Assessment of National Quality Assurance Standards at Civil Hospital, Jalandhar

By

Kajal Jumnani

Dissertation submitted for the partial fulfillment of the
MBA Hospital and Health Management

Academic year, 2016-2018

The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

Assessment of National Quality Assurance Standards at Civil Hospital, Jalandhar

By

Kajal Jumnani

Dissertation submitted for the partial fulfillment of the
MBA Hospital and Health Management

Academic year, 2016-2018

Punjab Health Systems Corporation, Jalandhar, Punjab

The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

INSTITUTE OF HEALTH MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that **Ms. Kajal Jumnani** student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at **Punjab Health System Corporation ,Civil Hospital, Jalandhar**, from 1st Feb 2018 to 30th April 2018.

The Candidate has successfully carried out the study designated to her during internship training and her 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.

(Col.) Dr. Ashok Kaushik
Dean, Academics and Student Affairs
The IIHMR University, Jaipur

Mr. Shyama Prasad Chattopadhyay
Assistant Professor
The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur- 302029, Rajasthan, India.
Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

PUNJAB HEALTH SYSTEMS CORPORATION
State Institute of Health and Family Welfare Complex
Phase-VI, Near Civil Hospital, SAS Nagar (Mohali), PUNJAB
Phone : 0172-2262938, 2263938, Tele-Fax : 0172 - 2266938
Visit us at : punjabhealth.co.in : E-mail: phschd@yahoo.com

No. PHSC/QA/18/ 1593 Dated 1.5.18

TO WHOM IT MAY CONCERN
CERTIFICATE OF DISSERTATION COMPLETION

This is to certify that Ms. Kajal Jumnani student of MBA in Hospital and Health Management, IIHMR Jaipur has successfully completed three months dissertation in health facility as allotted under Punjab Health Systems Corporation, Punjab from 01.02.2018 to 30.04.2018.

During the dissertation the student's performance was satisfactory.

We wish her success in all her future endeavors.

(Varun Roojam) I.A.S.
Managing Director
Punjab Health Systems Corporation
-Cum-Secretary Health and Family Welfare, Pb.

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

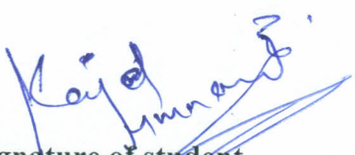
This is to certify that the dissertation titled **ASSESSEMNT of NATIONAL QUALITY STANDARDS at CIVIL, HOSPITAL, JALANDHAR** and submitted by **Kajal Jumnani** Enrollment No. **0431** under the supervision of **Mr. Shayma Prasad Chattopadhyay** for award of MBA in **Hospital and Health Management** of the University carried out during the period from **1/2/2018** to **30/4/ 2018** 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 Kajal Jumnani

THE IIHMR UNIVERSITY

CERTIFICATE BY SCHOLAR

This is to certify that all ethical issues have been considered while collecting data for my dissertation titled "ASSESSMENT OF NATIONAL QUALITY ASSURANCE STANDARDS" AT CIVIL HOSPITAL, JALANDHAR"



Signature of student

ACKNOWLEDGEMENT

I owe a great debt to all professionals at **CIVIL HOSPITAL, JALANDHAR** for generously sharing their knowledge and time, which inspired me to do my best at this project study.

My heartfelt gratitude to **Dr. Parvinder Paul Kaur** (Assistant Director, Quality Assurance) and **Dr. Kanwal Singh Bawa** (Medical Superintendent) for showing their keen interest in the study and for sharing their views in spite of their very busy schedule. It has been my privilege to work under their dynamic supervision at the Hospital.

I am extremely grateful to **Dr. Chanjiv Mehta** (Senior Medical Officer) for the constant support and encouragement. This study would not have been possible without their support.

I express my warm veneration towards front office department staff, for their valuable guidance throughout the entire course of study to its completion.

My sincere gratitude to **Dr. Ashok Kaushik** (Professor Dean, The IIHMR University, Jaipur) for his relentless support and guidance. My regards go to my guide at institute **Mr. Shyama Prasad Chattopadhyay** (Assistant Professor, The IIHMR University) for his very helpful attitude and valuable suggestions.

I would like to express my heartless thanks to my parents for their moral support, which always inspires me to perform best. The last but not the least credit goes to all my friends' colleagues who helped me in this study.

Sincerely

Kajal Jumnani
MBA- HM 21 (2016-2018)
The IIHMR University, Jaipur

TABLE OF CONTENT

LIST OF FIGURES

I. About the Hospital

1. SBLS Civil Hospital, Jalandhar

SBLS Civil Hospital, Jalandhar was established in 1951. It has 470 sanctioned beds with 150 bedded Maternal and Child Care and 30 bedded Trauma Centre. It caters the health care needs of the population of about 8.62 lakh in Jalandhar.

District Hospital is above all the hospitals in the district i.e. sub- district hospital, block level hospital (CHC) and primary health care (PHCs) and it act as a referral unit for all the Tehsil/ Taluk/ Block population in which they are geographically located. Sixteen Specialists services are provided by this hospital to all population of the Jalandhar. The hospital plays an important role in providing the Emergency services 24*7, emergency obstetrics care and neonatal care and help in bringing down the maternal mortality rate and neonatal mortality rate.

2. Scope of Services

The hospital has 27 departments; my concern departments were 16 only i.e. OPD, IPD, Accident and Emergency, Labour Room, Maternity Ward, Paediatrics ward, SNCU, OT, PP Unit, Blood Bank, Laboratory, Radiology, Pharmacy, Auxiliary Services, Mortuary, Administration.

General Medicine	Obstetrics & Gynaecology	Physiotherapy
General Surgery	Ophthalmology	Post Partum Unit
ENT	Paediatrics & Neonatology	Family Planning
Orthopaedics	Dental care	Psychiatrics
Dermatology	Accident & Emergency	Anaesthesia
Radiology, USG, ECG	Blood Transfusion & storage	ICTC
Immunization	AYUSH	Homeopathy
Arsh Clinic	De-addiction Centre	One Stop Centre
NICU & SNCU	Trauma Centre	DOTS Centre

1. **General Medicine -** Internal medicine or general medicine outpatient department dealing with the prevention, diagnosis, and treatment of adult diseases. This department has 4 doctors who deal with the OPD of more than 100 patients daily.

2. **General Surgery –** General surgery is a surgical specialty that focuses on abdominal contents including oesophagus, stomach, small bowel, colon, liver, pancreas, gallbladder, appendix and bile ducts, and often the thyroid gland. This department has 3 doctors.
3. **Obstetrics & Gynaecology - Obstetrics and gynaecology** (commonly known as OB-GYN, OBG, O&G or obs and gynae) is the medical specialty that deals with pregnancy, childbirth, and the postpartum period (**obstetrics**) and the health of the female reproductive systems. This department has 3 medical officers and 1 senior medical officer.

4. **Accident & Emergency –** The **accident and emergency** is the department in a hospital where people who have severe injuries or sudden illness are taken for **emergency** treatment. This department has 5 doctors and 3 nursing staff at each shift.

5. **Admission and Billing-** This is the department involved in admission and billing of the patient as per government policies.

6. **Medical record department-** MRD is the custodian of all the discharged/expired health records documents. The MRD staffs ensure the confidentiality, preservation, storage and retention of the documents. The department deals with record collection, codification, storage, analytical evaluation and retrieval of record if needed.

7. **Pharmacy-** The goal of the pharmacy is to procure and provide medicines and surgical items to the patients. The pharmacy serves various areas of the hospital like customs, special wards .The Department services include procurement and providing medicines to the patients. The department also provides medicines to the wards after procurement.

8. **Housekeeping-** The aim of the department is to achieve defect free room with 100% hygiene and cleanliness to maximize patient's satisfaction along with minimum cost. The department performs activities like cleaning providing room amenities, pest controlling and waste disposal.

9. **Finance-** The department provides accurate relevant and timely financial information necessary in making the right business plan and decisions. The finance department looks into the business building insight, areas for lowering cost and improving profitability, updating of bills on daily basis

for IPD patients. The billing staff has overall responsibility for coordination of various functions and daily basis report for the admission and provide the necessary solution to daily problems as deemed proper and reasonable.

10. **Security-** The department provides proactive, competent services, to protect the life and property of every individual present in the premises, to prevent any action or situation that might result in an injury or death when a patient/attendant/visitor/employee are lawfully on the hospital premises.

11. **Laundry-** The department delivers spotlessly clean and hygiene linen and uniforms to the users of different departments. The department maintains records for issued linen, received linen, new linen and alteration if needed. The department treats infected/contaminated linen, treats heat labile linen.

12. **Radiology-** The department use medical imaging to diagnose the patients. Civil hospital has imaging techniques like X- Ray, Ultrasound and computed tomography facilities. This department has 1 doctor and 3 technicians.

13. **Blood Bank-** A **blood bank** department where blood gathered as a result of blood donation is stored and preserved for later use in blood transfusion. This department has 2 doctors, 4 technicians and 2 nursing staff.

II. Executive Summary

The objective of the study is to assess Quality Assurance Level of Civil Hospital, Jalandhar against the National Quality Assurance Standards and to identify the gaps in assurance of the quality against these standards.

The study was completed in the duration of 3 months, from 1st February 2018 to 30th April 2018, in the Civil Hospital, Jalandhar which is 470 bedded and biggest government hospital in the state of Punjab.

The methodology used to assess the Quality Assurance level was Qualitative Study based on observation and discussion with patients and staff.

The assessment showed the current scenario of the healthcare services in the hospital in comparison to the set national standards of the Quality assurance. The tools used to assess were the standard departmental checklists for various departments of the hospital provided by the government of India. Out of the 18 checklists 16 checklists were applicable for the Civil Hospital, Jalandhar.

The hospital scored an overall score of 66.2% when evaluated by taking the average of the different department's individual score. Blood Bank scored the highest i.e. 77 percent whereas Mortuary scored the lowest i.e. 56 percent.

The hospital scored highest in the Service Provision out of 8 areas of concern (i.e. Service Provision, Patients Right, Support Services, Clinical Services, Quality Management and Outcome Indicator) and Lowest in the 2 area of concern i.e. Quality Management and Outcome Indicator.

The hospital needs to focus on various aspects of Quality and Outcome Indicators using the standard checklist to improve the hospital overall score and to get the National Quality Assurance Standard Accreditation.

