITY STANDARD IN SUB-DIVISIONAL HOSPITAL, MAHUA (VAISHALI), BIHAR under the guidance of me and my team at Sub – DIVISIONAL HOSPITAL MAHUA, VAISHALI, BIHAR

We wish him good luck for his future assignments.

30/4/2013

Deputy Superintendent
SDH Mahua, Vaishali, Bihar

17 May 2013

Certificate of Approval

The following dissertation titled **"IMPLEMENTING QUALITY STANDARD IN SUB-DIVISIONAL HOSPITAL, MAHUA (VAISHALI), BIHAR "** 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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FEEDBACK FORM

Name of the Student: VIKAS KUMAR Gupta

Dissertation Organisation: Sub-divisional hospital Mahua

Area of Dissertation: Implementing quality Standard in govt. Hospital

Attendance: Regular

Objectives achieved: Satisfactory

Deliverables: Report on Implementing quality Standard in hospital & Co-ordination with Mangement.

Strengths: Good problem solving Skills,

Suggestions for Improvement: Self initiation

7/8/2013

Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Date: 7/8/2013
Place: Mahua Bihar

ACKNOWLEDGEMENT

I have taken tremendous interest and effort in the project. However, it would not have been possible without the kind support and extended hand of help. I would like to express our sincere thanks to all of them.

I am highly indebted to **Dr. BirendraKumar(Deputy Superintendent),SDH,Mahua,**for his consistent guidance and marked supervision as well as for providing necessary information regarding the project that enabled me all reach the completion of the same successfully.

I am also highly indebted to Dr.**PawanTaneja(IIHMR, New Delhi)** for guiding and mentoring me and providing necessary information regarding the project that enabled me all reach the completion of the same successfully.

I would like to express our gratitude towards entire staff members of Sub-divisional Hospital**Mahua**for their gracious co-operation and firm encouragement at every step that helped me reaches the milestone.

I greatly appreciate our classmates specially who have provided their constant support and thorough knowledge and helped me with all their abilities.

Vikas Kumar Gupta

IIHMR, New Delhi

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ABBREVIATIONS

S.No.	ACRONYM	EXTENDED FORM
1.	IPHS	Indian Public Health Standards
2.	ABG	Arterial Blood Gas Analyzer
3.	AERB	Atomic Energy Regulatory Board
4.	AFB	Acid Fast Bacillus
5.	AIDS	Acquired Immuno Deficiency Syndrome
6.	ANM	Auxiliary Nurse Midwife
7.	ARV	Anti Rabies Vaccine
8.	BHT	Bed Head Ticket
9.	BMW	Biomedical Waste
10.	CMO	Chief Medical Officer
11.	CS	Civil Surgeon
12.	CSSD	Central Sterile Supply Department
13.	DHS	District Health Society
14.	DOTS	Directly Observed Treatment Short Course
15.	DPM	District Program Manager
16.	DS	Deputy Superintendent
17.	ECG	Electro Cardiograph
18.	ED	Emergency Department
19.	EEG	Electroencephalograph
20.	ER	Emergency

21.	HK	House Keeping
22.	HR	Human Resources
23.	ICTC	Integrated Counseling and Testing Centre
24.	ICU	Intensive Care Unit
25.	ILR	Ice Lined Refrigerator
26.	IPD	Inpatient Department
27.	ISO	International Standardisation for Organisation
28.	IUD	Intra Uterine Device
29.	JBSY	JananiBalSurakshaYojana
30.	LHW	Lady Health Worker
31.	LAMA	Leave Against Medical Advice
32.	LSCS	Lower Segment Caesarian Section
33.	MLC	Medico Legal Case
34.	MRD	Medical Record Department
35.	MOIC	Medical Officer In-charge
36.	MO	Medical Officer
37.	NHSRC	National Health System Resource Centre
38.	NRHM	National Rural Health Mission
39.	NSV	Non-scalpel Vasectomy
40.	OPD	Out Patient Department
41.	OPV	Oral Polio Vaccine
42.	OT	Operation Theatre
43.	OT	Occupational Therapy
44.	PT	Physiotherapy
45.	RKS	RogiKalyanSamiti
46.	RNTCP	Revised National Tuberculosis Control Program
47.	RO	Reverse Osmosis Plant
48.	RTA	Road Traffic Accident
49.	SHS	State Health Society
50.	TB	Tuberculosis

EXECUTIVE SUMMARY

The Referral Hospital or Community Health Centers (CHCs) , the secondary level of health care, are designed to provide referral as well as specialist health care to the rural population. These centers are however fulfilling the tasks entrusted to them only to a limited extent. The project coming to a close National Rural Health Mission (NRHM) will have to have a fresh look at their functioning in view of the persistent gaps with reference to IPHS to achieve and maintain an acceptable standard of quality of care with 24 x 7 operations.

The data was analyzed regarding status and gaps in existing Community Health Centers (CHCs) or FRU across the Hospital. The report is based on the analysis of data provided by staff, review of documents and general observation.

The major findings of the study are as:

1. The REFERRAL HOSPITAL has a big campus area which can be utilized for designing more services. The campus is however not being managed hence a lot of grass and stray animals are found in the campus.
2. Absence of Blood Bank is a major handicap for smooth functioning of hospital.
3. Essential equipments such as crash cart, dressing trolley, emergency tray are not available in patients care area.
4. Shortage of wheelchair and stretchers for patients transport.
5. All the departments need minor redesigning for smooth functioning.
6. The knowledge and practices about BMW management are rudimentary and need repeated training and monitoring.
7. BMW management practices and infection control practices are non-existent and staffs are not trained in these.
8. There is no system of allotting Unique ID numbers for each patient at the time of OPD Registration. The patients are registered and the registration number changes every month and data for revisit patient is not captured.
9. A medical record department does not exist and hence essential statistical information is not captured. Standard form and formats are not being used.

