

**Internship Training**

**At**

**L.M. Civil Hospital, Ludhiana (Punjab)**

**A Study on gap analysis of departments of Mother and Child Hospital,  
Ludhiana as per the National Quality Assurance Guidelines**

**By**

**Dr. Rashmi Wadhwa**

**PG/13/051**

**Under the Guidance of**

**Ms. Kirti Udayai**

**Assistant Professor and Assistant Dean (Academics)**

**Post Graduate Diploma in Hospital and Health Management**

**2013-15**



**International Institute of Health Management Research**

**New Delhi**

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### FEEDBACK FORM

Name of the Student: Dr. Rashmi Wadhwa, Assistant Hospital Administrator

Dissertation Organisation: L.M. Civil Hospital, Ludhiana, Punjab

Area of Dissertation: Hospital Administration and Quality Management

Attendance: 92%

Objectives achieved: Yes

Deliverables:

1. Worked on the Sanitation and the biomedical waste maintenance of the hospital.
2. Gap analysis of various departments of mother and child hospital, Ludhiana
3. Other managerial activities

Strengths: *Integrity & Hardworking, dedication, communication skills, honesty,*

Suggestions for Improvement:

1. Improve knowledge regarding usage of computers and internet.

*2. Reduce weight*

Date:

Place: Ludhiana, Punjab

*[Signature]*  
Dr. Parvinder Sidhu  
Senior Medical Officer Incharge  
(L.M. Civil Hospital, Ludhiana)  
Senior Medical Officer

Civil Hospital, Ludhiana

**TO WHOMSOEVER MAY CONCERN**

This is to certify that **Dr. Rashmi Wadhwa** student of Post Graduate Diploma in Hospital and Health Management (PGDHHM) from International Institute of Health Management Research, New Delhi has undergone internship training at **L. M. Civil Hospital, Ludhiana (Pb.) (National Health Mission, Punjab)** from **09/02/2015 to 31/05/2015**.

The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.



Dr. A.K. Agarwal

Dean, Academics and Student Affairs

IIHMR, New Delhi



Assistant Dean (Academic)

IIHMR, New Del

**L.M.CIVIL HOSPITAL, LUDHIANA**

The certificate is awarded to

**Dr. Rashmi Wadhwa**

In recognition of having successfully completed her  
Internship in all departments of

L.M. Civil Hospital, Ludhiana (Punjab)

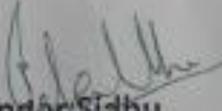
And has successfully completed her Project on

**Gap Analysis of various departments of the Mother and child Hospital as per  
the Standards of National Quality Assurance Mission Guidelines"**

From 09/02/2015 to 08/05/2015

She comes across as a committed, sincere & diligent person who has a strong  
drive & zeal for learning

We wish her all the best for future endeavors

  
**Dr. Parvinder Sidhu**  
Senior Medical Officer Incharge  
(L.M. Civil Hospital, Ludhiana)

**Civil Hospital, Ludhiana**



**PUNJAB HEALTH SYSTEMS CORPORATION**

State Institute of Health and Family Welfare Complex

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No. PHSC/QA/15/\_\_\_\_(07)\_\_\_\_

Dated: 12/5/15

**TO WHOM IT MAY CONCERN**

**CERTIFICATE OF DISSERTATION COMPLETION**

This is to certify that  
Dr. Rashmi Wadhwa student of the Postgraduate  
Diploma in Hospital and Health Management of IIMR Delhi has  
successfully completed four months dissertation under Punjab  
Health Systems Corporation, Punjab from 09.02.2015 to 31.5.2015.

During the dissertation the student's performance was  
found to be satisfactory.

We wish him/her success in all his/her future  
endeavors.

**Hussan Lal, IAS**

Managing Director

Punjab Health Systems Corporation

-Cum - Secretary Health and Family Welfare, Pb.

**CERTIFICATE OF APPROVAL**

The following dissertation titled "A Study on gap analysis of departments of **Mother and Child Hospital, Ludhiana** as per the **National Quality Assurance Guidelines**" at "**L.M. Civil Hospital, Ludhiana (Punjab)**" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily 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.

Dissertation Examination Committee for evaluation of dissertation.

Name

Dr. V. K. Ramteke

S. V. Mishra

Keshu Ugraji

Signature

[Signature]  
[Signature]  
[Signature]

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT**

**RESEARCH, NEW DELHI**

**CERTIFICATE BY SCHOLAR**

This is to certify that the dissertation titled “**To do the gap analysis of various departments of mother and child hospital, As per the national quality assurance guideline**” and submitted by Dr. Rashmi Wadhwa, Enrollment No. PG/13/051 under the supervision of Ms. Kirti Udayai, Asst. Professor, IIHMR, Delhi for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 09/02/2015 to 08/05/2015 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

## **ABSTRACT**

**BACKGROUND:** Hospital is a most visible face of the health care industry. Increased client awareness, expectations and aspirations, increased government regulations and legislations, increased competition, public private partnership programmes, rapid change in healthcare, emphasis on quality, great advances in technology have great impact on hospital administration.

A Quality based approach helps in identifying the gaps in service delivery and tracing its roots and linking them to organisational processes. It builds a system of taking effective actions for traversing the gaps, periodic assessment and improving the quality. The Quality Assurance Guidelines have been developed by the Ministry of Health & Family Welfare for addressing the concerns of public, and also the technical components of service delivery in a comprehensive manner.

### **OBJECTIVE:**

1. To do the gap analysis of the departments in the mother and child hospital, Ludhiana. Based on National Quality Assurance Guidelines.
2. To make the recommendations after the gap analysis of these departments.

**PURPOSE OF THE STUDY:** Mother and child hospital , are abided to provide the best services to the citizens of India, to provide best health care services to the future of India. This study aims to identify the gaps as per the standards in guidelines of state quality assurance. The intent is to make the recommendations that will serve and lay efforts to

improve the hospital and its surroundings by implementing strategies. This will help the Punjab health system to be organized and to go for the quality accreditation.

**METHODOLOGY:** a study was conducted in departments of mother and child hospital, Ludhiana. The study was of descriptive type, and was conducted from 1<sup>st</sup> march 2015 to 15 april 2015. The data was collected using the checklists as per the guidelines of national quality assurance mission. The technique used for collecting the data was by observation, record review, and staff interview. Data Analysis was done using Microsoft Excel.

**CONCLUSION:** Effective implementation of the National Quality Mission will address the major quality issues such as the staff deficit; implementation of the health management information system, interpersonal communication, and other important unaddressed areas such as regular patient feedback and its evaluation, standardization of care processes, patient safety, safe transport, and continuity of care and will thus facilitate improvement in public sector hospital as envisaged under NHM. Once the hospital is certified, it is important that it focuses on maintaining the quality and that the hospital staff is continuously motivated for continual and ongoing quality enhancement to higher levels of quality of healthcare.

## ACKNOWLEDGEMENT

It is indeed a privilege to have got the opportunity to work in a prestigious organization such as L.M. Civil Hospital, Ludhiana (Punjab). My three months on the job training has been nothing short of extensive learning. The exposure I have got on the functioning of various clinical and non clinical departments has been tremendous and has left me with an urge to learn more.

I convey my deep and sincere thanks to Mr. Hussan Lal, Mission Director, NHM, Punjab and Dr. Parvinder Pal kaur, Additional Director (QA) for firstly giving me the opportunity to do my dissertation from L.M. Civil Hospital, Ludhiana (Punjab).

I am thankful to Dr. Parvinder Sidhu , Senior Medical Officer, L.M. Civil Hospital, Ludhiana (Punjab), for giving me permission to do the project in the Hospital and for showing keen interest, encouraging appreciation and solemn advice throughout the project.

A special thanks to all the staff of L.M. Civil Hospital, Ludhiana, Punjab, for always being so co-operative and trusting me. Without their co-operation and warm attitude this project would have been a distant dream.

I am highly obliged to my guide Ms. Kirti Udayai, Assistant Professor and Assistant Dean (Academics) for providing necessary suggestions and guiding me to complete this report.

Last but not least, I offer my regards and gratitude to all those who supported me in any way during my training.

Dr. Rashmi Wadhwa

IIHMR, New Delhi

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## ABBREVIATIONS

HAI : Hospital Acquired Infection.

HIC : Hospital Infection Control.

WHO : World Health Organization.

ALOS : Average Length of Stay.

NABH : National Accreditation Board for Hospitals and Health care Organizations.

ISO : Indian Standards Organization.

OPD : Out Patient Department.

OT : Operation Theatre.

BMW : Bio Medical Waste.

ICU : Intensive Care Unit.

ICTC : Integrated Counseling and Testing Centre.

TB : Tuberculosis.

NSV : No-Scalpel Vasectomy.

STD : Sexually Transmitted Disease.

STI : Sexually Transmitted Infection.

RTI : Respiratory Transmitted Infection.

BLS : Basic Life Support.

ALS : Advanced Life Support.

SMO : Senior Medical Officer.