III. Introduction

1. Quality in Healthcare

Health care is the diagnosis, treatment and prevention of disease, illness, injury and other physical and mental impairments in human beings. Health care is delivered by practitioners in allied health, dentistry, midwifery, obstetrics, medicine, nursing, optometry, pharmacy, psychology and other care providers.It refers to the work done in providing primary care, secondary care and tertiary care as well as in public health.

The quality of health care as 'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge'. The quality of technical care consists in the application of medical science and technology in a way that maximizes its benefits to health without correspondingly increasing its risks.

Quality in Healthcare 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 Healthcare, which considers preferences and aspirations of the service users, and is in congruent with their cultures? It implies that patients are accorded dignified and courteous behaviour and their reasonable belief, practices and rights 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, 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 must be avoided.

2. Quality Assurance

Quality assurance is a systematic measurement and needs regular monitoring with a feedback loop of services receivers/providers perception on service quality for error prevention and improvement of services.

It is objectively and symmetrically monitors and evaluates services and facilities offered and performed in the hospital premises are in accordance with pre-established standards.

Identify gaps of service quality in terms of perception of service receivers and follow the standards and pursue opportunities for further improvement in the existing services. The survey will be carried out with in the hospital premises on services offered and performed based on National Quality Assurance Standards and ensure the delivery of quality services to the patients as well.

It is comprehensive and multifaceted concept that measures how well client's expectations and providers technical standards are being met.

The four principles of Quality Assurance are:

1. To focuses on the system and process.
2. Utilise data to analyse system delivery processes.
3. To encourages team approach on problem solving and quality improvement
4. It is oriented towards meeting the needs and expectations of the patients.

IV. Background

1. Introduction

Quality of Care has emerged as key thrust area for both Policy Makers and Public Health Practitioners as an instrument of optimal utilization of resources and improving health outcomes and client satisfaction. The National Health Policy 2016 clearly states in its objective – Improve health status through concentrated policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public health sector with focus on Quality.

Ministry of Health & Family Welfare, Government of India in collaboration with state health departments has developed and implementing a comprehensive quality assurance framework for public health facilities and Programs. This Framework comprises of four interrelated approach and activities to achieve patient centric quality system

- Instituting Organizational Framework for Quality.
- Defining Standards of Service Delivery and Patient Care.
- Continuous Assessment of services against set standards.
- Improving Quality through closing gaps and implementing opportunities for Improvement.

The framework-based works on following principles –

1. **Systems approach** –Quality System should be integral part of Health Systems. Rather than working on isolated themes and facilities, the approach should be holistic quality improvement involving all components of health system. Quality processes should be interlaced with healthcare planning and provision processes to give optimal results. This is achieved by instituting a system of continuous assessment, handholding and participative quality improvement through coordinated efforts of all stakeholders.

2. **Client Focus –**The quality system should enable providers to meet and surpass the expectations of it clients. These may be patients, beneficiaries and community at large. The patient care and quality assurance processes should be designed keeping in mind the users of public health facilities, so these are accessible, affordable, dignified and user-friendly to its seekers. This achieved though taking continuos objective feedback from users and using it for improving the services.

3. **Recognizing the champions-** Healthcare Quality improvement on large scale thrives upon success stories, role models, inspirational leaders and champions to spread quality culture. The quality framework gives provision of promoting and recognizing champions through incentives and reward mechanism.

4. **Team work–** Quality can only be achieved by concentrated, coordinated and sustainable efforts of all stakeholders be it policy makers, health administrators, clinicians, patient care staff or frontline community health workers. Quality Assurance committees and units have been instituted at National, state and district level to facilitate team work. At facility level Quality Team have been constituted so all service providers can pool their efforts to for quality improvement.

5. **Process Focus–** Healthcare quality is comprises for three components – structure, process and outcome. The desired outcome can only be achieved when optimal infrastructure and human resources is utilized by efficient processes. Though structure is important component to ensure quality, National Quality Framework is predominately relying on improving the outcome by optimizing the processes within given structural limitations. This is achieved by through assessment, improvement and standardization healthcare processes.

6. **Continual Improvement –**Quality is a long journey, requires concentrated and sustained efforts. The quality framework believes in incremental improvement in healthcare process through continual quality improvement cycle.

7. **Objective Quality Measurement –** The journey towards quality improvement starts with objective and unbiased measurement of quality of existing healthcare processes and services. Under Quality Framework, National Quality Assurance Standards have been instituted of all level of public health facilities. Explicit assessment tools and scoring system has been developed for objective measurement and fact based decision making for quality improvement.

8. **Concern & Context –** Public Hospitals service a large section of community those don't have access to private health care because of affordability or access. Public system also has almost exclusive responsibility for implementing preventive and primitive health programs. National Quality Framework works towards develop indigenous quality system of public health facilities that meets specific requirements of its users as well global benchmarks.

Ministry of Health & family Welfare, Government of India in 2013, for strengthening the Quality Assurance 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 (SQAU)

c. Quality Assessors (Empanelled)

3. District level**:**

a. District Quality Assurance Committee (DQAC)

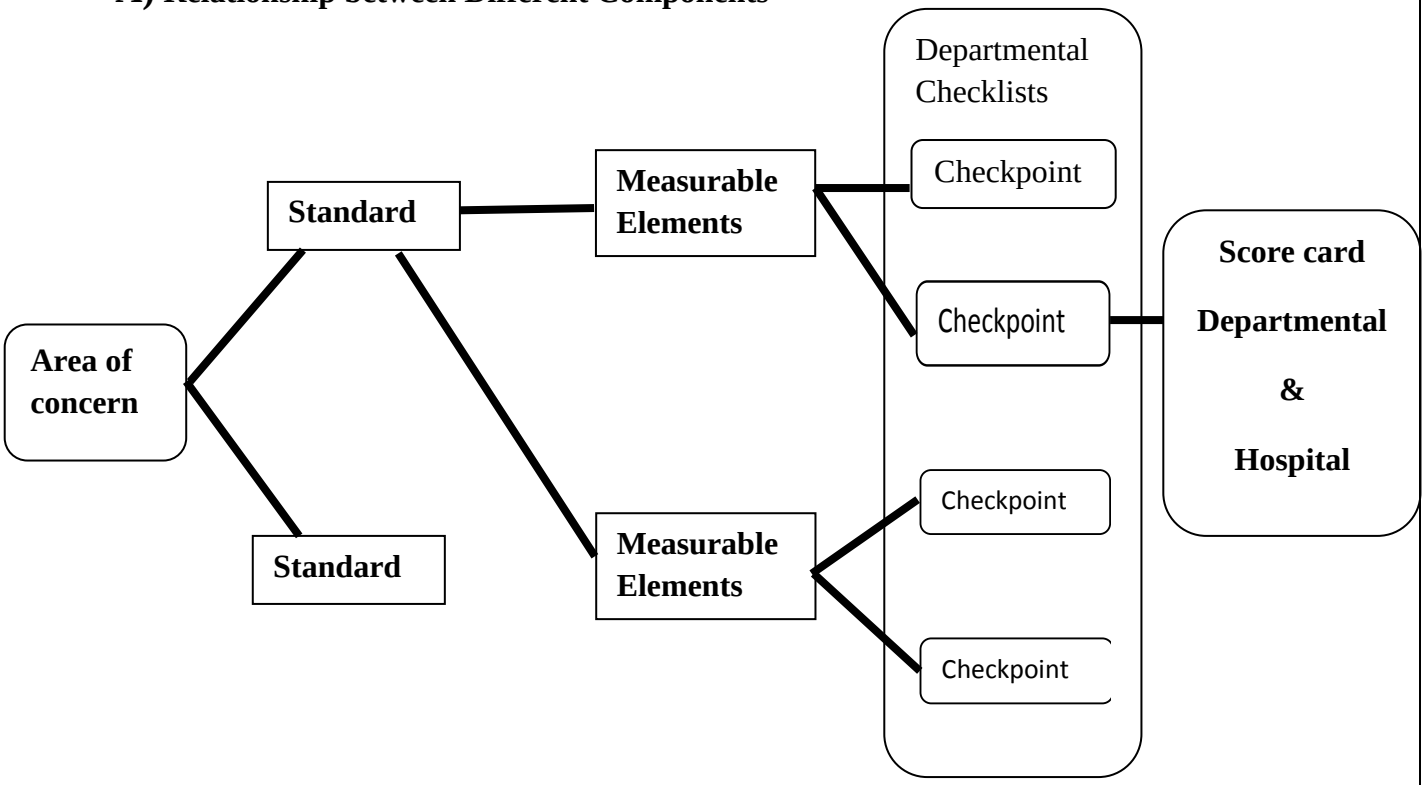
b. District Quality Assurance Unit (DQAU)

4. District Hospital level**:** District Quality Team / Hospital Quality Team

2. Explicit Measurement System

The main pillars of Quality Measurement System are Quality Standards. There are seventy standards, defined under his system. The standards have been grouped within the eight areas of concern. Each standard further has specific measurable elements. These standards and elements are checked in each department of a health facility through department specific checkpoints. All checkpoints for a department are collated and together they focus assessment tool called Checkpoint. Scored/filled checklists would generate scorecards.

A) Relationship between Different Components



Following are the areas of concerns in a health facility:

1. Service Provision
2. Patient's Rights
3. Inputs
4. Support Services
5. Clinical Services
6. Infection Control
7. Quality Management
8. Outcome

- **Area of Concern A: Services Provision**

Standard A1:- The facility provides Curative Services

Standard A2:- The facility provides RMNCHA Services

Standard A3:- The facility provides diagnostic Services

Standard A4:- The facility provides services as mandated in national Health Programmes/State Scheme.

Standard A5:- The facility provides support services

Standard A6:- Health services provided at the facility are appropriate to community needs.

- **Area of Concern B: Patient Rights**

Standard B1:- The facility provides the information to care seekers, attendants & community about the available services and their modalities.

Standard B2:- Services are delivered in a manner that is sensitive to gender, religious and cultural needs, and there are no barriers on account of physical economic, cultural or social reasons.

Standard B3:- The facility maintains privacy, confidentiality & dignity of patient, and has a system for guarding patient related information.

Standard B4:- The facility has defined and established procedures for informing patients about the medical condition, and involving them in treatment planning, and facilitates informed decision making.

Standard B5:- The facility ensures that there are no financial barriers to access, and that there is financial protection given from the cost of hospital services.

- **Area of Concern C: Inputs**

Standard C1:- The facility has infrastructure for delivery of assured services, and available infrastructure meets the prevalent norms.

Standard C2:- The facility ensures the physical safety of the infrastructure.