10. Laundry services are outsourced to traditional Dhobis which is not ideal for hospital standard.
11. The maintenance of the hospital building, premises and equipments is not being done periodically.
12. Safety measures are not in place as there are loose wires all around which are a constant source of risk of electrical shock and fire.
13. It is 3km outside from main MAHUA town,so accessibility is poor
14. Hospital is run by Outsourced electricity generating D.G. set 24 hrs. ,not availability of electric connection
15. Theft is major issue because of carelessness of home guards
16. Hospital has a very big building but unauthorized capturing of rooms by staff members of hospital
17. Not proper maintenance of labour table and NBSU instrument

1 STRENGTHS

The following are the STRENGTHs of the Referral Hospital:

- It is located in the centre of the block and easily approachable.
- Commanding and well informed Medical Officer In-charge.
- MOIC interested in overall development of Referral Hospital.
- Hospital has avery big area it is only SUB DIVISIONAL HOSPITAL in whole Vaishalidistrict,it covers 6 blocks approximate population 1449438
-
- 6000 OPD per month and 600 Delivery per month the figure itself indicates that the Referral Hospital serves good number of health care to the community.
- Involvement of PRI (Penchant Raj Institute) in the hospital functioning is working very efficiently and effectively.
- Patient who cannot be treated at the centre are referred to the district hospital in Ambulance.
- The hospital has 24 hours Ambulance facility.
- Round the clock water availability.
- Inspite of very less doctors and supporting staff hospital is running

2 WEAKNESSES

- Trained manpower requirements are not filled as per patient load and IPHS standard.
- Centralized decision making at the state level leads to delay in approval and implementation.
- Non-availability of essential laboratory services.
- There is water logging in the hospital which needs to be rectified at the earliest.
- BMW is not followed as per BMW guidelines 1998 (2001).
- Equipments are inadequate and often out of order. Annual maintenance is also not carrying out.
- Supply of drugs and consumables are irregular and there are shortages from time to time.
- Training is poor and lacks skill development, team building and motivational components i.e. continuous medical education or Training Program is not periodically conducted to update the clinical staff and managerial staff.
- Lack of security services.

3 OPPORTUNITIES

- It has great potential to be brought up to a model CHC.
- Proper planning and coordination with DHS, NRHM and RKS can lead to development of services and better delivery of health care in an integrated way.
- Free space available which can be utilized for improved construction or future expansion of the hospital.
- Willingness of Government to empower the leadership.

4 PERCEIVED CHALLENGES

- Decentralization of decision making at the hospital level.
- Adherence to BMW management rules 1998.
- Following infection control practices.
- Upkeep and sanitation of hospital building and environment.
- Providing laboratory services.

INTRODUCTION

Sub-district (Sub-divisional) hospitals are below the district and above the block level (CHC) hospitals and act as First Referral Units for the Tehsil /Taluk /block population in which they are geographically located. Specialist services are provided through these sub district hospitals and they receive referred in cases from neighboring CHCs. These hospitals should play an important referral link between the Community Health Centers, Primary Health Centers and sub-centers. They have an important role to play as First Referral Units in providing emergency obstetrics care and neonatal care and help in bringing down the Maternal Mortality and Infant Mortality. It also saves the travel time for the cases needing emergency care and reduces the workload of the district hospital. In some of the states, each district is subdivided in to two or three sub divisions. A subdivision hospital caters to about 5-6 lakhs people. In bigger districts the sub-districthospitals fills the gap between the block level hospitals and the district hospitals. There are about 1200 such hospitals in the country with a varying strength of number of beds ranging from 50 to 100 beds or more.

It caters to the people living in Block MAHUA(VAISHALI) in the district. REFERRAL HOSPITAL system is required to work not only as a curative centre but at the same time should be able to build interface with the institutions external to it including those controlled by non-government and private voluntary health organization. It covers 14.5 lacpopulations. The number of beds available in the REFERRAL HOSPITAL is 80.

The REFERRAL HOSPITAL compound is good and enough area for patients cares. Environment is good surrounding of the hospital. Availability of all the departments is the positive point of the hospital but not in good condition and need to properly maintain. Transporting facility is good and the road is very good in condition. Patients come easily in the hospital.

The building of the hospital is an old setup. Due to lack of maintenance the condition of the wards, OT, Labour room, toilets and other rooms are not as per standards.

Therefore the study is carried out to analyze the gaps with reference to IPHS guidelines. The main objective of the study is to identify the availability of infrastructure facility, human resources, investigative services, and facility based newborn care services with respect to Indian Public Health Standards (IPHS) at FRU.

Referral Hospital, MAHUA(VAISHALI) Fact Sheet		
S.No.	**AREA**	**NUMBER**
1.	Total population covered	14.5 lacc
3.	Additional PHC	No
4.	Sub-centre	27
5.	Sanctioned bed	80
6.	Functional bed	80

The health care system in India, at present, has a three-tier structure to provide health care services to its people. The first tire, known as primary tire, has been developed to provide health care services to the vast majority of rural people. The primary tire comprises three types of health care institutions: Sub Centre (SC), Primary Health Centre (PHC) and Community Health Centre (CHC). The rural health care infrastructure has been developed to provide primary health care services through a network of integrated health and family welfare delivery system.

Rural Health Care Institutions

Rural health care institutions are established and maintained by the State Governments out of funds provided to them by the Central Government under the Minimum Needs Programmes / Basic Minimum services Programmes.

Sub Centers (SC): SC is the first contact point between health workers and village community. (National norms of population coverage: 5000 in plain area and 3000 in hilly / tribal area).