TLC : Total Leukocyte Count.

DLC : Differential Leukocyte Count.

ESR : Erythrocyte Sedimentation Rate.

FNAC : Fine Needle Aspiration Cytology.

MLC : Medico Legal Case.

ECG : Echocardiography.

CT : Computed Tomography.

PNDT : Pre Natal Diagnostic Technique.

AMC : Annual Maintenance Contract.

AERB : Atomic Energy Regulatory Board.

## **TERMS and DEFINITIONS**

- **Accreditation:** A process of external review of the quality of the health care being provided by a healthcare organisation. This is generally carried out by a non-governmental organisation.
- **Standards:** A statement of expectation that defines the structures and process that must be substantially in place in an organisation to enhance the quality of care.
- **Surveillance:** The continuous scrutiny of factors that determines the occurrence and distribution of diseases and other conditions of ill health. It implies watching over with great attention, authority and often with suspicion. It requires professional analysis and sophisticated interpretation of data leading to recommendations for control activities.
- **Standard Precautions:** A method of infection control in which all human blood and other bodily fluids are considered infectious for HIV, HBV and other blood-borne pathogens, regardless of patient history. It encompasses a variety of practices to prevent occupational exposure, such as the use of personal protective equipment (PPE), disposal of sharps and safe housekeeping.
- **Nosocomial Infection:** Nosocomial infections can be defined as those occurring within 48 hours of hospital admission, 3 days of discharge or 30 days of an operation.

**PART 1: INTERNSHIP**  
**REPORT**

## **1.1: Organization profile**

### **PUNJAB HEALTH SYSTEMS CORPORATION (PHSC)**

- The Punjab Health Systems Corporation was incorporated by the State Govt. in the year 1996 through enactment of Legislative Act, “The Punjab Health Systems Corporation Act, 1996” (Punjab Act No.6 of 1996).
- Main objective is implementation of a World Bank assisted Health Systems Development Project for revamping of existing secondary level health care services.
- Corporation has taken over 166 Institutions which includes District Hospitals, Sub-Divisional Hospitals and Community Health Centres.
- Under this project modernization and updation of 157 hospitals has envisaged through systems supports such as Computerization, HMIS, Disease Surveillance, Training of Personnel, Quality Assurance, Bio-waste Management, Strengthening of Physical Infrastructure (Buildings & Equipments) etc.

## HOSPITAL PROFILE



**Name of the Hospital:** L.M. Civil Hospital, Ludhiana was started in about 1935. After it the hospital was functioning in a four-storied nurses hostel in a make-shift arrangement. In the year 2000, a new hospital building was designed ambitiously and phase-one of it has been constructed with the World Bank Aid. Each block is designed as a self-sufficient unit having its own independent system of horizontal and vertical circulation i.e., corridors, staircases, ramp, and lifts. By virtue of self-sufficiency, even in partial construction the unit can work well. The building is designed around a central courtyard, which acts as a space for outdoor activities, and provides adequate light and ventilation in the interiors. The design and siting of the unit is such that most of the areas fall in north and south wings--considered to be the best orientation in this region. The eastern side is planned to accommodate diagnostics, private rooms, and central sterilisation as the eastern sun is welcome throughout the year.

The western flange, containing circulation areas i.e., ramp, staircases and lifts, cuts off the unwanted sun from the usable areas. For easy and efficient working, the entrance foyer, reception, registration, outpatient department (OPD) etc., are placed on the ground-floor level. The upper two floors contain inpatient wards. The operation theatres are placed at the third-floor level to keep them away from the hubbub of lower levels. The building has been designed and constructed up to four floors so far. However, provision has been made for the addition of another storey. On the external façades, these vertical shafts, along with horizontal roof-projections in exposed concrete, impart the building a modernist and strong visual character. Hospital has 250 beds (Sanctioned). Civil Hospital having the facilities of Medicine, ENT, Surgery, Eye, Dental, Gynaecology, Skin, ICTC centre, Leprosy centre, T.B unit, JSY, RSBY, Telemedicine, Blood Bank and Nephrology.

**Vision:** Hospital shall strive to be the leader in the area of quality healthcare.

**Mission:** Hospital shall continuously engage itself in upgrading its comprehensive multispeciality healthcare delivery system through quality intervention, involvement of all functionaries and excellent leadership.

**Bed Strength: 250 Beds (sanctioned)**



**Mother and Child Hospital:** To check mother child mortality rate during delivery by providing ultra modern facilities to the pregnant women of Ludhiana and adjoining areas, the 100 bedded district level Mother Child Care Hospital has been started. The Hospital is well equipped with ultra modern technology to conduct all kinds of tests, x-rays, scans, ultrasound etc. on very reasonable rates. Besides, the hospital also have Intensive Care Unit (ICU) and Special Newborn Care Unit (SNCU), which would be instrumental in reducing mother child mortality rate during delivery.



## **1.2: Services Available At Hospital**

### Services

- Medicine
- ICU
- General Surgery and minimal access surgery
- ENT
- Pediatrics
- Obstetrics & Gynecology
- Dermatology
- General orthopedics and hand surgery
- Dentistry
- Ophthalmology
- Dialysis
- ICTC
- Chest & TB

### **24 hr Services**

- 24 hrs Emergency
- Blood Bank
- Laboratory
- Radiology

- Pharmacy
- Ambulance

**1.3: Facility Layout**

<b>FLOOR</b>	<b>SERVICES / DERPARTMENTS</b>
<b>Ground floor</b>	<b>Registration</b>
	<b>OPD Chambers</b>
	<b>X-ray &amp; Ultrasound, ECG</b>
	<b>Dispensary</b>
	<b>Laboratory</b>
	<b>User's Charges</b>
	<b>Dialysis</b>
	<b>Emergency &amp; Trauma</b>
	<b>Medical Store</b>
	<b>Jan Aushadi</b>
<b>First floor</b>	<b>ART</b>
	<b>Dental Wing</b>
	<b>Wards – Male and Female Ward</b>
	<b>Operation Theater</b>

**Table 1**

## **1.4: Departments, Observations and Issues**

### **OUT PATIENT DEPARTMENT**

Location: It is located at ground floor of the main building of hospital. There are 11 numbers of OPD chamber. Every OPD has adequate number of Patients examination table, Stool, Doctors chairs, and hand washing facilities. There is non availability of equipments like BP meter, weighing machine, in every OPD chamber. Only few of OPD chamber have these instruments like medicine OPD, Gynaecology OPD.

X-Ray and USG, ECG, Lab department is present at same floor nears OPD. There is drinking water and toilets facilities are also present in the OPD. Dialysis unit is on the same floor.

**Adjacent Department:** X-Ray, Laboratory, USG, ECG

#### **Workload:**

**Average OPD Patients** = 500-550 Patients/Day

**Average Indoor Patients** = 15-20

**OPD Charges:** Rs 10 (It is valid for one week), 50 Rs (for Indoor Patients)

**OPD Timing:** 9am to 3pm (Mon-Sat) in Winters

8am to 2pm(Mon-Sat) in Summers.

### **ISSUES**

1. Adequate no. of wheel chairs and trolley are not available in the OPD area.
2. The fire exit plan is not displayed.
3. Doctor's schedule is not displayed in the OPD area.

## **AMBULANCE SERVICES**

**Location:** There is no specific area for ambulances. It parks near the emergency department.

Conditions of the ambulance is good and well maintained

**Adjacent Department:** Emergency Department

**Workload:** 7 to 8 Calls in 24 Hours

## **ISSUES**

1. No ambulance control room.
2. No emergency crash cart is present in the ambulance.
3. No wheelchair present in the ambulance.
4. Staffs are not trained in BLS and ALS.
5. Response time of ambulance is not monitored.

## **EMERGENCY DEPARTMENT**

**Location:** Next to OPD building.

The emergency department has two trauma wards (6 + 8 Bedded) and one emergency ward (8 Bedded Facility). Emergency department has reception, lab (not using), Examination room, Casualty medical officer room, nurse room, one store room and one OT. Emergency roster is made every month.

Emergency medicine is kept in the almirah which is present in the Doctor room.

**Adjacent Department:** Out Patient Department

**Workload:** 40-50 Patients/day

### **ISSUES**

1. There is no fire exits plan displayed. Fire fighting equipments were improper.
2. Soiled and infected linen are not segregated, all type of used linen is collected and send to the laundry.
3. Staffs are not trained for ALS/BLS.
4. There is no ICU. An ICU is currently under construction

### **LABORATORY**

**Location:** At ground floor

Microbiology and Histopathology services are not available in the laboratory. There is charge list of each lab test present in the laboratory. And also displayed in the OPD area.

**Adjacent Department:** Dispensary , radiology unit.

**Work Load:** 100-120 Investigations/day.

Daily entry register, Hb and blood group register, Urine microscopic register, TLC, DLC and ESR register, Biochemistry and Serology register, FNAC register, Daily register (Total test), Haemogram register, MLC register in Main Lab.