Standard C3:- The facility has established Programme for fire safety and other disaster.

Standard C4:- The facility has adequate qualified and trained staff, required for providing the assured services to the current case load.

Standard C5:- The facility provides drugs and consumables required for assured services.

Standard C6:-The facility has equipment & instruments required for assured list of services.

- **Area of Concern D: Support Services**

Standard D1:- The facility has established Programme for inspection, testing and maintenance and calibration of Equipment.

Standard D2:- The facility has defined procedures for storage, inventory management and dispensing of drugs in pharmacy and patient care areas.

Standard D3:- The facility provides safe, secure and comfortable environment to staff, patients and visitors.

Standard D4:- The facility has established Programme for maintenance and upkeep of the facility.

Standard D5:- The facility ensures 24 X 7 water and power backup as per requirement of service delivery, and support services norms.

Standard D6:- Dietary services are available as per service provision and nutritional requirement of the patients.

Standard D7:- The facility ensures clean linen to the patients.

Standard D8:- The facility has defined and established procedures for promoting public participation in management of hospital transparency and accountability.

Standard D9:- Hospital has defined and established procedures for Financial Management."

Standard D10:- The facility is compliant with all statutory and regulatory requirement imposed by local, state or central government.

Standard D11:- Roles & Responsibilities of administrative and clinical staff are determine as per govt. regulations and standards operating procedures.

Standard D12:- The facility has established procedure for monitoring the quality of outsourced services and adheres to contractual obligations.

- **Area of Concern E: Clinical Services**

Standard E1:- The facility has defined procedures for registration, consultation and admission of patients.

Standard E2:- The facility has defined and established procedures for clinical assessment and reassessment of the patients.

Standard E3:- The facility has defined and established procedures for continuity of care of patient and referral.

Standard E4:- The facility has defined and established procedures for nursing care."

Standard E5:- The facility has a procedure to identify high risk and vulnerable patients.

Standard E6:- The facility follows standard treatment guidelines defined by state/Central government for prescribing the generic drugs & their rational use.

Standard E7 :-The facility has defined procedures for safe drug administration.

Standard E8:- The facility has defined and established procedures for maintaining, updating of patients' clinical records and their storage.

Standard E9:-The facility has defined and established procedures for discharge of patient.

Standard E10:- The facility has defined and established procedures for intensive care.

Standard E11:- The facility has defined and established procedures for Emergency Services and Disaster Management.

Standard E12:- The facility has defined and established procedures of diagnostic services.

Standard E13:- The facility has defined and established procedures for Blood Bank/Storage Management and Transfusion.

Standard E14:- The facility has established procedures for Anaesthetic Services.

Standard E15:- The facility has defined and established procedures of Operation theatre services.

Standard E16:- The facility has defined and established procedures for end of life care and death.

- **Maternal & Child Health Services**

Standard E17:- The facility has established procedures for Antenatal care as per guidelines.

Standard E18:- The facility has established procedures for Intranatal care as per guidelines.

Standard E19:- The facility has established procedures for postnatal care as per guidelines.

Standard E20:- The facility has established procedures for care of new born, infant and child as per guidelines.

Standard E21:- The facility has established procedures for abortion and family planning as per government guidelines and law.

Standard E22:- The facility provides Adolescent Reproductive and Sexual Health services as per guidelines.

- **National Health Programmes**

Standard E23:- The facility provides National health Programme as per operational/Clinical Guidelines.

- **Area of Concern F: Infection Control**

Standard F1:- The facility has infection control Programme and procedures in place for prevention and measurement of hospital associated infection.

Standard F2:- The facility has defined and Implemented procedures for ensuring hand hygiene practices and antisepsis.

Standard F3:- The facility ensures standard practices and materials for Personal protection.

Standard F4:- The facility has standard procedures for processing of equipment and instruments.

Standard F5:- Physical layout and environmental control of the patient care areas ensures infection prevention.

Standard F6:- The facility has defined and established procedures for segregation, collection, treatment and disposal of Bio Medical and hazardous Waste.

- **Area of Concern G: Quality Management**

Standard G1:- The facility has established organizational framework for quality improvement.

Standard G2:- The facility has established system for patient and employee satisfaction.

Standard G3:- The facility has established internal and external quality assurance Programmes wherever it is critical to quality.

Standard G4:- The facility has established, documented implemented and maintained Standard Operating Procedures for all key processes and support services.

Standard G5:- The facility maps its key processes and seeks to make them more efficient by reducing non value adding activities and wastages.

Standard G6:- The facility has established system of periodic review as internal assessment, medical & death audit and prescription audit.

Standard G7:- The facility has defined and established Quality Policy & Quality Objectives.

Standard G8:- The facility seeks continually improvement by practicing Quality method and tools.

- **Area of Concern H: Outcome Indicator**

Standard H1:- The facility measures Productivity Indicators and ensures compliance with State/National benchmarks.

Standard H2:- The facilities measures Efficiency Indicators and ensure to reach State/National Benchmark.

Standard H3:- The facility measures Clinical Care & Safety Indicators and tries to reach State/National benchmark.

Standard H4:- The facility measures Service Quality Indicators and endeavours to reach State/National benchmark.

Key Performance Indicator

1.Productivity

D1 Bed Occupancy Rate

D2 Lab test done per thousand Patients (indoor & OPD)

D3 Percentage of cases of high risk pregnancy/ obstetric complications out of total registered pregnancies at the facility

D4 Percentage of surgeries done at night out of total surgeries

D5 Percentage of surgeries one during day out of total surgeries

D6 Percentage of C- Section out of Total deliveries

2. Efficiency

D7 No. of Deaths in Emergency/Total No. of emergency attended

D8 Percentage of out referrals out of Total Admission

D9 No. of major surgeries per surgeon (in a month)

D10 OPD per Doctor

D11 External Quality score for lab tests (Median value)

D12 Percentage of Stock outs of Vital drugs (list of essential commodities under RMNCH+A)

3. Clinical Care/Safety

D13 No. of Maternal Deaths out of total admission during ANC, INC, PNC

D14 No. of Neonatal Deaths out of total live births and neonatal admission

D15 Percentage of cases for which Maternal Death Review done

D16 Average Length of Stay

D17 Percentage of Surgical Site Infection out of total surgeries

D18 Percentage of Mortality out of total SNCU admissions

D19 Number of Sterilization Failures

D20 Number of Sterilization Complications

D21 No. of Deaths after Sterilization

D22 No. of unit issued on replacement X 100/ Total no of unit issued

D23 Percentage of delivery having partograph recorded

D24 Percentage of IIIrd and IVth generation antibiotics being prescribed (Sampling methods)

4. Service Quality

D25 Percentage of LAMA out of Total Admission

D26 Patient Satisfaction Score for IPD

D27 Patient Satisfaction Score for OPD

D28 Registration to Drug Time (average)

D29 Percentage of JSY payments done before discharge

D30 Percentage of women provided drop-back facility after delivery

V. Research Questions

To review the Quality Assurance Level of Civil Hospital, Jalandhar according to the National Quality Assurance Standard.

VI. Study Objectives

GENERAL OBJECTIVE- To assess the Quality Assurance Standards of Civil Hospital, Jalandhar.

SPECIFIC OBJECTIVES -

- Identify the gaps against the National Quality Assurance Standards department wise (i.e. 16 departments- OPD, IPD, Accident and Emergency, Labour Room, Maternity Ward, Paediatrics ward, SNCU, OT, PP Unit, Blood Bank, Laboratory, Radiology, Pharmacy, Auxiliary Services, Mortuary, Administration).
- To give recommendations for bridging the gap areas or non- compliances.
- To measure the patient satisfaction level by using the standard patient satisfaction score card.

VII. Study Methodology

As the National Quality Assurance departmental checklist has means of verification is Observation, staff interview and patient interview and Record Review, so the study design will be Qualitative Study based on the Observation and Discussions.

Study Design: 1. Observational Study

2. Qualitative Study (interviewing staff of different departments and patients of different departments).

Study Area: Civil Hospital, Jalandhar

Study Duration: 3 Months (1/February/2018 to 30/April/2018).

Data Collection Tool:

- **Primary Data Collection-** Department specific checklists of National Quality Assurance Standards in District Hospitals.
- Patient satisfaction feedback form.
- **Secondary Data Collection**- Hospital Documents Review and Clinical Record Review.

Data collection Technique:

- Record Review (RR)
- Staff Interview (SI)
- Observation (OB)
- Patient's Interview (PI)

Sample Size: Sample size for interview will be –

- 1 senior employee and 2 junior employees from different departments.
- 2 patients from each department (i.e., 2 patients from wards, OPD, waiting area, orthopaedic, laboratory etc).

VIII. Data Analysis

As per the pre-defined Scoring Rule of National Quality Assurance Standards:

2 marks – Full compliance

1 marks – Partially compliance

O mark – Non compliance

The final score of each department will be in percentage that can be calculated by using formula:

$$\frac{\text{Score obtained} * 100}{\text{No. of checkpoints in checklist} * 2}$$

After calculating the final department wise Quality Score, the department's Quality Assurance Standards will be then assessed on the scale provided by the National Quality Assurance i.e., as follows:

- 70% and above score – Highly Satisfactory
- 50 - 60% score – Satisfactory
- 40- 50% score – Average
- Below 40% - poor