Primary Health Centre (PHC): PHC is the first contact point between village community and doctor. The activities of PHC involve curative, preventive, promotive and Family Welfare Services. It acts as a referral unit for 6 SCs. It has 4-6 beds for patients. (National norms of population coverage: 30, 000 in plain area and 20, 000 in hilly / tribal area).

Community Health Centre (CHC): It serves as a referral centre for 4 PHCs. It has 30 indoor beds with one OT, X-Ray, Labour Room and Laboratory facilities. (National norms of population coverage: 120, 000 in plain area and 80, 000 in hilly / tribal area). Staffing pattern of Sub Centres, Primary Health Centres and Community Health Centres is shown in table 1(at the end).

REVIEW OF LITRATURE

A study conducted by **SIHFW Rajasthan "To analyse of Community Health Centres in Rajasthan"** has revealed the gaps in various departments within the facility as:

Service delivery, Human Resource and IPHS:

The IPHS prescribes that every CHC has to have a Physician, Surgeon, Obs. &Gynae. And Anaesthetist,Paediatrician and a Public Health Specialist. With regards to the service delivery out of total 31Community Health Centres (CHCs), Physicians (Medical specialist) are available at 54.8% (17) of CHCs.Only 64.5% of CHCs have a surgeon. Obstetricians/ Gynaecologists are also not available at 51.6%CHCs. Paediatric services are not available at majority of CHCs (54.8%) and child population only in thecatchment of 45.2% CHCs is lucky to have paediatrician.

As far as the **man power** is concerned at 48.4% of CHCs do not have physician, while 9.8% CHCs havethe luxury of having 2 physicians. Majority (54.8%) of CHCs have 1 general surgeon while only (6.4%)CHCs at Dag (Jhalawar) and Sheoganj (Sirohi) have 2 general surgeons in place. For the provision ofreproductive health, a gynaecologist/ Obstetrician are essential but at majority (51.6%) of CHCsObstetrician/ Gynaecologistis not available. Paediatrician is a luxury for 54.8% of CHCs; only 45.2% CHCshave Paediatrician. Only 25.8% CHCs have Anaesthetist (a must for every CHC to be functional as FRU),22.6% CHCs having an Ophthalmologist and at 90.4 % CHCs Dresser is not available.

51.6% CHCs have one Pharmacist/Compounder. Availability of Ward Boys is not an issue with 77.5%CHCs but for 22.5% CHCs. Sweepers are available at majority of places (64.5% CHCs). StatisticalAssistant/ Data Entry operator is available at 22.6% CHCs while in 77.4% CHCs this post is vacant.

Assured services as per IPHS:

The standards adopted under IPHS ask for certain "assured services" : Emergency medical and surgicalservices, services for LSCS, Blood banking, Essential diagnostics, referral, National Health programdelivery, Essential drugs, Diet, Laundry, IPD, OPD, OT, Labour room, X-ray, Pharmacy, citizen charters andilk. Further, every CHC is expected to have SOP and standard protocols.

With reference to the said "*Assured services*", the analysis shows-

90.3% CHCs provide **Emergency Services** except CHCs Atru (Baran), Nagar (Bharatpur) and Tonk. 83.9%CHCs are providing Family Planning services. 24-Hour delivery Services are available at majority of CHCs(93.5%) except at Atru (Baran) and TonkCHCs.Emergency Obstetric Care is available only at 45.2%CHCs.

New Born Carefacility is being provided at 74.2% CHCs (only 45.2% have a pediatrician). EmergencyCare of sick Children Facility is being provided by 64.5% CHCs, while this facility is not available at 35.5%CHCs. Essential **Laboratory Services** are available at majority (83.9%) of CHCs. **Referral Transport Services** are available at 67.8%

Specialist services related to **safe Abortion** areavailable at 67.7% CHCs. Treatment facility for **RTI/STI** is available at majority (93.5%) of CHCs. Facilitiesin **Gynaecology/ obstetric** (96.8).**Maternal and Child health Service** availability (96.8).

As far as the **investigation facility**concern 87.1% CHCs has ECG facility while this facility is not availableat 12.9% CHCs. 87.1% CHCs do not have Ultra Sound facility. Majorities (77.4%) of CHCs have samplecollection and transportation facilities, while at 22.6% CHCs services are not available. Diagnostic facilityis available at 22.6% CHCs while 77.4% CHCs outsource this to private lab/hospital.

Infrastructure refers to the basic support system in the form of a proper and regularly maintainedbuilding, and the basic facilities available within the building for the smooth functioning of the health careestablishments. Fortunately 90.4% CHCs are located within the village itself, rest 9.6% CHCs are locatedat less than 2 hours of travel distance from the farthest village. 96.8% of CHCs have Govt. buildings, whileCHC Kekri (Ajmer) is housed in rented building.

All the CHCs have **Operation Theatre**facility except CHC in Tonk. Out of these only 70.0% operationtheatres are used for Obstetric/ Gynaecological purpose, while 30.0% CHCs do not use their operationtheatre for Obstetric/ Gynaecological purpose. Majority of OTs (55.3%) are functional for other surgeries too, while in 33.3% of OTs are not functional.70.9% CHCs have Air conditioner in Operation Theatre and out of these 67.7% CHCs have their Airconditioner in working condition.

77.4% CHCs have **Generator and Emergency Lights**availability in Operation Theatre. Out of remaining22.6% CHCs has neither Generator nor emergency light 38.7% CHCs have reported that they have walkincoolers to store the vaccine. Blood storage unit as a must for an FRU is available at 58.1% CHCs, whilethis facility is not available at 41.9% CHCs.

At majority (90.3%) of CHCs **labor room**is available except from CHCs at Atru (Baran), Sardarshahar(Churu) and Tonk. all 31 CHCs are getting adequate water supply. 64.5% CHCs have vehicles at theircentres while 35.05% CHCs do not have any vehicle. Majority of CHCs (90.3%) CHCs do not have wastedisposal facility.