### **ISSUES**

1. Equipments were not calibrated.
2. No fire fighting equipment was installed.

3. No adequate Laboratory having adequate space for working

### **IMAGING DEPARTMENT**

**Location:** At ground floor.

There are 2 X-Ray machines. Portable X-Ray machine is not in use. CT scan is not done in the civil hospital. X-Ray department having three room as processing room, registration room, dark room. ECG room is situated far away to the registration room of X-Ray. No ECG technician. There is one room is for USG near the X-Ray processing room. and having the one USG machine. The patient privacy is maintained. USG department have the PNDT certificate but not displayed.

**Workload:** 70-80 X-Ray/Day. Charges: 120 Rs. (For X-Ray)

50-60 Ultrasound/Day. Charges: 150 Rs. (For USG)

Registers: Daily OPD X-Ray register, Register (about types of X-Ray done in a day), AMC Register, MLC Register.

### **ISSUES**

1. Layout plan of the imaging department is not approved from AERB.
2. Glass and door of the X-Ray process area was not led coated for the safety from the harmful X-Rays.
3. Turnaround time for investigations not measured.
4. No TLD Batches , or personal protective equipments are worn.

## **OPERATION THEATRE**

### **Location:**

- (Gynaecology OT) having 2 OT Table: MCH Building
- 3rd Floor (Main OT) having 2 OT Table
- Ground Floor (Emergency OT) having 1 OT Table

There are three OT Complex in the Civil Hospital one is the main OT, second one is the Gynaecology OT and third is Emergency OT. In main OT the Ortho, Eye, Surgeries, ENT surgeries is done.

### **ISSUES**

1. There is no zoning concept inside the OT.
2. There is same direction for the patients and biomedical waste transportation.
3. No ultrasonic washer present in the department for effective sterilization.
4. OT utilization rates not monitored.

## **IN PATIENT WARD**

### **Location:**

2nd Floor and 3rd Floor.

There are two types of wards present in Civil Hospital (Male and female wards). Nursing station present in the wards but not in use due to the lack of manpower and equipments. The nurses look after the patients from Nurses room. Gynaecology ward is present in front of Gynaecology OT.

There are 8 private and 4 deluxe wards present on the 3<sup>rd</sup> floor. Each ward has four cubicles and every cubicle has around 6-8 beds.

Gynaecology Ward: 18 Beds & 9 Beds for Pediatrics = 27 beds

General Ward: 24 Beds (Male ward) & 24 Beds (Female ward)

Private and Deluxe Ward: 8 + 4 Beds = 12 beds

Staffing:

Gynaecology Ward: - 5 Nurses (Total), 3 Class IV, 3 Gynecologist & 1 Pediatrician

General Ward: - 7 Nurses (Total)

ISSUES:

1. Inadequate number of bed sheets per bed (nearly 2 per bed).
2. Inadequate number of nurses in the wards.
3. No fire fighting equipments were present.
4. Housekeeping checklist, cleaning schedule not evident.

### **BLOOD BANK**

**Location:** Ground Floor

The blood bank started in July 2010 at Civil Hospital. Blood bank has the aphaeresis facility.

Blood bank maintain all type of register like Patients registration register, Donor register, Cross match register, Deferred register, Test register etc.

Workload: 200 Units/Month.

This unit work 24\*7.

Staffing: 4-Lab Technician, 1 Medical Officer, 1 Class IV

### **MEDICAL STORE**

**Location:** Ground Floor

There are two medical stores, one is hospital pharmacy (free of cost) and second one is Jan Aushadi (Under Central Government) which is not free of cost.

Hospital pharmacy works 9AM – 3PM(Winters) & 8AM – 2PM(Summers) and Jan Aushadi is 24\*7.

Adjacent Department: Dialysis Unit.



## II. Employee ID Cards

- Facilitated the process of making of colour coded employee ID cards for all staff.

Green – Doctors / All class – 1 officers.

Orange – Nursing Cadre.

Blue – Pharmacist / all technical / non medical.

Red – All class-IV / Safai karamchari.

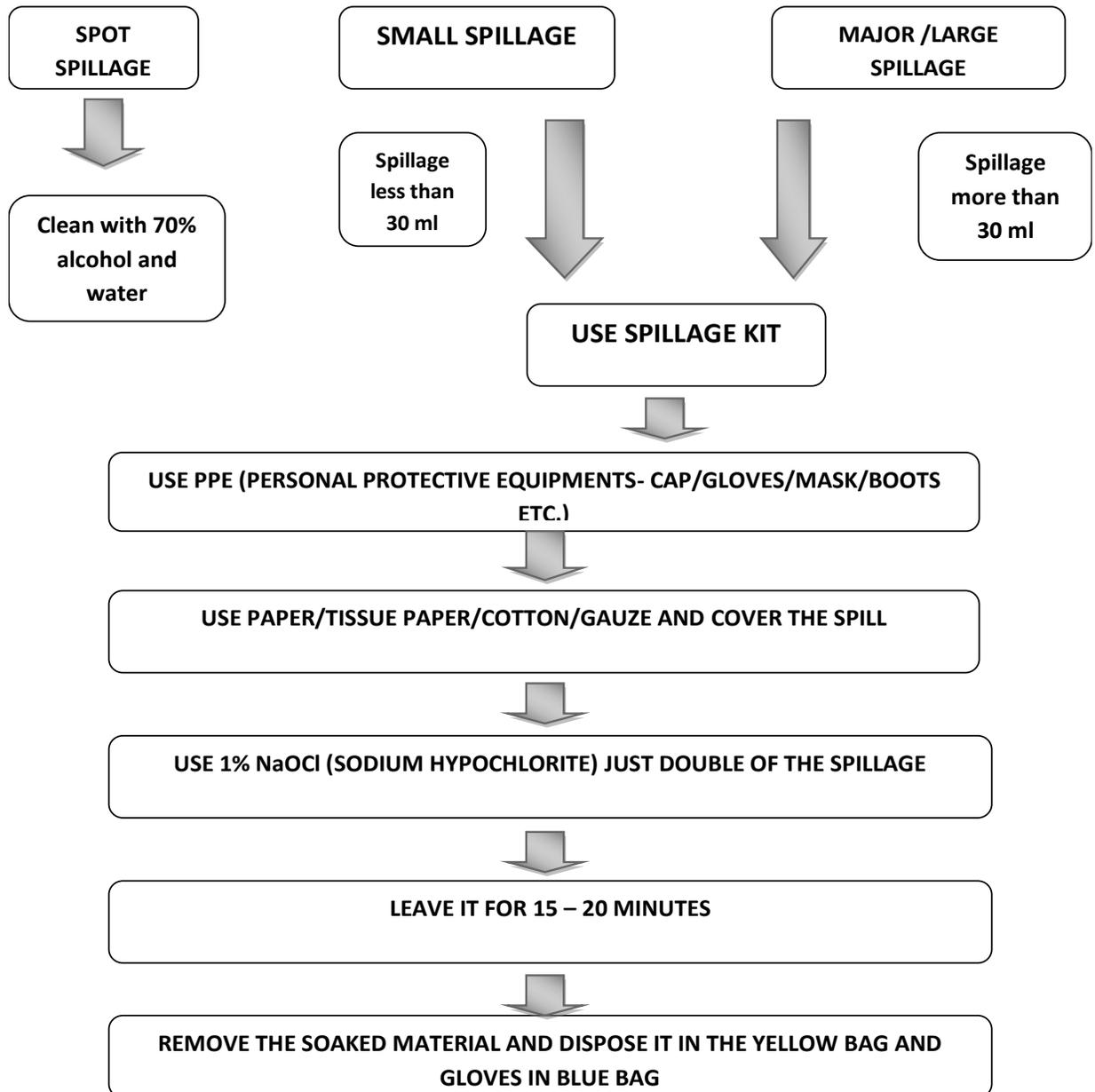
## III. Signages on visiting hours and visiting policy got displayed



## iv. Infection control in hospital

- Made the class4 and sweepers aware about the procedure to manage blood spill.
- Got these policies displayed everywhere.