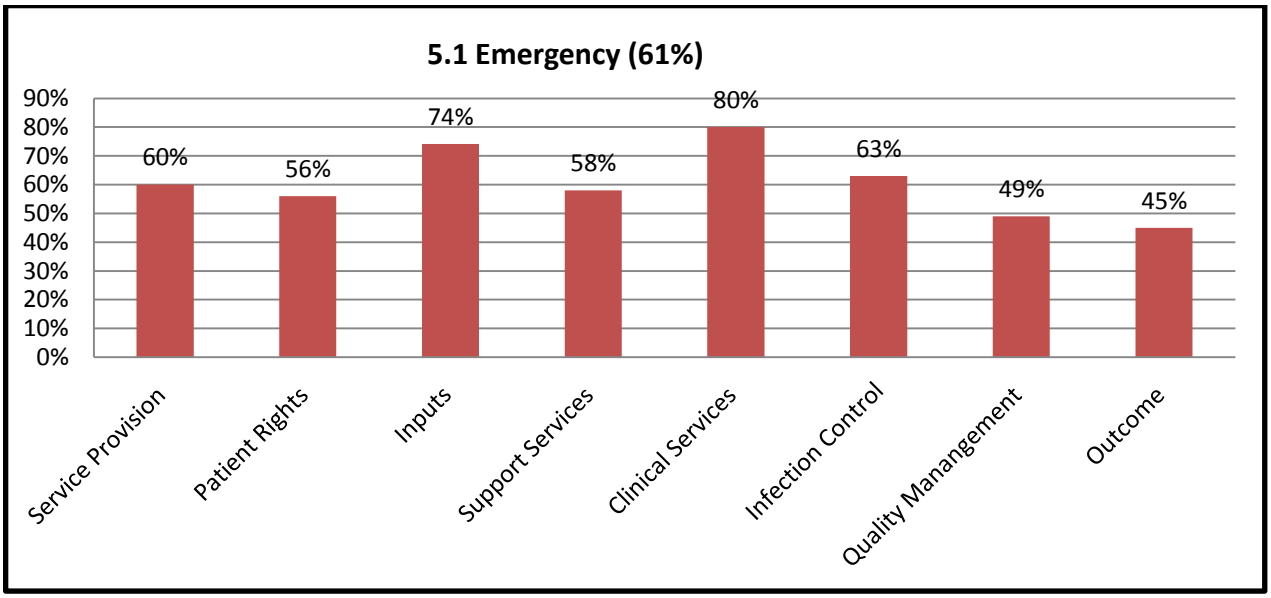
IX. Findings & Graphical Presentation

The assessment for the hospital was done for 16 departments excluding NRC and ICU, as there was no provision for the both. The finding is discussed in way:

- Graphs showing department wise score based on the score a department attains in each area of concern using the above mentioned formula and average of these departmental scores gave the hospital score.

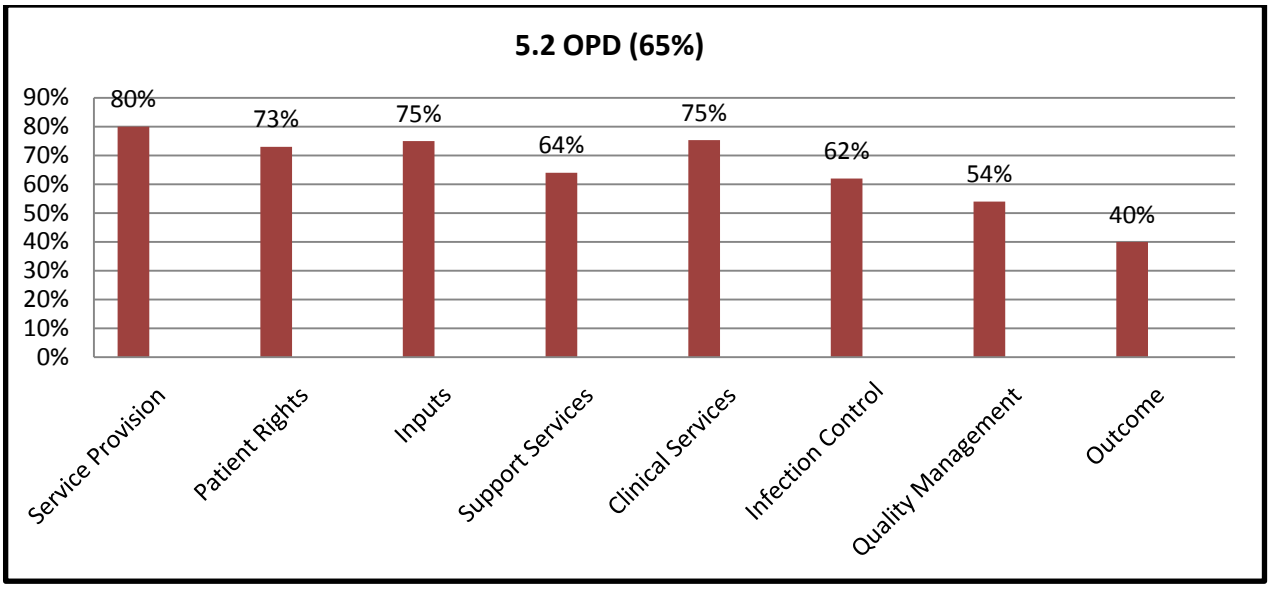
The department wise scoring is as following:

1) Accident and Emergency



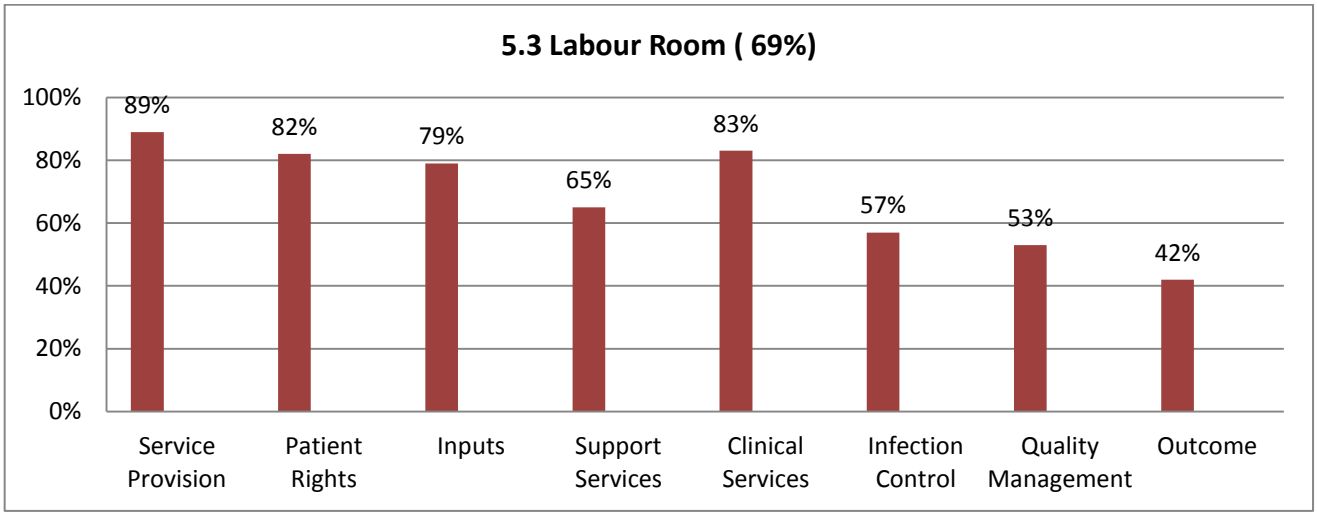
The emergency department to be assessed was found to have scores ranging from 45% to 80% in each area of concern, Quality Management and Outcomes which seems to be the lowest scoring area of concern throughout the assessed department.

2) Outpatient Department



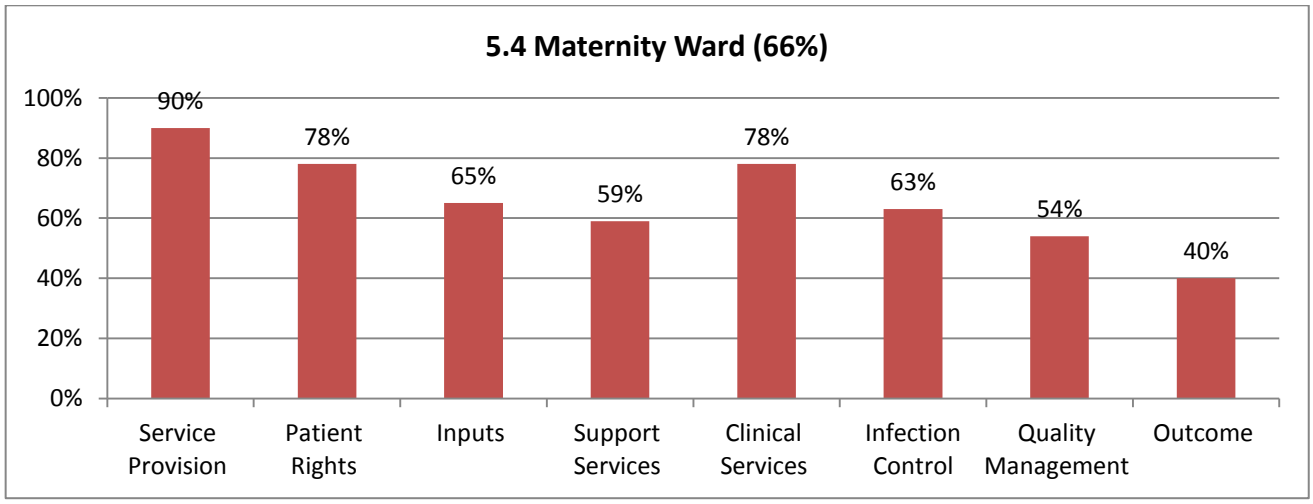
Out Patient Department was assessed and found to have scores ranging from 80% to 40% in each area of concern, OPD lags behind in Proper queue system, sitting arrangement, infection control practices and outcome management that is proper record maintenance.

3) Labour Room



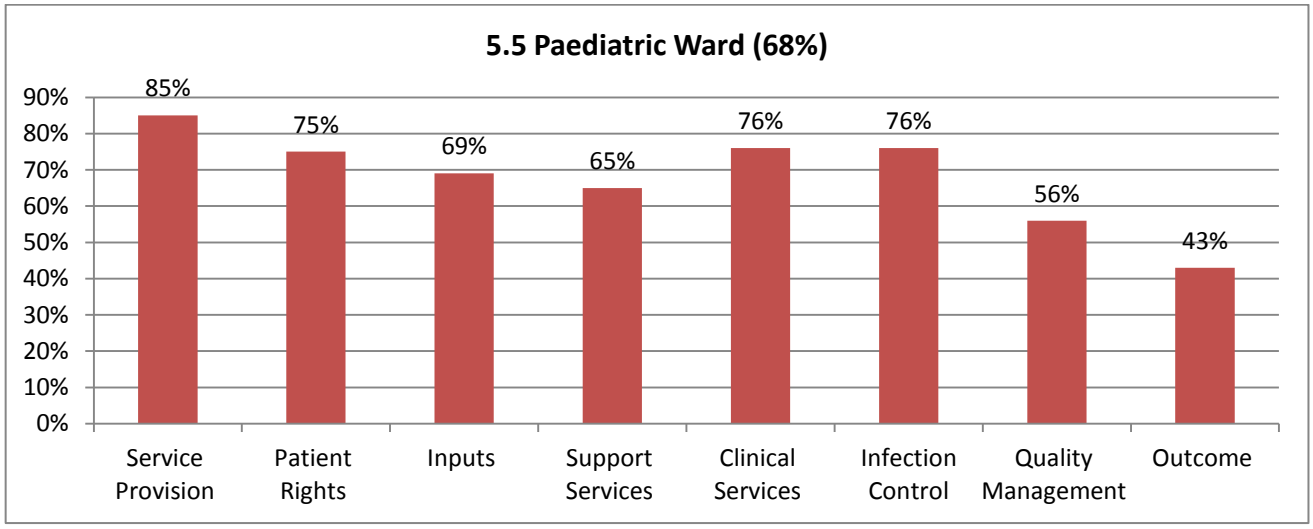
Labour room is most critical area of any hospital, as the scores in labour room are ranging from 89% - 42%, service provision has highest score means labour room working is efficient and available 24*7, somewhere lacking in infection control practices and outcome indicators management.