As far as the **furnishing** is concerned examination table, delivery table, stool for patients, oxygen trolley,iron bed, bed side locker, instrument tray, chair, wooden table and mattress are available at all the 31CHCs.CHC at Indergarh (Bundi), don't have basics like saline stand, wheel chair, stretcher on trolley.

54.9% CHCs doesn't have availability of standard operating procedures, while only 45.1% CHCs havethis facility. Facility of **External Monitoring** is not available at 61.2% CHCs, while 38.8% CHCs have thisfacility.

Internal Monitoring Facilityis not available at 38.8% CHCs, 54.9% CHCs have copies of constitution ofRMRS (RKS), while 45.1% CHCs don't have this constitution. Majority (80.6%) CHCs have citizen'scharter, while 19.4% don't citizen's charter. [1]

A study is done by **K.FrancisSudhakar** et.al. on topic ***"A Study Of Gap Analysis In Hospitals And The Relationship Between Patient Satisfaction And Quality Of Service In Health Care Services"***revealed that the centrality of any hospital effectiveness which is measured using patient satisfaction approach is the patient's perception about the quality of services provided. Apparently, the point of emphasis here is what aspects of quality of services are subjected to the assessment of patient satisfaction. Marketing is vital to the survival of any organization including health care delivery organizations. Assessment of quality of services provided by the hospitals in these days has been a serious concern for hospitals and health care organizations owing to the excessive demands imposed on them by users, consumers, government and society at large. In addition to the quality of services, measurement of patient satisfaction also has been encouraged by growing consumer orientation in health care, especially since it yields information about consumer views in a form which can be used for comparison and monitoring. [2]

A study is carried out by **P.R.Sodani et.al**. on topic "***Assessing Indian Public Health Standards For Community Health Centers: A Case Study With Special Reference To Essential New Born Care Services"*** exposed that infrastructure facilities were available in almost all the CHCs, but shortage of manpower especially specialists was observed. Availability of investigative services was found quite satisfactory except ECG. It was also observed that none of the CHCs have fully equipped facility based newborn care services (including newborn corner

and newborn care stabilization unit). As per IPHS suggested in the revised draft (2010) important deficiencies were revealed in the studied CHCs of Bharatpur district and by additional inputs such as recruiting staff, improving infrastructure facilities, CHCs can be upgraded. [3]

OBJECTIVES

GENERAL OBJECTIVES

To study and analysis the gap of referral hospital Mahua(Vaishali), Patna in Bihar by compare with the IPHS guideline.

SPECIFIC OBJECTIVES

1. Describes the process flow of all the departments in the REFERRAL HOSPITAL Mahua(Vaishali), Patna; with the identification of process owners, Input(s), Output(s) and process flow as each process occurring at each section of the hospital with the relevant records.

2. To analysis the gap (infrastructural, instrumental etc.) in all dept. of Mahua(Vaishali) referral hospital of Patna, Bihar

DATA AND METHOD

The primary data collection was carried out to assess the current system and potential improvement. The study was completed with the help of two stages:-

Stage 1.

IPHS checklist was used for a total survey of the hospital. The survey was done to understand the scope of services, status of manpower, physical infrastructure, status and availability of equipments and diagnostic services.

Stage 2.

Observations were used to map the various processes of the hospital and to know the functioning of the each department.

STUDY AREA

The study was done in the city of Patna, the capital of the state of Bihar, which is one of the north-east state of India.

For collecting the data various department of hospital were visited which includes operation theatre (OT) dept., Labour room dept., NBCC dept., Pharmacy dept., IPD, OPD, Emergency, Family Planning dept., Routine Immunization dept. etc.

STUDY DESIGN

Observational study to analyse the gaps within the facility by using IPHS standards.

Data Collection TOOL: Checklist

Duration of the Study: February 12 to April 25, 2013

STUDY FINDING

8.1 OUTPATIENT DEPARTMENT

For Process Flow:

Process Group	OPD	**Sub-Process**	OPD Registration
Process Location	Registration counter	**Process Owner**	Registration clerk
Input(s)	Patient coming to the hospital	**Output(s)**	No. of OPD registration per day

Process Flow/Process Description:	
• OPD patient's registration takes place from 8:00am to 2:00 pm. • There are separate registration counters for male and female patients. • The registration clerk at the registration counter writes the patient name, age, sex & address in a register and allocates a number to him/her on first cum first serve basis. • After registration patient waits for his/her turn to be called by security personnel for consultation with medical officers. • Registration fee is one rupee which is valid for one month. • Old registration holder patients directly go to the OPD.	
Patients Records	Outpatient Register, Registration Slip.

Gap Analysis:

Gap ID No.	**OP001**
Gap Statement: Registration counter is in the open.	
Rationale/Explanation: • For registration the patient has to stand outside in the open. • The area is not covered and patients have to stand in adverse weather condition. • There is no chair or bench available for the patients to sit.	
Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS Standards (4.1.3.)**

Gap ID No.	**OP001**
Gap Statement: Space for patient waiting area is a narrow corridor.	
Rationale/Explanation: • There is no designated waiting area for the patients. • The patients wait outside the consulting chamber in the corridor.	

• There is no sufficient space for waiting of the patients. • No supporting facilities (like wheelchair, ramps, handrails & trolleys) for disabled patients. • Rights of the patients/ Patients Charter are not displayed.	
Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.4 & 4.1.5, 4.1.6)**

8.1.2 OP Consultation

Process Group	OPD	**Sub-Process**	Consultation
Process Location	Consultation Chamber	**Process Owner**	Medical Officer
Input(s)	Patients with OPD Registration Slip	**Output(s)**	**(a)** 300/day of OPD consultations. **(b)** 15/day of investigation prescribed. **(c)** 33 types of medicine prescribed. **(d)** 250 of patients advised for follow up. **(e)** 10 of patients referred.