**L.M.CIVIL HOSPITAL, LUDHIANA**  
**SPILLAGE MANAGEMENT POLICY**



**PREVENTION OF NEEDLE STICK INJURY**

**L.M.CIVIL HOSPITAL, LUDHIANA**

**NEEDLE STICK INJURY POLICY**

**IN CASE OF NEEDLE STICK INJURY**

1. **DO NOT SQUEEZE/SUCK BLOOD.**
2. **DO NOT USE BETADINE/IODINE OR ANY ANTIBIOTIC ON THE WOUND**
3. **DO NOT PANIC**

1. **DO REMOVE THE GLOVES IF YOU ARE WEARING**
2. **WASH THE SKIN WITH SOAP AND WATER**
3. **IRRIGATE WITH WATER OR SALINE IF EYES OR MOUTH HAVE BEEN EXPOSED**

**WASH THE EXPOSED PART WITH RUNNING WATER AND SOAP**

**INFORM YOUR  
INCHARGE**

**INFORM IN EMERGENCY DEPARTMENT**

**GIVE YOUR DETAILS TO BE FILLED IN A REGISTER  
ENSURE VACCINATION STATUS**

**RISK EVALUATION FOR SOURCE, EXPOSED AND EXPOSURE**

**BLOOD TESTING OF HBV, HCV, HIV (IF NEEDED)**

**TAKE POST EXPOSURE PROPHYLAXIS REGIMEN, IF NEEDED**

**FOLLOW UP WITH LABORATORY TESTING AND CLINICAL ASSESSMENT  
WITH THE HELPOF THE DEPARTMENT**

**PART 2: DISSERTATION**  
**REPORT**

## **Chapter 1**

### **Introduction**

The State of Punjab has been consistently performing better than the rest of the country in reproductive and child health. High per capita income, high literacy rate, community development enterprise together with healthcare programs have led to the attainment of impressive indicators of health in the State. As per the SRS data of 2012 (released in September 2013) Infant Mortality Rate (IMR) of Punjab is 28 per 1000 live births as against 42 at the national level. The State's total fertility rate (TFR) at 1.8 has already reached the replacement level. The Maternal Mortality Ratio (MMR) stands at 172 (per 100,000 live births) against the national average of 212.

The Mother and Child Health Action Plan (2014-17) is developed which aims to improve the health of women and children in Punjab, and in doing so, to improve the lives of all people in the State. The health of women and children is critically important to almost every area of human development and progress, and directly impacts our success in achieving the development aspirations of the country, in particular, the XII Plan targets, as well as the Millennium Development Goals (MDGs).

Experience from across the globe has demonstrated that the health of women and children is the fountainhead of public health. Equally important is the adolescent health which bridges the flow of health from childhood to adulthood. A healthy population is the foundation upon which the nation builds a successful economy and a welfare state. Prosperity and wellbeing is essential to political stability, creative society and social harmony.

Since 2005, the National Rural Health Mission has resulted in an unprecedented strengthening of the public health system with focus on health infrastructure, human resources, service delivery, program management, monitoring and communitization. Deployment of ASHAs across rural areas has changed the paradigm of the way services are delivered at doorstep of the people.

The Government of Punjab has effectively harnessed the resources of NRHM and scaled up initiatives such as the Universal Immunization Programme, skilled care at birth, Emergency Obstetric Care, IMNCI (Integrated Management of Neonatal and Childhood Illnesses), NSSK (Navjat Shishu Suraksha Karyakram), FBNC (Facility Based Newborn Care), and referral transport services. Demand side financing initiatives such as the JSY (Janani Suraksha Yojna) and JSSK (Janani Shishu Suraksha Karyakaram) have helped in reducing out of pocket expenses on healthcare of women and children. Indeed, the Government of Punjab has gone beyond the provisions of NRHM for maternal and child health by introducing the MKKS (Mata Kaushalya Kalyan Scheme) and the free treatment of all girls up to the age of five years in public facilities. All such facilities to be provided to be provided by the mother and child wing of the hospital. One of which is located at L.M. Civil Hospital, Ludhiana.

Hospital is a most visible face of the health care industry. Increased client awareness, expectations and aspirations, increased government regulations and legislations, increased competition, public private partnership programmes, rapid change in healthcare, emphasis on quality, great advances in technology have great impact on hospital administration.

A Quality based approach helps in identifying the gaps in service delivery and tracing its roots and linking them to organisational processes. It builds a system of taking effective actions for traversing the gaps, periodic assessment and improving the quality. The Quality Assurance

Guidelines have been developed by the Ministry of Health & Family Welfare for addressing the concerns of public, and also the technical components of service delivery in a comprehensive manner.

The guidelines define 'road-map' for implementing quality assurance in the States. The QA approach suggested will help in improving the quality standards of public health facilities in the country.

Quality of health care is about process management technical standards and meeting patient's expectations by establishing a quality management system which can provide the framework for continuous improvement, thereby increasing the probability of enhancing patient safety. Improved health services have impact on health care outcomes in terms of reduction in mortality, morbidity, disability and increased utilization of services. It is an ongoing process which monitors the shortfalls in quality and implements remedial measures to address these shortfalls.

In order to achieve the targets, Establishment of Maternal and Child Health (MCH) Wings is done in 10 districts of Punjab. It is important to provide a feeling of safety and privacy to mothers who have delivered at a health facility.

This study aims to do the gap analysis as well as to give recommendations in order to improvise the facilities provided at the MCH wing of the L. M. Civil Hospital Ludhiana. This analysis has been done as per the National Quality assurance mission guidelines adapted by the state of Punjab.

## Chapter 2

### Review of Literature

The National Rural Health Mission (NRHM) was launched in the year 2005 with the goal *“to improve the availability of and access to quality health care for people, especially for those residing in rural areas, the poor, women and children.”* The Mission has led to considerable expansion of health services through rapid expansion of infrastructure, increased availability of skilled human resources and greater local level flexibility in operations, increased budgetary allocation and improved financial management<sup>(1)</sup>

Women’s health before and during pregnancy, place of delivery, quality of services for the mother and newborn during and after delivery have a far reaching impact on the survival, morbidity and mortality of a newborn/ child. Furthermore, adolescent health provides the crucial bridge for nurturing both maternal and child health, nutrition and wellbeing.<sup>(2)</sup>

The Millennium Development Goals (MDGs) 4 and 5, aimed at maternal health and child survival, respectively, gave an impetus for action to all countries towards improving the health of women and children. As India moves beyond the MDGs, it is time to set sights well beyond survival – on quality lives and the realization of the full potential of human creativity and capital.

The State of Punjab has performed better in all the relevant health indicators. Punjab’s MMR stands at 172 (SRS 2007-09) having declined from 192 a few years earlier (SRS 2004-06), while the IMR at 28 (SRS 2012) has decreased from 38 in 2008 (SRS 2008). TFR at 1.8 (SRS 2011) is already at the replacement level.

However, improvement in Quality of health services at every location has not been perceived, generally. Perceptions of poor quality of health care may, in fact, dissuade patients from using the available services because health issues are among the most salient of human concerns. Ensuring quality of the services will result in improved patient / client level outcomes at the facility level.

Ministry of Health and Family Welfare, Government of India is committed to support and facilitate a Quality Assurance Programme, which meets needs of Public Health System in the country and is sustainable. Main focus of proposed Quality Assurance Programme would be enhancing satisfaction level among users of the Government Health Facilities and reposing trust in the Public Health System.

### **HEALTH SYSTEM IN PUNJAB**

Healthcare System in Punjab works at three levels - Primary, Secondary and Tertiary.

a. **Primary Health Care** – Primary Health Care System is mainly responsible for preventive and promotive healthcare services and consists of:

- *Subcentres* – There are 2951 sub-centres in the State, manned by 4604 MPHWS (F).
- *Primary Health Centres (PHC)* – Operational at a population of approximately 30,000, there are 437 Primary Health Centres. Medical Officers are posted at the Primary Health Centres. While most of the PHCs offer only OPD services, some have been identified as delivery points and provide 24\*7 services. The PHCs are also vaccine storage points.

b. **Secondary Health Care**

- *Community Health Centres/ Block Primary Health Centres* – The State has 141 Community Health Centres/ Block PHCs which act as FRUs for the purpose of Maternal

and Child Healthcare. The services of Obstetricians, Paediatricians, Anaesthetists and Surgeons are available at these institutions.

- *Sub-Divisional Hospitals and District Hospitals* – There are 22 district hospitals and 41 sub-divisional hospitals in the state. These hospitals work 24\*7 and provide all emergency services apart from 24\*7 delivery services.

**c. Tertiary Health Care**

- *Medical Colleges* – The state has 10 Medical Colleges (3 in Government Sector at Patiala, Amritsar and Faridkot and 7 in Private Sector (2 at Ludhiana, 1 at Amritsar, 1 at Bathinda, 1 in district Patiala, 1 in Jalandhar and 1 in Pathankot). These Medical Colleges are providing tertiary level healthcare services.
- *Other Hospitals* – Apart from Medical Colleges, large corporate hospitals like Fortis, Ivy, MAX and Apollo, are also providing tertiary care.
- *Nursing Homes and Clinics* – The cities and towns have large number of private nursing homes and clinics operated by single or multiple doctors, which are providing healthcare, especially MCH services to the community.

**d. Subsidiary Health Centres (SHCs)**

Once a part of Department of Health & Family Welfare, the Subsidiary Health Centres operational in rural areas were transferred to the Department of Rural Development. There are 1186 SHCs, manned by Medical Officers apart from other staff, but their participation in the National Health Programmes is very little.