4) Maternity Ward



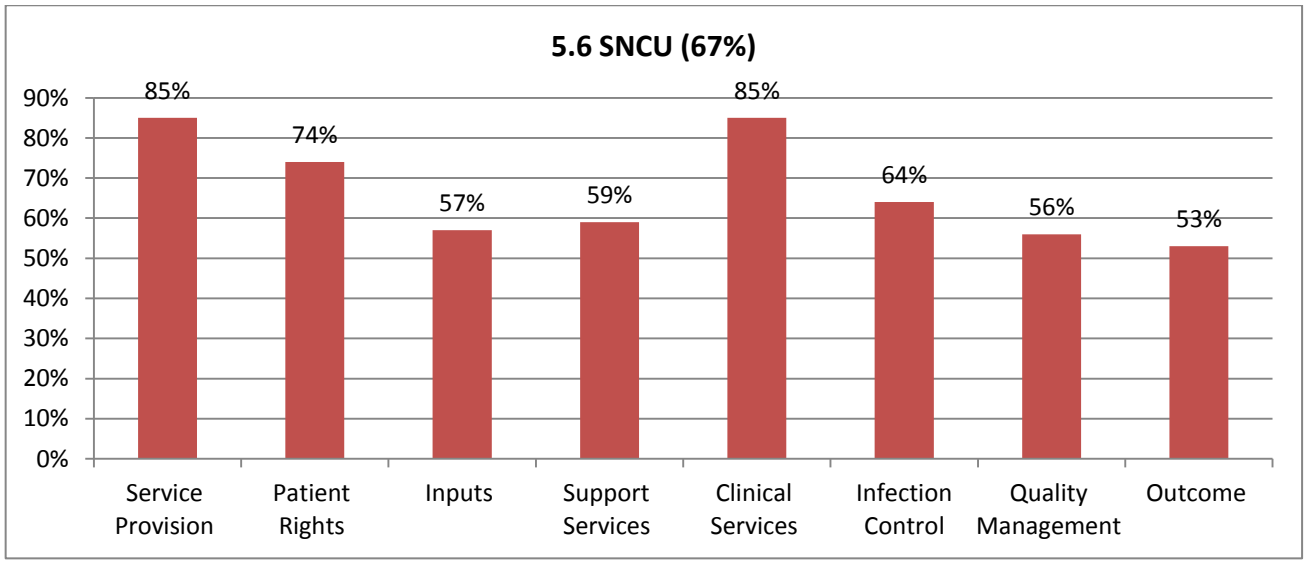
Maternity Ward is the extension of the labour room it consist of ANC (Anti natal) and PNC (Post natal) ward which has highest score 90% and the lowest score 40%, means maternity ward is very efficient in providing services round the clock, dedicated staff is available to take care of patients.

5) Pediatric Ward



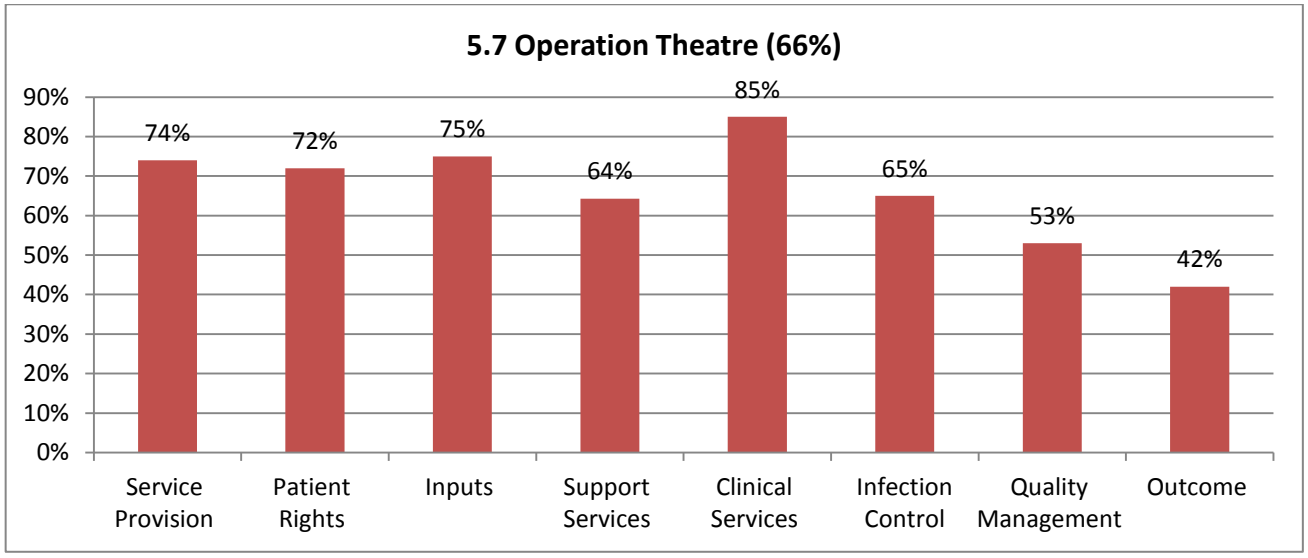
Paediatric Ward was assessed and has scores ranging from 85%- 43%, it was lacking behind in support services including (drugs management, annual maintenance of equipments, availability of linen as per load) and maintaining outcome indicators.

6) SNCU



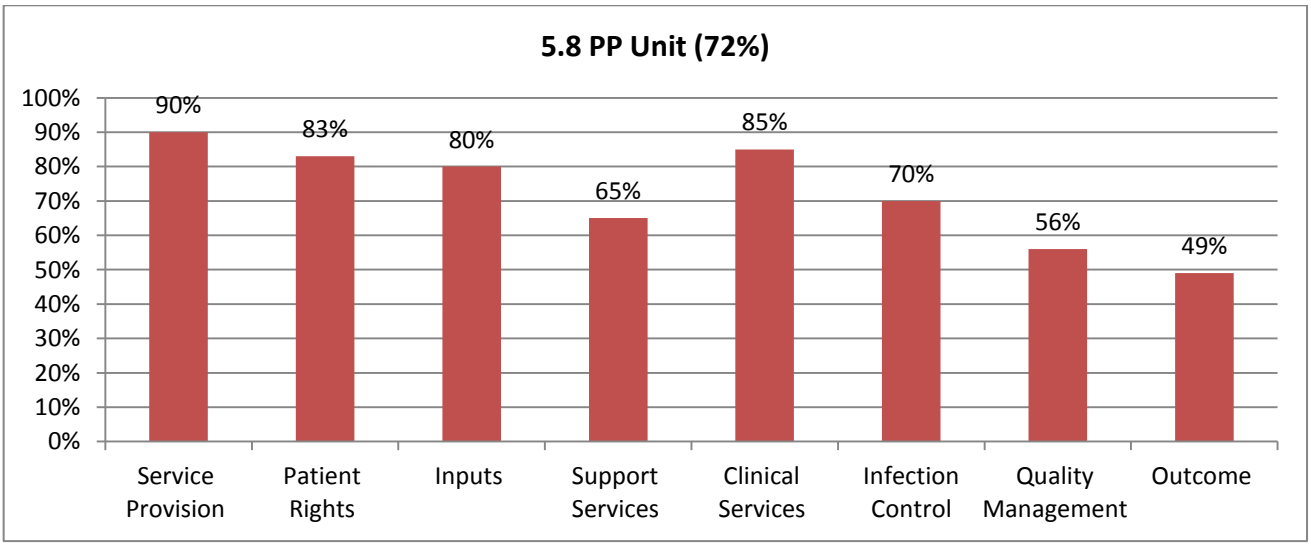
SNCU's scores are ranging from 85% to 53%, as service provision and clinical services has highest score i.e. 85% means SNCU providing good point of care to the new born and has dedicated start round the clock to take care of new born.

7) Operation Theatre



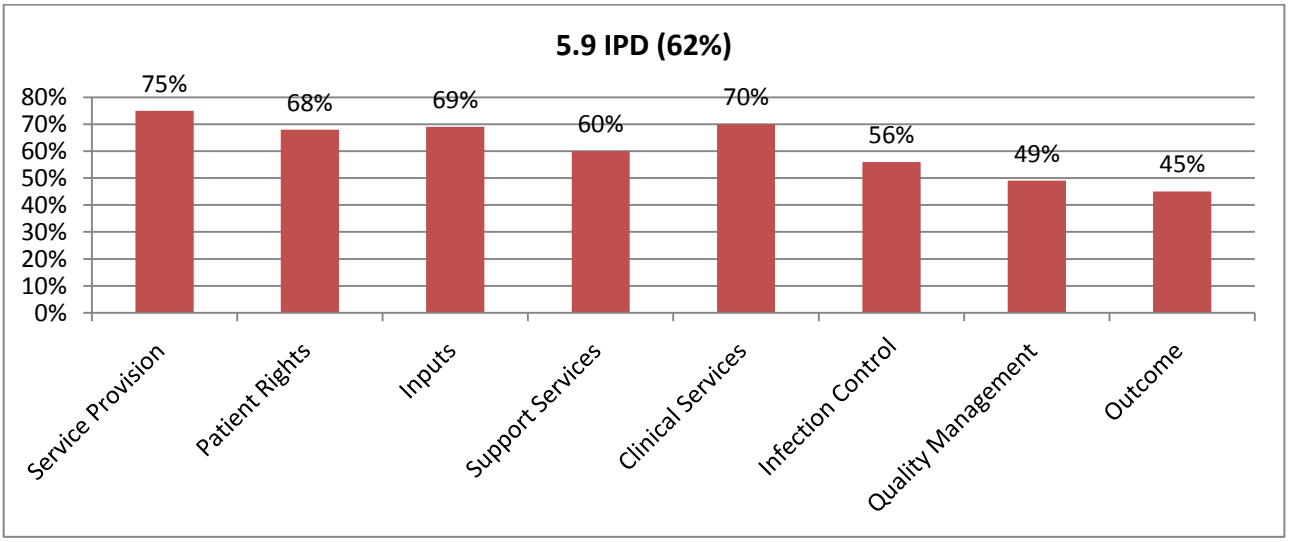
Operation Theatre another critical area of the hospital has highest score in the clinical services means patients care and safety is at the priority but it is lacking behind in maintaining the outcome indicators.

