Gap Analysis and Implementation of NABH Entry Level Patient Centric Standards at a Small Health Care Organization in Jodhpur

By

Jaishree Vyas

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2018-2020

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HLFPPT
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Certificate of completion of Internship/dissertation

The certificate is awarded to

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In recognition of having successfully completed her Internship in the department of

Social Franchising

and has successfully completed her Project on

Gap analysis and implementation of NABH entry level patient centric Standards at a Small Health Care Organization in Jodhpur

From **10th February 2020**

Hindustan Latex Family Planning Promotion Trust

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

We wish her all the best for future endeavors.

Sr. Programme Manager

Pankhuri Rai

Dr. Pankhuri Rai

National Manager-HR & OD

Mr. Satish Chandra Uniyal

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LIST OF ABBREVIATIONS

S.NO	ABBREVIATION	FULL FORM
1.	BMW	BIO-MEDICAL WASTE
2.	CSSD	CENTRAL STERILE SUPPLY DEPARTMENT
3.	ER	EMERGENCY
4.	HK	HOUSE KEEPING
5.	IC	INFECTION CONTROL
6.	ICU	INTENSIVE CARE UNIT
7.	NABH	NATIONAL ACCREDITATION BOARD OF HOSPITALS AND HEALTHCARE
8.	OPD	OUT-PATIENT DEPARTMENT
9.	OT	OPERATION THEATER
10.	PPE	PERSONAL PROTECTIVE EQUIPMENT
11.	UG	ULTRA SONAGRAPHY

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ABSTRACT

'Title: Gap Analysis and implementation of NABH patient centric standards at a SHCO in Jodhpur'

Indian health care system is currently operating within an environment of rapid social, economic and technical changes and hospitals are an integral part of health care system. Accreditation would be the single most important approach for improving the quality of hospitals National accreditation system for hospitals ensures that hospitals, whether public or private, national or expatriate, play their expected roles in national health system. Accreditation results in high quality of care and patient safety

Key words: NABH (National Accreditation Analysis, Compliance Board for Healthcare Providers)

Background Study: Quality Management Systems and Accreditation are versatile tools to ensure equity in healthcare services and the meeting the increasing aspirations of people. The ideal state of affair can be achieved by the institution of a quality management system that focuses on compliance with accreditation standards of NABH and like bodies Gap Analysis is a tool that helps an organization to compare its actual performance with its potential performance.

Objectives:

a. To assess the existing service delivery standards of the SHCO.
b. To carry out a gap analysis between existing level and desired level of NABH
c. To implement desired standards for streamlining the process.
d. To assist the Hospital in charting the further course of action which will lead to compliance with accreditation standards of the NABH.

Methodology: It has been done by the NABH self-assessment toolkit.

Research design- Descriptive and cross-sectional study with in-depth review of NABH guidelines. A self-assessment toolkit provided by NABH is used to assess the existing gaps in functional areas of hospital. Information was gathered by means of patient and staff interviews, direct observation, hospital and clinical record review.

Data collection Method

The pre-accreditation entry level NABH self-assessment toolkit was used for data collection. in that toolkit scoring was done with the help of PMIS software. For assessing some objective elements, Observation was required, for Some Other elements reviewing of SHCO manuals, records and policies was needed and in few, interview with the Staff and patients was required The toolkit of NABH consist:

1) Implementations (No/Yes): Weather the objectives are implemented in the department or not

2) Documentation (No/Yes): If the objective is implemented, weather is proper documentations regards same or not.

3) Evidence: If proper documentation of the said objective is available, then evidence will be collected regarding the same.

4) Scores (10/5/0): once all the above criteria are fulfilled score would be given as follow

- Compliances to the requirements: 10

- Partial compliances to the requirements: 5

- non-compliance: 0

Data analysis:

It was analysed quantitatively excel workbook. The analysis depicts that, the SHCO that are going for assessment are maximum compliant to standards, while those Small Healthcare organizations which has Just filled the application are less compliant. The Small Healthcare organizations, that obtained the NABH entry level pre-accreditation, are less compliant compared to those Small Healthcare organizations, that are about to go for assessment.

Result:

The Study revealed that all NABH chapters have average score below 5, which shows that they are non-compliant to NABH requirements. Hospital has shown maximum compliance in NABH chapter no. 1 and chapter no. 5 Patient Rights and Education and least compliance to Chapter 2 Care of patient.

Conclusion:

The gap analysis has revealed non-compliance as per NABH Standards which need to be addressed. As per the scheduled plan of action it is recommended that the hospital will attempt to fill the identified gaps. To conclude, the actions to be taken for compliance with accreditation standards are likely to impact the delivery of public health services positively, ensuring quality services, efficient outcomes with risk management with patients, staff, and visitors' safety, and above all equity in healthcare services for the citizens.

SECTION 1 INTRODUCTION OF THE STUDY:

Gap analysis is the initial step in the review of the available service delivery system It is an efficient base to implement a modern management system It can be measured against pre-set. It reveals the areas of improvement in the existing service system. It focuses on the components of the management services and how effective they are. The scope of improvement will mark the level up to which services are to be upgraded. Scope of improvement will give the percentage of progress nodded to achieve the pre-set standards.