## **2.1 Quality in Health Care**

Quality in healthcare is a relatively novel concept in public health in our country. The notion of enforcing quality care in medical profession can be traced back to early 1900s in the form of “Medical Audit” in the United States of America (USA). The medical audit gradually moved to “Hospital Standardization Program” in 1918 and finally took the form of “Quality Assurance activities” (i.e., delivery of relevant and effective medical care in accordance with the standards) with the formation of “Joint Commission on Accreditation of Hospitals” later named as “Joint Commission on Accreditation of Health Care Organizations” in 1960. The Geneva-based International Organization for Standardization (ISO) was raised in 1946. The ISO 9000 series of standards have generated maximum interest worldwide.(3) In India, National Accreditation Board for Hospital and Health Care Providers (NABH), a constituent board of Quality Council of India (QCI), has been set up to establish and operate accreditation program for healthcare organizations.(4)

The quality in healthcare system implies that the patients receive high level of care, have access to a qualified and competent medical staff and to a quality-focused organization, receive understandable education and communication and that their feedback (satisfaction) is evaluated continuously. It also benefits patient through appropriate healthcare decisions and standardization of healthcare processes, focus on patient safety, vulnerable patient, safe transport, and continuity of care, which is paramount.(5)

In our country the healthcare setup can be viewed as government and private/corporate organizations. The private/corporate hospitals by the virtue of their objectives typically have an inbuilt quality culture and these have been undergoing certification for various accreditation

standards. These hospitals have gained importance in recent past due to sheer increase in their numbers and the quality of services they provide.

Still, the governmental setup comprising district hospitals, community health centers, primary health centers and subcenters are the main stay of healthcare all over the country. Under National Rural Health Mission (NRHM), with accredited social health activist in place, there is bound to be a groundswell of demands for health services and the system needs to be geared to face the challenge. Not only does the system require upgradation to handle higher patient load, but emphasis also needs to be given to quality aspects to increase the level of patient satisfaction. (6)

Quantitative improvement in services having been achieved in majority of states, the quality needs scrutiny. In fact a disproportionate increase in quantity without a proportionate increase in manpower and physical facility has led to a compromise in quality. One of the biggest challenges under NRHM is to meet the human resource requirement for the services to be delivered. There is deficit of the staff across the board, specialist doctors, male multipurpose workers, and laboratory technicians. The area that lags behind most significantly is the health management information system. Emphasis on interpersonal communication and utilization of the health facility visit for health awareness has been negligible as the time spent by the doctor per patient is limited. The other areas still to be addressed are regular patient feedback and its evaluation, standardization of care processes, patient safety, safe transport, and continuity of care. (7)

### **Quality Standards in India**

Various standards in India that can facilitate the public healthcare facilities to establish quality system are the Bureau of Indian Standards, NABH standards and Indian Public Health Standards

(IPHS). In order to ensure quality of services IPHS have been set up for public health facilities so as to provide a yardstick to measure the services being provided there.

### **Why ISO 9001:2008?**

IPHS largely addresses the structural lacunae such as availability of infrastructure, equipment, and manpower; there are a few components that measure processes and none that measure outcomes. (8) On the other hand ISO 9001: 2008 (earlier version 9001:2000) promotes the adoption of a process approach for developing, implementing, and improving effectiveness of a quality management system (QMS) while enhancing customer satisfaction by meeting customer requirement. Furthermore ISO 9001: 2008 can act as a stepping stone for implementation of more resource intensive and stringent standards such as NABH.

When a hospital is certified as complying with ISO 9001: 2008 standards it implies that it is able to provide services that meet patient's requirements and complies with statutory and regulatory requirements applicable to the services and aims to enhance patient satisfaction through effective application of the quality management system and through processes for continual improvement.(9)

Quality in Health System has two components:

**Technical Quality:** on which, usually service providers (doctors, nurses & para-medical staff) are more concerned and has a bearing on outcome or end-result of services delivered.

**Service Quality:** pertains to those aspects of facility based care and services, which patients are often more concerned, and has bearing on patient satisfaction.

**Working definition-** WHO defines Quality of Healthcare services in following six subsets:

**a. Patient-Centred:** delivering health care, which takes into account preferences and aspirations of the service users, and is in congruent with their cultures. It implies that patients are accorded dignified and courteous behaviour. Their reasonable belief, practices and rights are respected.

**b. Equitable:** delivering health care which does not vary in quality because of personal characteristics such as gender, caste, socioeconomic status, religion, ethnicity or geographical location.

**c. Accessible:** delivering health care that is timely, geographically reasonable, and provided in a setting, where skills and resources are appropriate to the medical need.

**d. Effective:** delivering health care that is based on the needs, and is in compliance to available evidences. Therefore, observance of treatment guidelines and protocols is important for ensuring the quality of care. The delivered health care results into the improved health outcomes for the individuals in particular, and community in general.

**e. Safe:** delivering health care which minimizes risks and harm to the users.

**f. Efficient:** delivering health care in a manner which maximizes productivity out of the deployed resources. The wastes are avoided.

## **2.2 Quality of Care (QOC)**

Well frame-work for assessing the quality of care on the well accepted **'Donabedian model'**, which classifies QOC in terms of three aspects – **Structure, Process, & Outcome.**

**a. Structure:** Structural aspect of QOC includes material resources like infrastructure, drugs and equipment; and Human Resources such as availability of adequate number of personnel, who have requisite knowledge and skills. Evaluation of the quality that relies on such structural

elements implicitly assumes that well qualified people with well appointed and well organized settings will provide high quality care. However, it is not always the case. Also, it is acknowledged that in the Public Health System, full compliance to infrastructure and HR norms may not be possible. However, after meeting the minimum infrastructure and HR norms for a Public Health Facility, it would be logical to expect a minimum quality in the available services at the Public Health Facility. The proposed system strives to provide QOC within these constraints.

**b. Process:** Care can also be evaluated in terms of processes & sub-processes, required for delivery the care. This refers to what takes place during its delivery – such as how quickly registration of a patient is done, and s/he is attended, courteous behaviour of the service providers, especially of doctors & nurses, conduct of examination with respect to privacy, confidentiality and for patient’s right, etc.

**c.Outcome:** The other aspect of quality of care can be assessed in terms of outcome measurements, which denote to what extent goals of the care have been achieved. All three aspects of the QOC have different connotation to different stakeholders, viz. Patients, Service providers and Health System, as given in Table 2.1.

### **2.3 Quality Improvement (QI)**

Quality improvement is an interdisciplinary process, which is designed to raise the standards of delivery of diagnostic, therapeutic, rehabilitative and preventive measures in order to maintain, restore or improve health outcomes of individuals and population. It also looks at the care part of facility treatment – courteous behaviour, clean premises, minimal waiting time, patients’ right, etc.

### **Critical steps of Quality Assurance:**

Following steps would be required to be taken for implementing a credible Quality System at Public Health Facilities -

- a. Setting up Quality Standards, Measurable Elements & Check-lists:** To provide consistently high-quality services, the foremost requirement is to set quality standards against which the performance can be measured. These standards must meet the specific requirements of Public health system and encompassing all three aspects of Quality of care i.e. Structure, Process and outcome.
- b. Quality Assessment:** This is an activity that measures various elements of service provision against pre-determined standards of care. Such an assessment provides an understanding of the areas where the actual position falls short of the set standards. It includes both periodic reviews in terms of internal scoring of a health facility, followed by assessment by the external assessors, who themselves are not directly responsible for the implementation, so as to avoid a 'conflict of interest situation'.
- c. Identification of gaps and areas of improvement** is an important and integral part of assessment. It is also important to conduct a 'root-cause analysis' of the observed gaps, so that real & sustainable solutions are found. Gaps should be categorised in term severity viz: High, moderate, Low.
- d. Action planning:** The most important step following the 'assessment and gap identification' is developing **time bound action plan** for traversing the gaps. Action planning for critical gaps and low hanging fruits should be prioritised. It is imperative that for each gap found above, corrective measures are defined along with the person responsible to take action and

the time frame for the same. If the observed gaps are many, phased action plan may be developed.

- e. **Follow-up Assessment:** After passage of an agreed time-frame, **follow-up assessment** is required to be done to ensure that the plan has been adhered and the gaps have been closed. As the elements related to quality are dynamic in nature, gaps may be found in those areas also, where none existed in the past /previous assessment (s). Therefore it is important to repeatedly assess a facility for incremental changes for the improvement.

### **2.4 The Organisational Structures**

For strengthening the QA activities, following organisational arrangements need to be set up at various levels with the roles and responsibilities defined for each level.

1. **National level:** Central Quality Supervisory Committee (CQSC);

2. **State level:**

a. State Quality Assurance Committee (SQAC)

b. State Quality Assurance Unit (SQUA)

c. QA assessors (Empanelled)

3. **District level:**

a. District Quality Assurance Committee (DQAC)

b. District Quality Assurance Unit (DQAU)

4. **District Hospital level:** District Quality Team (DQT)

**ASSESSMENT PROTOCOL:** The Assessors independently assess the different areas of concern of check list of their respective departments/ domains; and fill the sheets as per full, partial or non-compliance. Assessment process would comprise of gathering the information from many sources, such as: ,, Staff interview, ,, Review of records, ,, Direct observation, ,, Interviews with the patients and attendant.