8) Post-Partum Unit



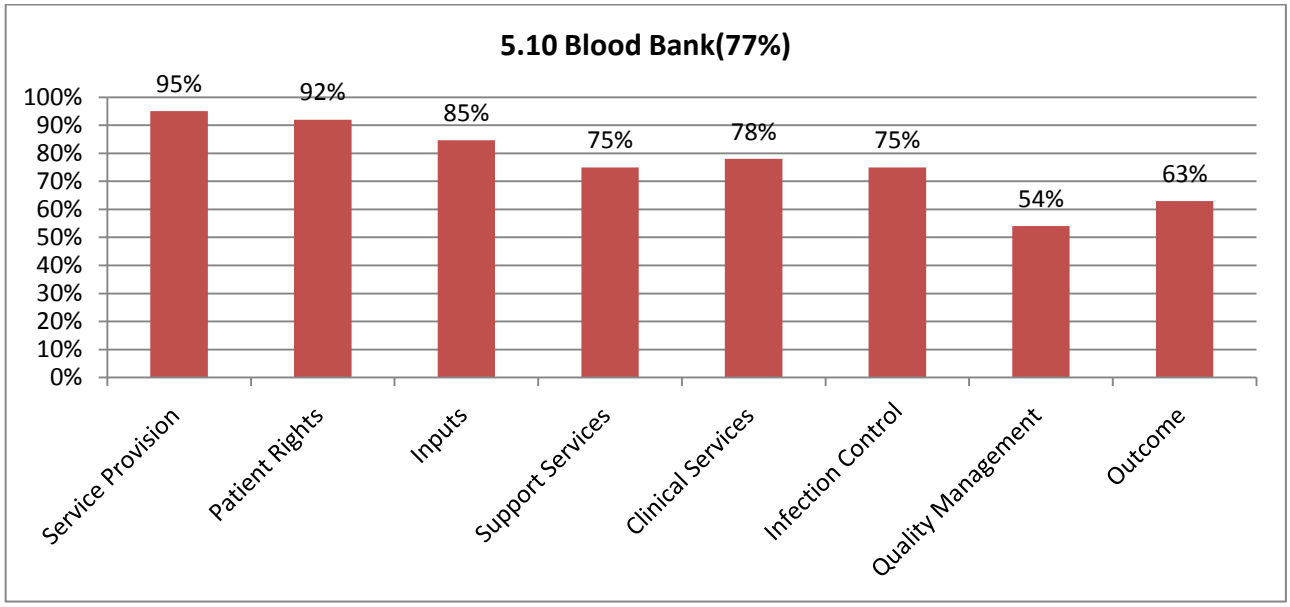
Post Partum unit , the Family Planning clinic has scores ranging from 90% to 49%, as PP UNIT is scoring highest marks in all departments means it is adhere to most of the standards and maintaining so well family planning programmes.

9) Inpatient Department



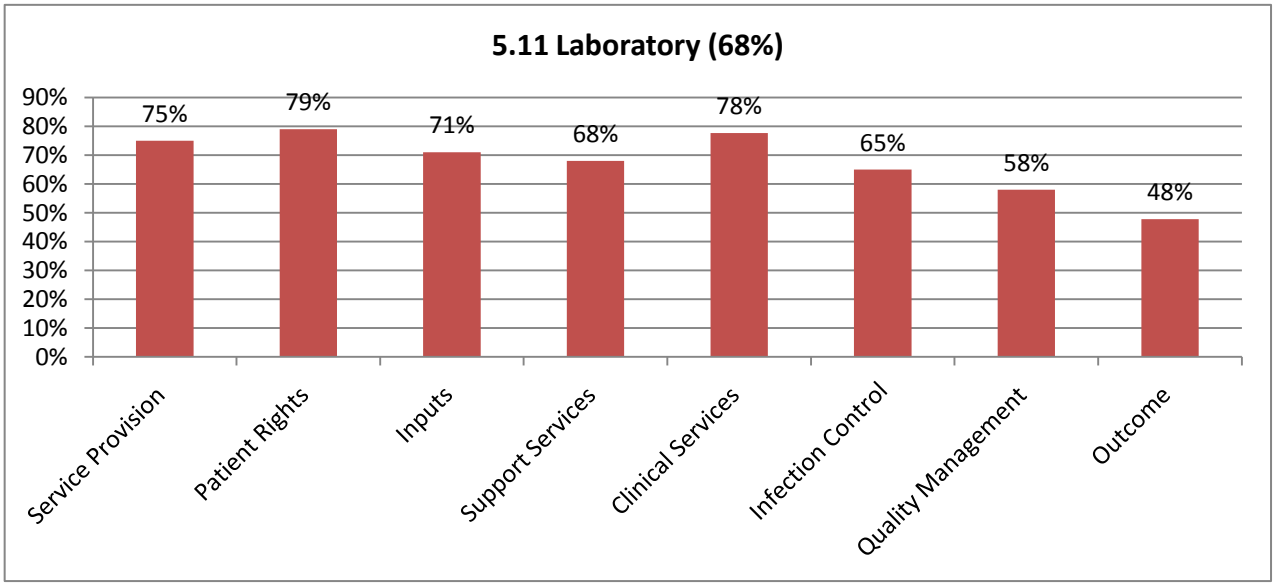
Inpatient Department include all the wards i.e. Surgical Wards, Medical Wards and Orthopaedics Wards etc. has almost nearly same scores in all area of concern and had very smooth functioning with regards to all areas of the concern.

10) Blood Bank



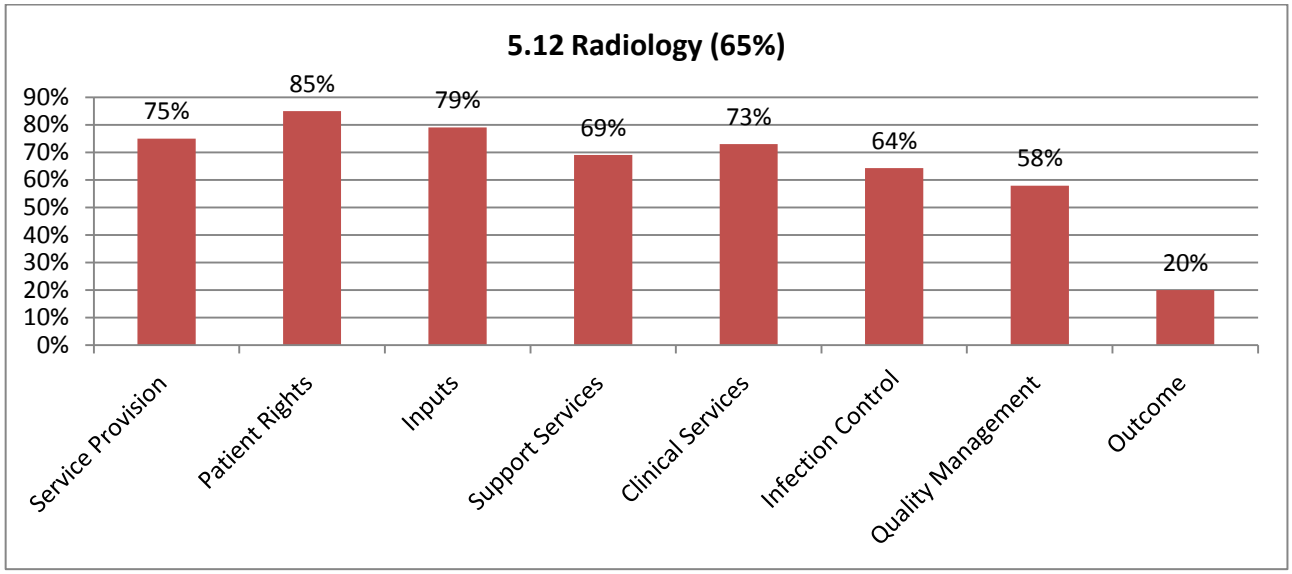
Blood Bank has scores ranging from 95% to 54%, it is found to be most systematic and well-maintained department in all area of concern.

11) Laboratory



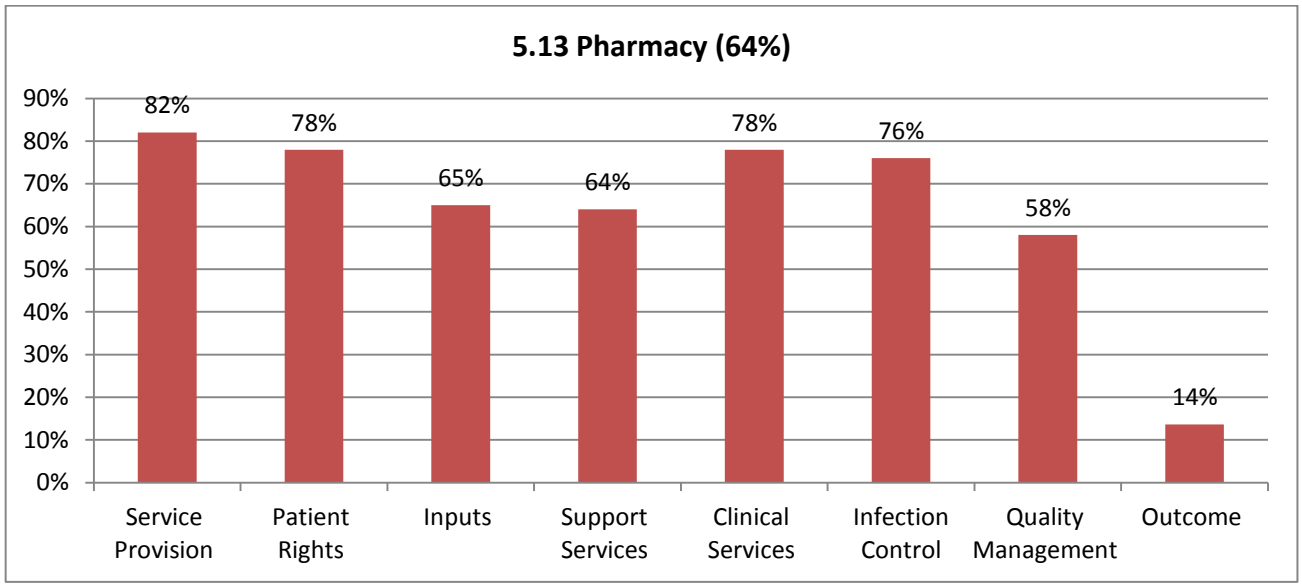
Laboratory has also one of the good score as compare to all departments, scores in all concern of areas is nearly same, the only improvement needed in Quality Management and Outcome Indicator to make this department highest scoring.