			(f) 250/month of patients advised for admission.
Process Flow/Process Description: • Medical Officer examines the patients as per their turn. • Assess vitals and prescribe medication/investigations/admission/refer to higher centers on OPD Registration form. • Medical Officer maintains the register and writes the patient's serial number, registration number, patient's name, age, sex, address and treatment. MO gives the information about dose, time and site of medication and also educate on diet if required.			
Patient Records		OPD Register.	

Gap Analysis:

Gap ID No.	**OP002**
Gap Statement : Hospital services, Citizen charter are not displayed in the OPD waiting area.	
Rationale/Explanation: • Citizen Charter is not displayed. • Posters imparting health education are not displayed in adequate number and all places. • Booklets/Leaflets are not available. • Available services, Name of the doctors, User Fee details and list of members of RKS/Hospital management committee are not displayed.	
Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.2.5, 4.1.6)**

Gap ID No.	**OP003**
Gap Statement: Basic facilities are not available in the OPD	

Rationale/Explanation: • There is no waiting area. • The doorway leading to the entrance not has a ramp facility easy access for handicapped patients; wheelchairs and stretchers are also not available. • Toilets with adequate water supply separate for males and females are not available. • Drinking water is not available in the patient's waiting area. • There are in-adequate chairs for patients and attendant in waiting area.	
Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.4 & 4.1.5)**
Supporting Annexure	Photograph

Gap ID No.	**OP004**
Gap Statement: Patient privacy is not maintained during examination.	
Rationale/Explanation: • Curtains are not available in OP consultation room. • During consultation time, a number of patients are present in consultation room.	
Gap Classification Structure	***Gap Severity Rating** High
Gap Reference	**IPHS (4.1.7)**
Supporting Annexure	Photograph

8.1.3 Dispensing of Medicines

Process Group	OPD	**Sub-Process**	Dispensing of Medicines
Process Location	OP Pharmacy	**Process Owner**	Pharmacist
Input(s)	OPD Registration Ticket	**Output(s)**	• No. of Medicines

			dispensed per day • No. of stock out per day
Process Flow/ Process Description: • Patients come pharmacy after the consultation and go directly to pharmacy and shows the prescription • Pharmacist checks the availability of drugs and if it is not available then advice some drugs is not available in the pharmacy, then patients are bound to purchase drugs outside the campus. • Pharmacist enters the name of the medicine in Medicine Dispensing Register; in register mention the reg. no. and quantity given to the patients.			
Patient Records	Medicine Dispensing Register		

Gap Analysis:

Gap ID No.	**OP005**
Gap Statement: Dispensing of medicine is not as per standard dispensing practices.	
Rationale/ Explanation: • Racks for storage of medicines are not available. • Medicines are kept on floor and during dispensing are laid down on a table which is too small. • All patients are not described briefly about the intake of medicine. • Medicines dispensed are not handed over to the patients in packets. • Dosages and timing of medication is not written • Refrigerator is available in pharmacy department but needs maintenance.	
Gap Classification Process	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.7)**

8.1.4 Dressing of Wound

Process Flow

Process Group	OPD	**Sub-Process**	Dresser
Process Location	Dressing Room	**Process Owner**	Dressing of wound
Input(s)	Patient	**Output(s)**	Wound dressing done

Process Flow/ Process Description:

- Patients come to dressing room prescribed by MO.
- Dresser/ ANM staff washes the wound with antiseptic solution.
- During dressing the wound dresser uses the cotton and gauze. They give some medicine like SILVER SULPHADIAZINE CREAM. At last they give advice to patients and send to pharmacy department for medicines. Patient comes to next visit after two days.
- Dresser maintains the register and writes the OPD registration no., name of patients and what is done and what medicine has given.

Patients Records	Dressing Register

Gap Analysis:

Gap ID No.	**OP006**
Gap Statement: Cluttering of junk in the dressing room.	

Rationale/ Explanation:

- Dressing room looks like a store room as many items are stored in this room.
- Do not follow the Biomedical Management process.
- Color coded bins have not been provided for segregation of waste.
- Cotton and all the waste are thrown everywhere.
- Floor is not cleaned frequently (at last once in each shift) and hence is dirty.

Gap Classification	***Gap Severity Rating**
Structure	Medium
Gap Reference	**IPHS (4.1.11)**
Supporting Annexure	Photograph

Gap ID No.	**OP007**
Gap Statement: Dressing is not done as per standard practices.	
Rationale/ Explanation: • Sterile gauze and dressing pad is not available. • Unsterile gauze and pad are used for dressing. • Dresser does not use PPE such as gloves, mask etc at the time of dressing. • Patient's privacy is not maintained at the time of dressing as more than one patient enters the room at the same time and there is no curtain available.	
Gap Classification Process	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.11)**
Supporting Annexure	Photograph

8.2 IN-PATIENT DEPARTMENT

A. 2.1) For Process Flow:

Process Group	IPD	**Sub-Process**	Registration
Process Location	Registration Counter	**Process Owner**	Registration Clerk
Input(s)	Registration Form	**Output(s)**	10 IPD Registrations per day
Process Flow/ Process Description: • In case the patients needs admission the doctor writes down the instruction in the OPD ticket. • The patient is advised to report the staff nurse in the inpatient ward. • The staff nurse collects the OPD ticket and admits the patient and allots the bed according to the severity of the patient condition. • After admitting the patient, nurse enters the detail of the patients in the case sheet register. • During night, only the staff nurse admits the patients.			
Patient Records	Registration Form		