**RULES OF SCORING:**

2 marks for full compliance

1 mark for partial compliance

0 Marks for Non Compliances

All checkpoints have equal weightage to keep scoring simple. Once scores have been assigned to each checkpoint, department wise scores can be calculated for the departments, and also for standards by adding the individual scores for the checkpoints. The final score should be given in percentage, so it can be compared with other groups and department. Calculation of percentage is as follows:

**Score obtained X 100**

**No of checkpoint in checklist X 2 Scores**

Scores can be calculated manually or scores can be entered into excel sheet given in the accompanying soft copy to get score card. All scores should be in percentages to have uniform unit for inter-departmental and inter-hospital comparison.

## **2.5 Departments of MCH**

The Mother and Child Hospital is a specialized facility for providing high quality healthcare services to women and children. Mother and Child care at these specialized hospitals is of high professional standard and is fully equipped with all diagnostic and clinical facilities.

The Hospital is well equipped with ultra modern technology to conduct all kinds of tests, x-rays, scans, ultrasound etc. on very reasonable rates. Besides, the hospital also have Intensive Care Unit (ICU) and Special Newborn Care Unit (SNCU), which would be instrumental in reducing mother child mortality rate during delivery.

Various departments of the hospital are:

1. Labour room
2. Maternity ward
3. Paediatric Ward
4. Sick New born Care Unit
5. Post Partum Unit

This report aims to do the gap analysis of the above mentioned departments as per the guidelines given by the national quality assurance guidelines and also to make recommendations to improve the facilities being provided.

## **RATIONALE**

Mother and child hospital , are abided to provide the best services to the citizens of India, to provide best health care services to the future of India. This study aims to identify the gaps as per the standards in guidelines of state quality assurance. The intent is to make the recommendations that will serve and lay efforts to improve the hospital and its surroundings by implementing strategies. This will help the Punjab health system to be organized and to go for the quality accreditation.

## **RESEARCH QUESTION**

Are the services provided at departments of mother and child wing, civil hospital as per the quality assurance standards?

## **SPECIFIC OBJECTIVES**

1. To do the gap analysis of the departments in the mother and child hospital, Ludhiana. Based on national Quality assurance guidelines.
2. To make the recommendations after the gap analysis of these departments.

## **METHODOLOGY**

- **Study Area:** Departments of MCH

1. Labour room
2. Maternity ward
3. Paediatric Ward
4. Sick New born Care Unit
5. Post Partum Unit

- **Study Design:** Descriptive
- **Study Period:** 1<sup>st</sup> March 2015 to 15 April 2015
- **Data collection tool:** checklist of national quality assurance guidelines
- **Technique:** observation, record review, staff interview
- **Data Analysis :** Analysis is done using Microsoft Excel

### **FINDINGS AND RECOMMENDATIONS**

The Mother and Child Hospital is a specialized facility for providing high quality healthcare services to women and children. Mother and Child care at these specialized hospitals is of high professional standard and is fully equipped with all diagnostic and clinical facilities.

The Hospital is well equipped with ultra modern technology to conduct all kinds of tests, x-rays, scans, ultrasound etc. on very reasonable rates. Besides, the hospital also has Intensive Care Unit (ICU) and Special Newborn Care Unit (SNCU), which would be instrumental in reducing mother child mortality rate during delivery

#### I. **Labour room:**

Labour room Score Card		
	<b>Labour room Score</b>	<b>66.8777</b>
<b>Area of Concern wise Score</b>		
<b>A</b>	<b>Service Provision</b>	<b>93.33333333</b>
<b>B</b>	<b>Patient Rights</b>	<b>62.5</b>
<b>C</b>	<b>Inputs</b>	<b>74</b>
<b>D</b>	<b>Support Services</b>	<b>77.35849057</b>
<b>E</b>	<b>Clinical Services</b>	<b>72.95918367</b>
<b>F</b>	<b>Infection Control</b>	<b>65.94202899</b>
<b>G</b>	<b>Quality Management</b>	<b>38.75</b>
<b>H</b>	<b>Outcome</b>	<b>45.00</b>

**Table 2 : Score card labour room**

1. **Service Provision**: All the services provided at labour room are at par. We are providing 24\*7 services. Few things which need to be emphasized are :

- Provision of dedicated services for USG.

2. **Patient Rights**:

- There should be display of the services and entitlements available in its departments like JSSK, JSY to increase awareness among the masses.
- Services provision of labour room should be displayed at the entrance.
- Name of doctor and Nurse on duty should be displayed and updated.
- Availability of Enquiry Desk with dedicated staff should be done.
- Only one attendant should be allowed to enter along with the patient.
- Availability of screen/ partition at delivery tables.
- Patient Records should be kept at secure place beyond access to general staff/visitors.
- Availability of complaint box and display of process for grievance redressal and whom to contact is displayed

3. **Inputs**:

- There should be availability of dedicated eclampsia area, dirty utility room .
- There should be Availability of functional telephone and Intercom Services
- Labour room should have sufficient fire exit to permit safe escape to its occupant at time of fire. These fire exits should be clearly visible.
- Staff should be competent for operating fire extinguisher and what to do in case of fire.
- There should be dedicated female security staff .

- There should be Regular training of paramedical staff on hand hygiene, infection control, Biomedical Waste Management, Patient safety.
- Appointment of a dedicated post natal counselor.
- Timely availability of delivery kits, Availability of Instruments arranged for Episiotomy trays, Availability of Baby tray etc.

#### 4. **Support Services:**

- All equipments should be covered under AMC including preventive maintenance; also records should be maintained for the same.
- Drugs are stored in containers/tray/crash cart and are labeled
- Empty and filled cylinders should be labeled.
- Temperature of refrigerators should be kept as per storage requirement and records are maintained of the same.
- There should be Security arrangement in labour room.
- Quality and quantity check on linen
- Doctor, nursing staff and support staff adhere to their respective dress code
- Partograph should be used and updated as per stages of labour.

#### 5. **Clinical Services:**

- There is a system of follow up of referred patients, proper communication should
- There should be a process to ensure the accuracy of verbal/telephonic orders
- High alert drugs available in department are identified, labeled and a level should be maintained.
- There should be a proper disaster plan and Staff should be aware of disaster plan

- Proper notes should be put. Especially, Death note including efforts done for resuscitation should be noted in patient record.

#### **6. Infection Control:**

- Surface and environment samples should be taken for microbiological surveillance
- There should be procedure for immunization of the staff; regular medical checkups should be done.
- Regular monitoring of infection control practices should be done.
- There should be Availability of Alcohol based Hand rub, Heavy duty gloves and gum boots for housekeeping staff
- Availability of Caps for the paramedical staff.
- Standard practice of mopping and scrubbing should be followed including three bucket mopping system.
- Fumigation/carbolization as per schedule should be done.
- Staff should be aware of mercury spill management, blood spill management and needle sticks injury protocols.

#### **7. Quality Management:**

- Department should have properly documented standard operating procedures.
- The facility should map its key processes and seeks to make them more efficient by reducing non value adding activities and wastages.
- The facility should have established system of periodic review as internal assessment, medical & death audit and prescription audit.

- The facility should have defined and established Quality Policy & Quality Objectives
- The facility should go for continually improvement by practicing Quality method and tools like six sigma , PDCA etc

8. **Outcome:**

- Regular maintenance of various indicators should be done as per the guidelines

II. **Maternity ward**

<b>Maternity Ward Score Card</b>		
	<b>Maternity Ward Score</b>	<b>54.2092</b>
	<b>Area of Concern wise Score</b>	
A	<b>Service Provision</b>	96.42857143
B	<b>Patient Rights</b>	64.1025641
C	<b>Inputs</b>	67.14285714
D	<b>Support Services</b>	61.53846154
E	<b>Clinical Services</b>	57.84313725
F	<b>Infection Control</b>	50
G	<b>Quality Management</b>	12.76595745
H	<b>Outcome</b>	28.94736842

**Table 3: Score card Maternity Ward**

1. **Service Provision:** All the services provided at maternity ward are at par. We are providing 24\*7 diagnostic and curative services. Few things which need to be emphasized are :

- Provision of separate wards for eclampsia and septic cases..

2. **Patient Rights:**

- There should be display of the services and entitlements available in its departments like JSSK, JSY to increase awareness among the masses.
- List of drugs available should be displayed and updated.
- Counselling aids like flip chart etc should be available for post partum counselling.
- Availability of Enquiry Desk with dedicated staff should be done.
- Availability of Breast feeding corner, disable friendly toilet.
- General Consent should be taken before admission.
- Patient Records should be kept at secure place beyond access to general staff/visitors.
- Availability of complaint box and display of process for grievance redressal and whom to contact is displayed.
- All the consumables should be provided free of cost to the patients. If any other expenditure occurred it should be reimbursed from hospital.