12) Radiology



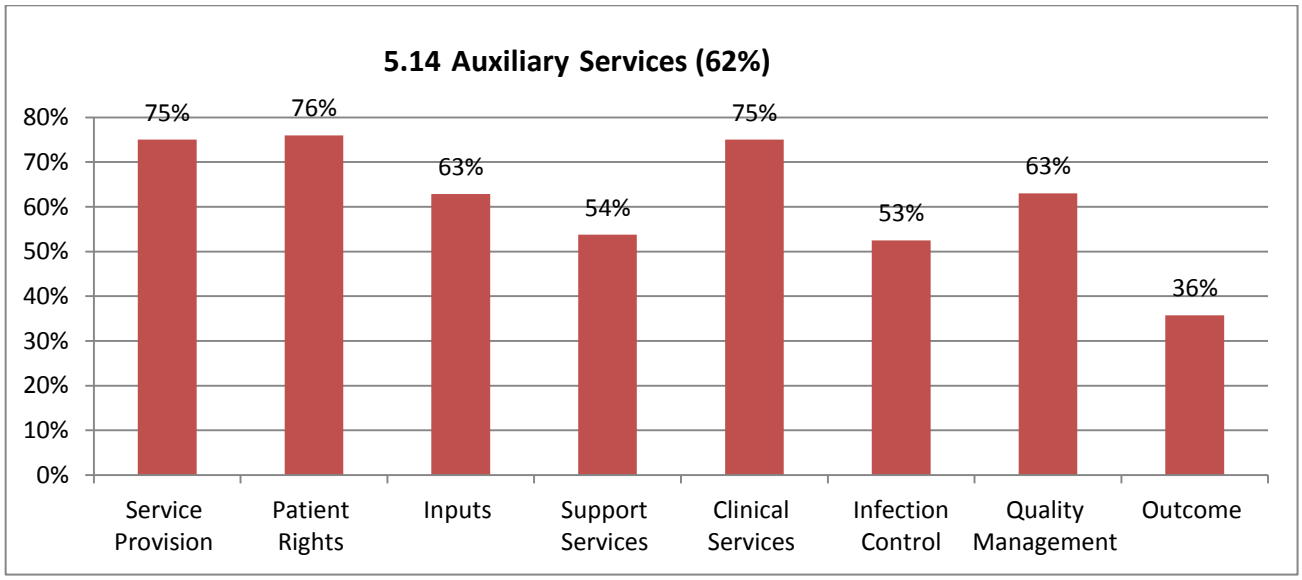
Radiology department is the very busy department of Civil Hospital, Jalandhar but has lack in seating arrangement and queue management system and has lowest Outcome Indicator which needed to rectify to make radiology department work efficiently.

13) Pharmacy



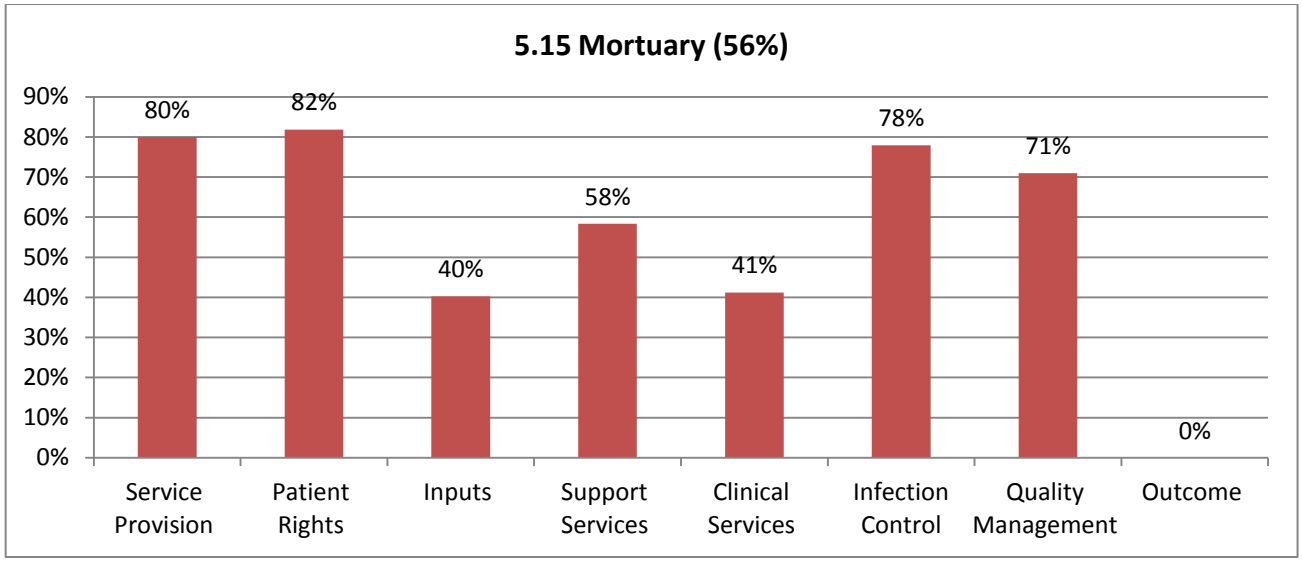
Pharmacy is assessed has score ranging from 82% to 14%, as the pharmacy is well maintained but the marking of the drugs like LASA drugs missing, antibiotic policy missing and prescription audit fro generic drugs prescribed is missing.

14) Auxiliary Services



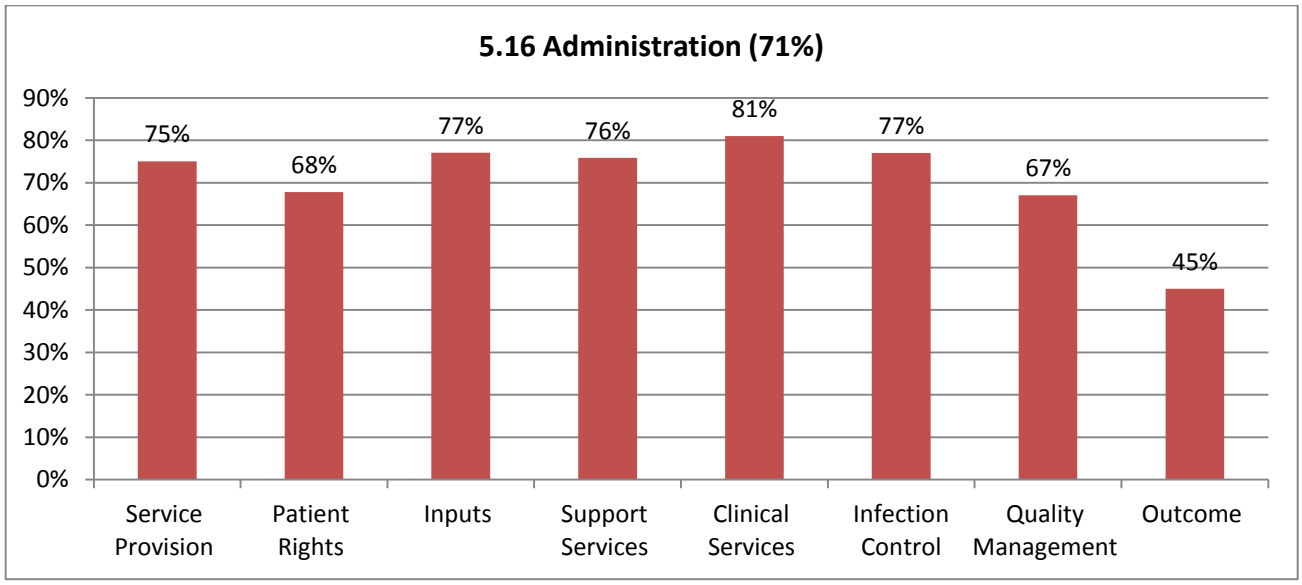
Auxiliary Services include four types of department such as Medical Record Department, Dietary Department, Laundry and House Keeping Department has sufficient score but lacking in dietary services and laundry standards.

15) Mortuary



Mortuary has lowest score i.e. 56% as compare to all departments, major lacking in inputs clinical services and outcome indicator maintenance. Mortuary have a separate building and need lot of maintenance.

16) Administration



Administration has overall nearly same score in all area of concern, only lacking in maintaining the Outcome Indicators.