B. (2.1) For Gap Analysis:

Gap ID No.	**IP001**
Gap Statement: Wards are not fully equipped for patients care.	
Rationale/ Explanation: • Patient transport facility (from OP consultation room to ward) is not adequate for vulnerable patient. • Bed side lockers are not provided to keep medicines. • Bed railings are not available in the wards. • Pillow and blanket not provided to patient. • Waste segregation bins are not available near the patient's bed. • Drinking water facility is not available in ward area. • Waiting area for patient's attendant is not available in front of wards. • The cots and mattresses are in bed condition and need immediate repair. • All the drugs are not available in the hospital and some have to bought from outside. • Wards are not clean. • No washing area is designated for washing of badly soiled linen.	
Gap Classification Structural	***Gap Severity Rating** High
Gap Reference	**IPHS (4.1.8)**

8.2.2 Patients Care

Process Flow:

Process Group	In patients Services	**Sub-Process**	Patients care
Process Location	Wards	**Process Owner**	Staff Nurse, Ward Boy, Medical Officer
Input(s)	patients	**Output(s)**	Patients Care

Process Flow/ Process Description:	
• Nursing staff check the vitals of the patient and monitor the condition of patient at fixed intervals according to condition of patient. • Nursing staff administrate medication to the patients as per doctor's order. • Medical Officer explains the condition of the patient to Nursing Staff and patient. • Medical Officer changes the medication according the condition of the patient. In any emergency Nursing Staff communicate verbally with medical officer. If any investigation required according to the condition of the patient Nursing Staff call the technician. • If there is no improvement in the health condition of the patient, then the Medical Officer refers the patient to District Hospital. • If the patient's condition satisfactory, the MO discharges the patient.	
Patient Records	Case Sheet/ Bed Head Ticket

Gap Analysis:

Gap ID No.	**IP001**
Gap Statement: Infection control not being practiced in the ward.	
Rationale/ Explanation: • Chittle Forceps and thermometer kept in the Savlon Solution but the solution is not changed every day. • There is no separate area to keep the sterile and unsterile equipments. • The Biomedical waste segregation is not as per guidelines. • Color coded dustbins have not been provided in the wards. • Needle cutter is not available in the ward. • Unsterile instruments are used by staff nurse/ ANM. • Cleaning and mopping schedule is not proper and disinfectants are not used.	
Gap Classification Process	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.8)**
Supporting Annexure	Photographs

Maternity & Child Health Care:

8.2.5 Delivery

Process Flow:

Process Group	In Patients Service	**Sub-Process**	Conduction of Delivery
Process Location	Labour Room	**Process Owner**	MO/ Staff Nurse
Input(s)	Patient with Labour Pain	**Output(s)**	Delivery conducted

Process Flow/ Process Description:

- The patient comes with Labour Pain.
- The attendant, who comes with patient, goes to registration counter and take the registration slip.
- Staff Nurse/ ANM examines the patient's condition. If signs for labour are confirmed, then patient is admitted. If not confirmed then the patient is sent home and advised to come back during the consent of labour pain.
- After checking of vitals, the patient transferred to Labour Room.
- After delivery, vitals are again checked and the mother is shifted to the ward.
- Neonatal Care is provided to the baby in NBCC unit.
- Breast feeding is initiated within half an hour of delivery.
- Staff Nurse/ ANM maintains the Labour Register and JBSY Register.
- In Labour Register, ANM writes the name of the patient, serial number, OPD/ ER number, ASHA name and patient's address.
- In JBSY Register ANM writes serial number, OPD/ ER number, name and address. age, child M/F, weight of child, ASHA name, list of medicine and signature. In JBSY Register photo of delivery patients should be pasted.

Patients Records	Case Sheet/ Bed Head Ticket, Delivery Register, JBSY Register.

Gap Analysis:

Gap ID No.	**IP001**

Gap Statement: Essential facility for labour room is not available.	
Rationale/ Explanation: • There are no separate areas for septic and aseptic deliveries. • The labour room is not well-lit and ventilated with an attached toilet facilities. • No scrub room for doctors and nurses. • No sterile supply in labour room.	
Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.10)**
Supporting Annexure	Photograph

Pics...

8.2.9 Emergency Services:

Process Flow:

Process Group	Emergency Services	**Sub-Process**	Emergency Treatment
Process Location	MOIC Cabin/ Labour Room	**Process Owner**	ANM/ MO
Input(s)	Patient transfer to the ward after delivery	**Output(s)**	Number of cases seen in Emergency

Process Flow/ Process Description:

- Patients requiring Emergency Care during OPD hours are seen in the OPD or Labour Room.
- After OPD hours, one staff nurse posted on Labour Room and one doctor is available round the clock.
- In case of Delivery, the patient is admitted in Labour Room by the nurse and if needed the doctor is informed who comes to examine the patient.
- In cases requiring minor dressing and treatment, the patients are examined and sent home after treatment and those requiring admission are admitted in the ward.
- The service/ care that is not available in Referral Hospital, those patients are referred to

Sadar Hospital Patna in Ambulance.	
Patient Records	Case Sheet/ Bed Head Ticket

Gap Analysis:

Gap ID No.	**IP 007**
Gap Statement: Patients are not accompanied by any hospital staff during transfer.	
Rationale/ Explanation: • The Referral Hospital has 24hr facility for the Ambulance. • During transfer no staff member accompanies the patient in ambulance in critical cases.	
Gap Classification Structure	***Gap Severity Rating** **High**
Gap Reference	**IPHS (4.1.11)**
Supporting Annexure	**-**

8.3 OPERATION THEATER

OT Booking

For Process Flow:

Process Group	OT	**Sub-Process**	OT Booking
Process Location	OT	**Process Owner**	OT Nurse
Input(s)	OPD Slip/ BHT	**Output(s)**	No. Of cases booked per day/ month
Process Flow/ Process Description: • Patient is examined in OPD/ Ward. • Doctor advice for surgery. • Case is posted in OT and entry made in OT Register. • The consent is taken in the ward by the staff nurse.			
Patient Records	Registration Form		

Gap Analysis:

Gap ID No.		**OT001**
Gap Statement: OT is not designed as per standard guidelines.		
Rationale/ Explanation: • No concept of zoning exists at present. • There is no separate dress change area in the OT. • There are windows which are not sealed. • Scrubbing Room is inside the Operating Room.		
Gap Classification Structure		***Gap Severity Rating** **High**
Gap Reference	**IPHS (4.1.9)**	
Supporting Annexure		**-**

Pics...