### **3. Inputs:**

- Cluttering of beds should be avoided, proper distance should be maintained between the two.
- There should be TV for entertainment and health promotion.
- There should be Availability of separate examination, treatment room and dirty utility room.
- There should be Availability of functional telephone and Intercom Services

- Maternity ward should have sufficient fire exit to permit safe escape to its occupant at time of fire. These fire exits should be clearly visible.
- Staff should be competent for operating fire extinguisher and what to do in case of fire.
- There should be dedicated female security staff .
- There should be Regular training of paramedical staff on hand hygiene, infection control, Biomedical Waste Management, Patient safety.
- Appointment of a dedicated post natal counselor.
- There should be Availability of Point of care diagnostic instruments like glucometer etc.
- There should be Availability of equipment for sterilization and disinfection like boiler.
- There should be Availability of patient beds with prop up facility .

#### **4. Support Services:**

- All equipments should be calibrated and should be covered under AMC including preventive maintenance; also records should be maintained for the same.
- Drugs are stored in containers/tray/crash cart and are labeled.
- Empty and filled cylinders should be labeled.
- Temperature of refrigerators should be kept as per storage requirement and records are maintained of the same.
- Narcotics and psychotropic drugs should be kept in lock and key.
- Nutritional assessment of patient done specially for high risk pregnancy and other specified cases.

- Quality and quantity check on linen. Gowns should be provided to the patient.
- Doctor, nursing staff and support staff adhere to their respective dress code.

#### **5. Clinical Services:**

- There should be separate counter for admission of patients.
- Time of admission should be recorded in patient record and immediate Initial assessment should be done which should be documented preferably within 2 hours.
- The process for ensuring the identification before any clinical procedure should be used for every patient and new born.
- Hand over should be given bed side and a proper documentation should be done .
- The facility should have defined procedures for safe drug administration like there should be medical, prescription audits.
- The facility should have defined and established procedures for discharge of patient.
- The facility should have defined and established procedures for Blood Bank/Storage Management and Transfusion.
- There is a system of follow up of referred patients, proper communication should be done
- There should be a process to ensure the accuracy of verbal/telephonic orders
- High alert drugs available in department are identified, labeled and a level should be maintained.
- There should be a proper disaster plan and Staff should be aware of disaster plan

- Proper notes should be put. Especially, Death note including efforts done for resuscitation should be noted in patient record.

#### **6. Infection Control:**

- There should be procedure for immunization of the staff; regular medical checkups should be done.
- There should be procedure to report cases of Hospital acquired infections.
- Doctors should be aware of Hospital Antibiotic policy.
- Regular monitoring of infection control practices should be done.
- There should be Availability of Alcohol based Hand rub, Heavy duty gloves and gum boots for housekeeping staff
- Standard practice of mopping and scrubbing should be followed including three bucket mopping system.
- Brooms should not be used.
- Staff should be aware of mercury spill management, blood spill management and needle sticks injury protocols.

#### **7. Quality Management:**

- Department should have properly documented standard operating procedures.
- The facility should map its key processes and seeks to make them more efficient by reducing non value adding activities and wastages.
- The facility should have established system of periodic review as internal assessment, medical & death audit and prescription audit.
- The facility should have defined and established Quality Policy & Quality Objectives

- The facility should go for continually improvement by practicing Quality method and tools like six sigma , PDCA etc

**8. Outcome:**

- Regular maintenance of various indicators should be done as per the guidelines

**III. Pediatric Ward:**

PAEDIATRICS WARD SCORE CARD		
	Score	63.5501355
Area of Concern wise Score		
A	Service Provision	90.625
B	Patient Rights	67.85714286
C	Inputs	66.66666667
D	Support Services	72.64150943
E	Clinical Services	69.58762887
F	Infection Control	67
G	Quality Management	24.41860465
H	Outcome	63.5501355

**Table 4: Score card Pediatrics Ward**

**1. Service Provision:** All the services provided at maternity ward are at par. We are providing 24\*7 diagnostic and curative services. Few things which need to be emphasized are :

- Provision of separate isolation wards for chicken pox , measles etc.

**2. Patient Rights:**

- There should be display of the services and entitlements available in its departments like RSBY to increase awareness among the masses.

- General Consent should be taken before admission.
- Patient Records should be kept at secure place beyond access to general staff/visitors.
- Availability of complaint box and display of process for grievance redressal and whom to contact is displayed.
- All the consumables should be provided free of cost to the patients. If any other expenditure occurred it should be reimbursed from hospital.

### **3. Inputs:**

- Cluttering of beds should be avoided; proper distance should be maintained between the two.
- There should be Availability of separate examination, treatment room ,Play room and dirty utility room.
- There should be Availability of functional telephone and Intercom Services
- Ward should have sufficient fire exit to permit safe escape to its occupant at time of fire. These fire exits should be clearly visible.
- Staff should be competent for operating fire extinguisher and what to do in case of fire.
- Availability of general duty doctor round the clock should be ensured.
- There should be Regular training of paramedical staff on hand hygiene, infection control, Biomedical Waste Management, Patient safety, IMNCI etc.
- There should be Availability of Point of care diagnostic instruments like glucometer etc.

- There should be Availability of equipment for sterilization and disinfection like boiler.

#### **4. Support Services:**

- All equipments should be calibrated and should be covered under AMC including preventive maintenance; also records should be maintained for the same.
- Drugs are stored in containers/tray/crash cart and are labeled.
- Empty and filled cylinders should be labeled.
- Identification band for children below 5 years.
- Narcotics and psychotropic drugs should be kept in lock and key.
- Nutritional assessment of patient done specially for high risk pregnancy and other specified cases.
- Quality and quantity check on linen. Gowns should be provided to the patient.
- Doctor, nursing staff and support staff adhere to their respective dress code.

#### **5. Clinical Services:**

- Time of admission should be recorded in patient record and immediate Initial assessment should be done which should be documented preferably within 2 hours.
- The process for ensuring the identification before any clinical procedure should be used for every patient and new born.
- Hand over should be given bed side and a proper documentation should be done .
- The facility should have defined procedures for safe drug administration like there should be medical, prescription audits.

- The facility should have defined and established procedures for discharge of patient.
- The facility should have defined and established procedures for Blood Bank/Storage Management and Transfusion.
- There is a system of follow up of referred patients, proper communication should be done .
- Triage, Assessment & Management of newborns having emergency signs are done as per guidelines.
- Management of children with severe Acute Malnutrition is done as per guidelines.
- There should be a process to ensure the accuracy of verbal/telephonic orders
- High alert drugs available in department are identified, labeled and a level should be maintained.
- There should be a proper disaster plan and Staff should be aware of disaster plan
- Proper notes should be put. Especially, Death note including efforts done for resuscitation should be noted in patient record.

**6. Infection Control:**

- There should be procedure for immunization of the staff; regular medical checkups should be done.
- There should be procedure to report cases of Hospital acquired infections.
- Doctors should be aware of Hospital Antibiotic policy.
- Regular monitoring of infection control practices should be done.

- There should be Availability of Alcohol based Hand rub, Heavy duty gloves and gum boots for housekeeping staff
- Transportation of bio medical waste is done in close container/trolley
- Standard practice of mopping and scrubbing should be followed including three bucket mopping system.
- Brooms should not be used.
- Staff should be aware of mercury spill management, blood spill management and needle sticks injury protocols.

**7. Quality Management:**

- Department should have properly documented standard operating procedures.
- The facility should map its key processes and seeks to make them more efficient by reducing non value adding activities and wastages.
- The facility should have established system of periodic review as internal assessment, medical & death audit and prescription audit.
- The facility should have defined and established Quality Policy & Quality Objectives
- The facility should go for continually improvement by practicing Quality method and tools like six sigma , PDCA etc

**8. Outcome:**

- Regular maintenance of various indicators should be done as per the guidelines

IV. Sick New born Care Unit:

SNCU Score Card		
	<b>SNCU Score</b>	<b>45.82367</b>
	<b>Area of Concern wise Score</b>	
<b>A</b>	<b>Service Provision</b>	<b>95.83333333</b>
<b>B</b>	<b>Patient Rights</b>	<b>67.24137931</b>
<b>C</b>	<b>Inputs</b>	<b>60.24096386</b>
<b>D</b>	<b>Support Services</b>	<b>53.22580645</b>
<b>E</b>	<b>Clinical Services</b>	<b>59.22330097</b>
<b>F</b>	<b>Infection Control</b>	<b>27.08333333</b>
<b>G</b>	<b>Quality Management</b>	<b>4.347826087</b>
<b>H</b>	<b>Outcome</b>	<b>4.166666667</b>

Table 5: Score card Sick New born Care Unit

**1. Service Provision:** All the services provided are at par. We are providing 24\*7 diagnostic

and curative services. Few things which need to be emphasized are :

- Provision of USG and portable X ray services

**2. Patient Rights:**

- Services available in SNCU should be displayed.
- There should be display of the services and entitlements available in its departments like JSSK and JSY to increase awareness among the masses.
- General Consent should be taken before admission.
- Contact information in respect of SNCU referral services are displayed
- Counselling aids should be available for education of mother
- Discharge summary should be given to the patient.
- Privacy should be maintained in breast feeding room

- Availability of complaint box and display of process for grievance redressal and whom to contact is displayed.
- All the consumables should be provided free of cost to the patients. If any other expenditure occurred it should be reimbursed from hospital.