X. Hospital Quality Score Card

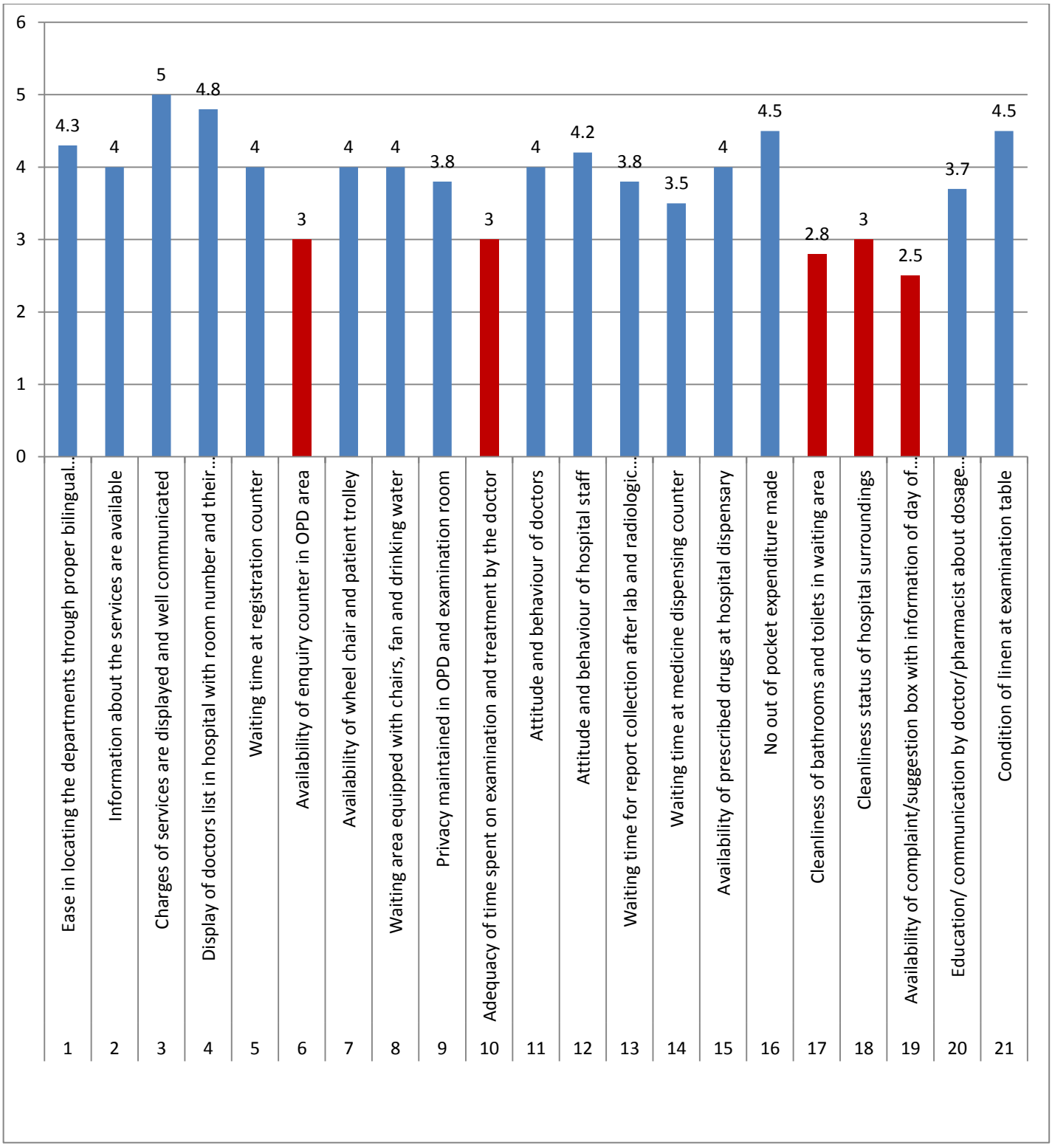
Hospital Quality Score Card is the Hospital Performance score card which represents the overall Quality Score of the Hospital along with the individual departmental score.

S. NO.	Department Wise Score	Score (%)
1	Accident and Emergency	61
2	OPD	65
3	Labour Room	69
4	Maternity Ward	66
5	Paediatrics	68
6	SNCU	67
7	Operation Theatre	66
8	PP UNIT	72
9	IPD	62
10	Blood Bank	77
11	Laboratory	68
12	Radiology	65
13	Pharmacy	64
14	Auxiliary Services	62
15	Mortuary	56
16	Administration	71
17	**Overall score**	**66.2**

The overall score of the hospital was calculated by taking the average of all the departments. The overall score of the hospital is 66.2%.

XI. Patient's Satisfaction Feedback

Patient's satisfaction is the most important parameter for judging the quality of service being provided by a Healthcare provider to the patients. Positive feedback from the patients leads to the goodwill of healthcare providers in the market, whereas negative feedback gives warning to upkeep the Healthcare services.



Patients are mostly dissatisfied with the time given for consultation and examination and with the cleanliness of the washrooms and surroundings.

XII. Discussion

The Quality Assurance Assessment of the Civil Hospital, Jalandhar yielded the score of 66.2% which is very Satisfactory Level, quite lacking behind the government's target of score above 70%.
If we observed scores maximum are near to 60 percent, where highest score is in the Blood Bank i.e. 77 % and the lowest score is in the Mortuary i.e. 56 %.

All the departments assessed for eight area of concern and maximum departments are lacking in 2 area of concern i.e. Quality Management which includes making SOPs, internal quality assessment and control, monitoring and evaluation of departments, process mapping of critical processes and corrective and preventive action plans, Quality Policy and Quality Objective, Quality Management is a new concept to the public hospital so relatively lacking in scoring for this area of concern.

Outcome talked about the Productivity Indicators like Bed Occupancy Rate, Efficiency Indicators like No. of OPDs per Doctor, Clinical Indicators like MMR, IMR and Death rate for the hospital etc., these indicators emphasize on the efficiency of the processes of the hospital, which can help in improvement of the outcome of the hospitals and various government run programmes.

The above discussion shows that the hospital is very efficient in providing the services round the clock as per government norms but only failing in Quality Management and maintaining the Outcome Indicator.

XII.RECOMMENDATIONS:

As the Hospital lacking in some areas in every department to achieve the Standard Score according to the National Quality Assurance Level, so to make corrections and to achieve Standard Score, I have recommended some suggestions department wise i.e.-

1) Accident and Emergency-

1. Need triage to display.
2. Proper demarcation of area according to the triage needed to be done.
3. Emergency Drug trays needed to maintain timely and record the stock outs timely.
4. SOP's and Outcome indicators needed to maintain.

2) OPD-

1. Queue system needed to manage along with patient calling system as the OPD is very high.
2. SOPs needed to be displayed.
3. Privacy issues needed to be cater by using curtains and sheets.

3) LABOUR ROOM –

1. Tables are rusted needed to be painted or replace.
2. Point of care diagnostic tests is not available needed to make available to improve Quality Care.
3. Signage's not available as per standards informed concern head of the department to rectify the same.
4. Staffs needs regular training on Bio- Medical Waste Management and Hand Hygiene as this is the most critical area of the hospital.

4) MATERNITY WARD –

1. Visiting Policy needed to be implemented as the no. of attendants coming with patients are more than 2.
2. Staffs are not aware of the disaster plan, roles and responsibilities of them.

5) PAEDIATRIC WARD –

1. No security guard is posted there, suggested for the posting a guard common in paediatrics and SNCU.
2. Visiting Policy needed to be implemented.

3. Suggested to make play room or place television with some cartoon channels so that children feel happy and recover soon.

6) OPERATION THEATRE –

1. OT zones are not demarked like protective zone, clean utility, dirty utility, sterile area etc, suggested to OT incharge to implement same.
2. Lacking in maintaining the records of carbolisation and sterilization suggested implementing the same.
3. WHO Surgical Safety Checklist needed to be implemented to ensure the right surgery for right patient at right demarcated place at right time.

7) POST PARTUM UNIT –

1. Only lacking in maintaining the Outcome Indicator which is consulted with PP UNIT incharge to make sure the compliance.
2. SOPs needed to implement to ensure the Quality care is given to patients.

8) IPD –

1. Cleanliness of wards and washroom is sometime a issue, housekeeping incharge instructed to maintain cleanliness and training given to the housekeeping staff to follow the standard practices.
2. Nursing station is not provided or displayed the critical value of different tests, nursing incharge of every ward instructed to display the same.

9) BLOOD BANK –

1. Annual Maintenance record maintenance needed to be done, blood bank incharge suggested doing the same and ensuring the compliance of the same.
2. Training on Fire Safety needed to be given to the dedicated staff.

10) LABORATORY –

1. Common people flow through the department needed to be restricted as this is non-compliance according to the National Quality Assurance Standards.
2. Bio-Medical Waste disposal adherence is needed as per BMW rules and regular training needed to be given.
3. Outcome Indicators needed to be maintained as these are the essential to know the disease status.

11) RADIOLOGY –

1. Lead apron and TLD badges are not placed properly, incharge of the department instructed to keep it properly as per guidelines.

2. Medical Check up of all staff need to made compulsory at least yearly.
3. SOPs needed to be implemented and ensure the compliance of the same.
4. Outcome Indicators needed to be maintained.

12) Pharmacy-

1. List of drugs needed to be displayed, with their availability status on daily basis.
2. Timely indenting of drugs needed to be done to avoid the stock out.
3. Proper marking of drugs needed to be done along with LASA drugs.

13) Auxiliary Services –

1. Laundry equipments needed to be buying to compliance the National Quality Assurance Standards.
2. Demarcated and dedicated area/zones needed to be made in the laundry to separate out dirty and clean clothes.
3. Records of laundry needed to be maintained, to identify from which ward which and how much clothes collected and needed to return back.
4. In Kitchen serving trolley needed to buy to serve the hot food to the patient.

14) Mortuary –

1. As mortuary has a different building and almost all need maintenance.

15) Administration –

1. Record maintenance is only issue in the administration, needed to take with priority and reach to compliance soon.

XIV. Conclusion

In the end we can say that, Quality in public place is newer concept and the results and effectiveness will only be seen in long term. The hospital need to work a lot to reach the National Quality Standards and to attain the 70% marks and for achieving the same the hospital's quality assurance committee has to work with proper framework to fulfil the gaps and to provide the quality healthcare services in the hospital.

The biggest challenge is to maintain that score for the long time period, as the regular check is needed to maintain the service quality which can be done by allocating the roles and responsibilities to the departmental inchrages for the upkeep of the services.

Last but not the least appraisal for every work is very necessary, so there should be a yearly appraisal programme for the incharges to increase their enthusiasm towards providing the quality healthcare services along with the upkeep of the services.

References:

BOOKS:

1. Department of Health and Family Welfare, Government of Punjab 2013, *Policy and Guidelines for Quality Assurance in Health Care.*

2. Maternal Health Division, Ministry of Health and Family Welfare, Government of India 2013, *Operational Guidelines for Quality Assurance in Public Health Facilities.*

3. Ministry of Health and Family Welfare, Government of India 2013, *Assessor's Guidebook for Quality Assurance in District Hospitals (VOLUME- 1 AND VOLUME – 2).*

WEB SOURCE:

1. nhsrcindia.org (Operational Guidelines of Quality Assurance in Public Health Facilities).

2. www.rrcnes.gov.in (Assessor's guide book (checklist) for Quality Assurance in District Hospital).

3. http://nhsrcindia.org/quality-improvement.

4. Khushboo Sabharwal Gupta,Varsha Rokade , Journal of Health Management 18(1) 84–94 © 2016 Indian Institute of Health Management Research, http://journals.sagepub.com.

5. D'Souza, S. C., & Sequeira, A. H. (2012). Measuring the customer-perceived service quality in health care organization: A case study. Journal of Health Management, 14(1), 27–41.