8.4 STERILIZATION UNIT

There is no separate Sterilization Unit. There is an adjacent space available next to OT.

A. (4.1) For Process Flow:

Process Group	Sterilization Unit	**Sub-Process**	Sterilization
Process Location	Autoclave Room	**Process Owner**	OT Staff/ ANM
Input(s)	Unsterile Instruments	**Output(s)**	Sterile Instruments
Process Flow/ Process Description: • OT Technician collects the used equipments from the OT and washes in running tap water. • The instruments are checked for any damage and then dried & packed in designated trays. • Then the instruments are put in Autoclave Machine for sterilization.			

• All the procedures are done under the guidance of Surgeon or MOIC.	
Patient Records	Register

C. (4.1) For Gap Analysis:

Gap ID No.	**OT001**
Gap Statement: Sterilization process is not commensurate the standard sterilization practices.	
Rationale/ Explanation: • Calibration and maintenance of Autoclave is not being done. • Chemical indicators for sterilization are not being used. • Instruments are not disinfected and washed in enzymatic solution. • Decontamination of instruments, gloves, cannulae and syringes are not in practices. • No proper storage and re-assembly of instruments. • No testing of sterilization.	
Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.9)**
Supporting Annexure	Photographs

Medical Store

Process Flow:

Process Group	Administration(Procurement)	**Sub-Process**	Procurement of drugs and kits, Lab equipments & stationary.

Process Location	Pharmacy Store	**Process Owner**	Pharmacist, Lab Technician
Input(s)	Indent	**Output(s)**	Medicine issued from District Medical Store.

Process Flow/ Process Description:

- Hospital pharmacy store raise indent to district pharmacy store.
- Indent is raised with the approval of MOIC.
- Hospital pharmacy store receive the drugs and disposables from District Pharmacy Store against the indent.
- The medicines for the whole block including the Sub-Centers are received by the pharmacist and distributed accordingly.
- If the medicines are not adequate, medicines are bought through scheme.
- Local purchase of drugs also done and the amount is taken from RKS and untied funds.

Patient Records	Service Registers

Gap Analysis:

Gap ID No.	**MS001**
Gap Statement: There is less space and facilities for storage of medicines.	

Rationale/ Explanation:

- Racks are not available to properly arrange the medicine.
- There is one single rack where all the medicines are stored together.
- No Labeling of medicine is being done.
- All the equipments and stationary material lying here and there in store and mixed up with medicine, looks like a garbage store.

Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS (4.1.14)**
Supporting Annexure	Photograph

8.7 MAINTENANCE

Process Group	Maintenance	**Sub-Process**	Plumber/ Electrical/Biomedical
Process Location	Maintenance	**Process Owner**	MOIC/ RKS
Input(s)	Maintenance problem complaints	**Output(s)**	Action taken for solves the problem.
Process Flow/ Process Description: • The on duty staff of the department informs the problem to the MOIC/ RKS. • The MOIC give the authorization and call the respective people. • The account department make the bill of expenditure and submit to the RKS and the payment made by the RKS.			
Maintenance Record		Problem/ Recovery Registers.	

Gap Analysis:

Gap ID No.	**Maintenance 01**
Gap Statement: Preventive maintenance of building and equipments is not being carried out.	
Rationale/ Explanation: • There is no AMC of equipments. • There is no electrician, plumber in hospital; hence routine preventive, breakdown maintenance is not being carried out. • There is no facility round being taken and documented.	
Gap Classification Process	***Gap Severity Rating** High
Gap Reference	**IPHS 4.2 (a)**
Supporting Annexure	-

Gap Analysis:

Gap ID No.	**Maintenance 02**
Gap Statement: There is risk of electrical shock and fire.	

Rationale/ Explanation: • Open electrical points are found. • There are loose wires in some places.	
Gap Classification Process	***Gap Severity Rating** High
Gap Reference	**IPHS 4.2 (a)**
Supporting Annexure	**-**

8.9 HOUSE KEEPING

Process Flow

Process Group	Housekeeping Services	**Sub-Process**	Cleaning & Mopping
Process Location	Hospital premises area	**Process Owner**	Housekeeping service provider
Input(s)	Unclean Referral Hospital	**Output(s)**	Clean Referral Hospital
Process Flow/ Process Description: • The housekeeping staff does dusting and mopping in the hospital area. • Male housekeeping staff cleans the wards, OPD area, OT, Lab & x-ray and washroom three times in a day. • Female housekeeping staff cleans the labour room. • Housekeeping staff do the mopping with the solution of phenyl and water.			
Patient Records			

Gap Analysis:

Gap ID No.	**HK 01**
Gap Statement: Cleaning and mopping practice is not being carried out as per hospital practices.	

Rationale/ Explanation: • Broom is used for dusting in OT and Labour room before mopping. • The ratio of phenyl and water is not defined and they do mixing as per availability of materials. • Scrubbing is not being done daily in all areas. • Cobwebs are not cleared at last once in a month. • Toilets are not cleaned in each shift and patient load. Hence they stink most of the time.

Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS 4.1.8 (g)**
Supporting Annexure	**-**

8.10 DIETARY SERVICES

Process Flow:

Process Group	Dietary Services	**Sub-Process**	Dietary
Process Location	Outsourced	**Process Owner**	Staff Nurse
Input(s)	No. Of in-patients required for diet.	**Output(s)**	Diet provide to the patient.