### **3. Inputs:**

- Cluttering of units should be avoided; proper distance should be maintained between the two.
- TV for entertainment and health promotion should be there.
- Mother's area for expression of breast milk/ Breast feeding should be separate.
- Step down area in close proximity should be made.
- Wall mounted digital display is available in SNCU to show earth to neutral voltage, stabilizers, power backup should be maintained.
- There should be Availability of functional telephone and Intercom Services
- Ward should have sufficient fire exit to permit safe escape to its occupant at time of fire. These fire exits should be clearly visible.
- Staff should be competent for operating fire extinguisher and what to do in case of fire.
- Availability of general duty doctor round the clock should be ensured.
- There should be Regular training of paramedical staff on hand hygiene, infection control, Biomedical Waste Management, Patient safety, IMNCI etc.
- There should be Availability of Point of care diagnostic instruments like glucometer etc.

- There should be Availability of equipment for sterilization and disinfection like Autoclave.
- Availability of dedicated washing machine for SNCU.

#### **4. Support Services:**

- All equipments should be calibrated and should be covered under AMC including preventive maintenance; also records should be maintained for the same.
- Drugs are stored in containers/tray/crash cart and are labeled.
- Empty and filled cylinders should be labeled.
- Expressed milk is stored at recommended temperature.
- SNCU has functional room thermometer and temperature is regularly maintained.
- Nutritional assessment of patient done specially for mother of admitted baby
- Gown should be provided to visitors/staff at the entrance of SNCU.
- Quality and quantity check on linen. Gowns should be provided to the patient.
- Doctor, nursing staff and support staff adhere to their respective dress code.

#### **5. Clinical Services:**

- Time of admission should be recorded in patient record and immediate Initial assessment should be done which should be documented preferably within 2 hours.
- The process for ensuring the identification before any clinical procedure should be used for every patient and new born.
- Hand over should be given bed side and a proper documentation should be done .
- The facility should have defined procedures for safe drug administration like there should be medical, prescription audits.

- The facility should have defined and established procedures for discharge of patient.
- There is a system of follow up of referred patients, proper communication should be done .
- Triage, Assessment & Management of newborns having emergency signs are done as per guidelines.
- Management of children with severe Acute Malnutrition is done as per guidelines.
- There should be a process to ensure the accuracy of verbal/telephonic orders
- High alert drugs available in department are identified, labeled and a level should be maintained.
- There should be a proper disaster plan and Staff should be aware of disaster plan
- Proper notes should be put. Especially, Death note including efforts done for resuscitation should be noted in patient record.

**6. Infection Control:**

- There should be procedure for immunization of the staff; regular medical checkups should be done.
- There should be procedure to report cases of Hospital acquired infections.
- Doctors should be aware of Hospital Antibiotic policy.
- Regular monitoring of infection control practices should be done.
- There should be Availability of Alcohol based Hand rub, Heavy duty gloves and gum boots for housekeeping staff
- Transportation of bio medical waste is done in close container/trolley

- Standard practice of mopping and scrubbing should be followed including three bucket mopping system.
- Brooms should not be used.
- Staff should be aware of mercury spill management, blood spill management and needle sticks injury protocols.

**7. Quality Management:**

- Department should have properly documented standard operating procedures.
- The facility should map its key processes and seeks to make them more efficient by reducing non value adding activities and wastages.
- The facility should have established system of periodic review as internal assessment, medical & death audit and prescription audit.
- The facility should have defined and established Quality Policy & Quality Objectives
- The facility should go for continually improvement by practicing Quality method and tools like six sigma , PDCA etc

**8. Outcome:**

- Regular maintenance of various indicators should be done as per the guidelines

V. Post Partum Unit

Postpartum Unit Score Card		
	<b>Postpartum Score</b>	<b>59.5238</b>
	<b>Area of Concern wise Score</b>	
<b>A</b>	<b>Service Provision</b>	<b>89.28571429</b>
<b>B</b>	<b>Patient Rights</b>	<b>72.22222222</b>
<b>C</b>	<b>Inputs</b>	<b>65.13157895</b>
<b>D</b>	<b>Support Services</b>	<b>68.86792453</b>
<b>E</b>	<b>Clinical Services</b>	<b>68</b>
<b>F</b>	<b>Infection Control</b>	<b>57.59493671</b>
<b>G</b>	<b>Quality Management</b>	<b>8.75</b>
<b>H</b>	<b>Outcome</b>	<b>38.63636364</b>

Table 6: Score card PPU

**1. Service Provision:** All the services provided at maternity ward are at par. We are providing 24\*7 diagnostic and curative services. Few things which need to be emphasized are :

- Dedicated postpartum ward for FP surgeries and abortion clients
- Availability of point of care diagnostic test

**2. Patient Rights:**

- Availability departmental signage's in local language should be made.
- Compensation for family planning services are displayed to create awareness.
- Availability of disable friendly toilet.
- Display of reproductive rights of clients
- Availability of complaint box and display of process for grievance redressal and whom to contact is displayed.

- All the consumables should be provided free of cost to the patients. If any other expenditure occurred it should be reimbursed from hospital.

### **3. Inputs:**

- Demarcated of Protective Zone, clean zone , disposal zone etc in OT.
- Availability of OT technician.
- There should be Availability of functional telephone and Intercom Services
- Ward should have sufficient fire exit to permit safe escape to its occupant at time of fire. These fire exits should be clearly visible.
- Staff should be competent for operating fire extinguisher and what to do in case of fire.
- Availability of general duty doctor round the clock should be ensured.
- There should be Regular training of paramedical staff on hand hygiene, infection control, Biomedical Waste Management, Patient safety, Family planning etc.
- There should be Availability of Point of care diagnostic instruments like glucometer etc.
- There should be Availability of equipment for sterilization and disinfection like Autoclave.

### **4. Support Services:**

- All equipments should be calibrated and should be covered under AMC including preventive maintenance; also records should be maintained for the same.
- Drugs are stored in containers/tray/crash cart and are labeled.
- Empty and filled cylinders should be labeled.
- Quality and quantity check on linen. Gowns should be provided to the patient.

- Doctor, nursing staff and support staff adhere to their respective dress code.

#### **5. Clinical Services:**

- Time of admission should be recorded in patient record and immediate Initial assessment should be done which should be documented preferably within 2 hours.
- The process for ensuring the identification before any clinical procedure should be used for every patient and new born.
- Hand over should be given bed side and a proper documentation should be done .
- The facility should have defined procedures for safe drug administration like there should be medical, prescription audits.
- The facility should have defined and established procedures for discharge of patient.
- The facility should have defined and established procedures for Blood Bank/Storage Management and Transfusion.
- There is a system of follow up of referred patients, proper communication should be done .
- Triage, Assessment & Management of newborns having emergency signs are done as per guidelines.
- Management of children with severe Acute Malnutrition is done as per guidelines.
- There should be a process to ensure the accuracy of verbal/telephonic orders
- High alert drugs available in department are identified, labeled and a level should be maintained.

- There should be a proper disaster plan and Staff should be aware of disaster plan
- Proper notes should be put. Especially, Death note including efforts done for resuscitation should be noted in patient record.

#### **6. Infection Control:**

- There should be procedure for immunization of the staff; regular medical checkups should be done.
- There should be procedure to report cases of Hospital acquired infections.
- Doctors should be aware of Hospital Antibiotic policy.
- Regular monitoring of infection control practices should be done.
- There should be Availability of Alcohol based Hand rub, Heavy duty gloves and gum boots for housekeeping staff
- Transportation of bio medical waste is done in close container/trolley
- Standard practice of mopping and scrubbing should be followed including three bucket mopping system.
- Brooms should not be used.
- Staff should be aware of mercury spill management, blood spill management and needle sticks injury protocols.

#### **7. Quality Management:**

- Department should have properly documented standard operating procedures.
- The facility should map its key processes and seeks to make them more efficient by reducing non value adding activities and wastages.
- The facility should have established system of periodic review as internal assessment, medical & death audit and prescription audit.

- The facility should have defined and established Quality Policy & Quality Objectives
- The facility should go for continually improvement by practicing Quality method and tools like six sigma , PDCA etc

**8. Outcome:**

- Regular maintenance of various indicators should be done as per the guidelines

## **CONCLUSION**

Effective implementation of the National Quality Mission will address the major quality issues such as the staff deficit; implementation of the health management information system, interpersonal communication, and other important unaddressed areas such as regular patient feedback and its evaluation, standardization of care processes, patient safety, safe transport, and continuity of care and will thus facilitate improvement in public sector hospital as envisaged under NHM. Once the hospital is certified, it is important that it focuses on maintaining the quality and that the hospital staff is continuously motivated for continual and ongoing quality enhancement to higher levels of quality of healthcare.

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