Process Flow/ Process Description:

- Nursing staff inform to the contractor (NGO) about the number of diets are required.
- The diets are provided to the ward patients by a lady.
- The diet is provided to those patients only who admitted in hospital for delivery or family planning operation; remaining patients are not able take the advantage of dietary services.
- Diet is given three times as breakfast, lunch and dinner.

Patients Records	

Gap Analysis:

Gap ID No.	**DTS 01**
Gap Statement: Diet is not provided as per the requirements of patients.	

Rationale/ Explanation: • Nutrition assessment is not done. • Quality of the food is not checked. • There is no monitoring of food making process. • Food hygiene is not maintained. • Foods are prepared on stoves. • The condition of kitchen room is very poor.	
Gap Classification Process	***Gap Severity Rating** Medium
Gap Reference	**IPHS (8)**
Supporting Annexure	

8.11 LAUNDRY SERVICES

Process Flow

Process Group	Laundry	**Sub-Process**	Cleaning the linen
Process Location	Outsourced	**Process Owner**	MOIC/ HM
Input(s)	Dirty Linen	**Output(s)**	Cleaned Linen
Process Flow/ Process Description: • Dirty linen is collected from OT and labour room. • Outsourced service provider (NGO) receives the dirty linen and washed it outside of the Referral Hospital. • The washed linen is received by the hospital staff.			
Patients Records	Linen Receiving Register.		

Gap Analysis:

Gap ID No.	**LR 01**
Gap Statement: Laundry service is outsourced to traditional Dhobi.	

Rationale/ Explanation: • All dirty linen are mixed up during collection. • There is no fix timing for receiving the dirty linen and dispatch the washed linen. • Washing procedure is not proper. • Washer man uses the normal detergent for washing the linen.	
Gap Classification Structure	***Gap Severity Rating** Medium
Gap Reference	**IPHS (8)**
Supporting Annexure	**-**

RECOMMENDATIONs

The Recommendations according to IPHS guidelines are as follows for improvement of services in Referral Hospital:-

A. Service Delivery:

Unlike Sub-centre and PHCs, CHCs have been envisaged as only one type and will act both as Block level health administrative unit and gatekeeper for referrals to higher level of facilities. All essential services as envisaged in the CHC should be made available, which includes routine and emergency care in Surgery, Medicine, Obstetrics and Gynecology, Pediatrics, Dental and AYUSH in addition to all the National Health Programmes.

Standards for Newborn stabilization unit, MTP facilities for second trimester pregnancy (desirable), The Integrated Counselling and Testing Centre (ICTC), Blood storage and link Anti Retroviral Therapy centre have been added. Hence these facilities should be there.

Minimum Requirement for Delivery of the Above-Mentioned Services:-

The following requirements are being projected based on the assumption that there will be averagebed occupancy of 60%. The strength may be further increased if the occupancy increases with subsequent up gradation. With regards to Manpower, 2 specialists, namely**, Anesthetist and**

Public Health Specialist willbe provided in addition to the available specialists,namely, Surgery, Medicine, Obstetrics and Gynecology and Pediatrics.

A **Block Public Health Unit** is envisaged at the CHC having a Block Medical Officer/Medical, one Public Health specialist and at least one Public Health Nurse. The support manpower will include a Dental Assistant, Multi Rehabilitation Worker, Cold Chain and Vaccine Logistic Assistant in addition to the existing staff. The manpower at CHC has been rationalized in order to ensure optimal utilization of scarce manpower.

Facilities:-

The lists of equipment and essential drugs have been updated; the drug list for obstetric care and sick newborn & child care (for First Referral Unit (FRU)/CHC) has been incorporated in these guidelines. Physical Infrastructure will be remodeled or rearranged to make best possible use for optimal utilization as per given guidelines in the relevant section.

Human Resource Management:-

Capacity Building will be ensured at all levels by periodic training of all cadres.

Accountability:-

It is mandatory for every CHC/FRU to have functional"RogiKalyanSamiti" (RKS) to ensure accountabilityand also shall have the Charter of Patients' Rights displayed prominently at the entrance. A grievance redressal mechanism under the overall supervision of RKS would also be set up.

Quality of Services:-

Standard Operating Procedures and Standard Treatment Protocols for common ailments and the National Health Programmes should be available and followed. To maintain quality of services, external monitoring through Panchayati Raj Institutions and internal monitoring at appropriate intervals is advocated. Guidelines are being provided for management of routine and emergency
cases under the National Health Programmes so as to maintain uniformity in Management in tune with the National Health Policy.

CONCLUSION

Mahua(Vaishali) referral is located in the centre of the block and easily approachable. Medical Officer In-charge is Commanding and well informed. MOIC is interested in

overall development of Referral Hospital, 1.58lac population covered by it.275 OPD per day and 10 Delivery per day the figure itself indicates that the Referral Hospital serves good number of health care to the community. Involvement of PRI (Panchayti Raj Institute) in the hospital functioning is working very efficiently and effectively. Patient who can not be treated at the centre are referred to the district hospital by Ambulance. The hospital has 24 hours Ambulance facility. Round the clock water availability. Trained manpower requirements are not filled as per patient load and IPHS standard.

Centralized decision making at the state level leads to delay in approval and implementation. The hospital has non-availability of essential laboratory services.There is water logging in the hospital which needs to be rectified at the earliest. BMW is not followed as per BMW guidelines 1998 (2001) and equipments are inadequate and often out of order. Annual maintenance is also not carrying out supply of drugs and consumables are irregular and there are shortages from time to time.Training is poor and lacks skill development, team building and motivational components i.e. continuous medical education or Training Program is not periodically conducted to update the clinical staff and managerial staff and Lack of security services.

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