NABH

National Accreditation Board for Hospitals & Healthcare Provider (NABH) is a constituent board of Quality Council of India, set up to establish and operate accreditation program for healthcare organizations. board while being supported by all stakeholders including industry, consumers, government, has fully functional autonomy in its operation. A public recognition of the achievement of accreditation standards by a healthcare organization, demonstrated through an independent external peer assessment of that organization's level of performance in relation to the standards

The NABH accreditation is for that organization (hospitals), which give treatment to the patient. HCOs in our country could be appointed into 3 types based on bed no's-

(a) C type SHCOs are situated lot of places for easy reach. It has 50 or lesser beds give primary care. Those are hospitals and clinics.

(b) B type HCOS have 51- 100 beds, provided some specialty Care; have some departments that includes game investigations facility. These could have arrangement give care to patients and the relative.

(c) A type HCOs have 100 bed strength, multi-speciality, used for more good diagnostic technology and attract technical, having experience and qualitative experts.

There are around 50000 HCOS on national level as mentioned on website of NABH, where maximum could be learned as SHCOs. The small Healthcare organization is defined by NABH, as these HCOS which has 50 bed and have all medical facility, utility and supportive services as Claimed by small Healthcare settings.

According to the NABH website, Maximum HCOS (around 90%) have below 100 beds, so there was a demand of specific guideline for SHCOs therefore these can apply easily for accreditation, get themselves certified as destination of qualitative care.

The standards for SHCO (small Health care organizations) is compiled after taking 41 Standard Of total 105 standards which have 149 elements of total 686 elements of total of full NABH accreditation Programme (NABH 4th edition 2015) is relevant for SHCOs.

Benefits of Accreditation:

Accreditation benefits all Stake Holders Patients are the biggest beneficiaries. Accreditation results in high quality of care and patient safety. The patients get services by medical staff Rights of patients are respected and protected Patient satisfaction is regularly evaluated. Accreditation to a Hospital stimulates continuous improvement It enables hospital in demonstrating commitment to quality care It raises community confidence in the services provided by the hospital. It also provides opportunity to healthcare unit to benchmark with the best.

EXECUTIVE SUMMARY - OF THE GAP ANALYSIS

Quality Management Systems and Accreditation are versatile tools to ensure equity in healthcare services and the meeting the increasing aspirations of people This ideal state of affair can be by the institution of a quality management system that focuses on compliance with accreditation standards of NABH and like bodies. Gap Analysis is a tool that helps an organization to compare its actual performance with its potential performance.

It has been expected by government that these small Health Care organizations will fulfil to entry-level pre accreditation standard and provide qualitative care and Will make a qualitative culture in the country.

Entry level **NABH** Pre-Accreditation Standards for small Health care organizations contain 10 chapters 41 standards that again have 149 Elements, keeping in view the small Health organizations, so that they Can easily implement it. Outline of National Accreditation Board of healthcare and Hospital are:

Patient centric standards:

1. Access, Assessment and continuity of care (AAC)
2. care of Patient (COP)
3. Management of Medication (MOM)
4. Patent Right and Education (PRE)
5. Hospital Infection Control (HIC)

Management Centric standards:

6. Continuous quality improvement (CQI)
7. Responsibility of Management (ROM)
8. Facility Management and Safety (FMS)
9. Human Resource Management (HRM)
10. Information Management System (IMS)

The small Health care organizations, that get pre accreditation NABH entry level, shall start self-assessment entry level NABH pre-accreditation standard after implementing for minimum 3 months before application submission and must confirm that it complies with the standard. After getting NABH entry level pre-accreditation, the HCOs should go for NABH progressive level and after then full accreditation.

SECTION 2 REVIEW OF LITERATURE:

Quality assurance by way of formal accreditation is considered as necessary pall of the operation of any healthcare organization.

One of the Study on accreditation of hospitals in low- and middle-income country, it was found that accreditation of hospital was developed at first in US by the American college of surgeons Close to 100 years ago. First it Slowly spread to other countries but it gets acceleration in the 1980 and 1990. Chiefly in English speaking developed countries.

In handbook complied by Apollo Hospital, Dhaka, Bangladesh, it Says that accreditation by JCI is an effective quality evaluation and management tool ensuring a safe care environment which help continuous improvement process to reduce risk to patient and staff.

K. Francis Sudhakar, M. Kameshwar Rao, T. Rahul (1 Jan 2012) in a study on

"Gaps in quality of expected and perceived health in public hospitals" was found that as regards tangibles in public hospitals services, these was a wide gap by 3 counts which was statistically significant. With to reliability, by 3 counts there is the gap. Such gap or difference in the quality scores was statistically significant. As regards responsiveness it was found that the gap found between them was by 31 units. Such gap was statistically significant with regard to assurance, it was found that the gap was 3.0 units Such gap was statistically significant. Lastly, with to empathy, it was found that the gap was found to be 3.0 units Such gap was statistically significant.

Di McIntyre and Laura Anselmi, Health Economics Unit, School of Public Health and Family, **Medicine University of Cape Town** Paper provides an overview of the methods to promote an equitable distribution of healthcare resources. It highlights that resource allocations are extremely valuable in efficient budgeting. It also highlights the successful implementation of resource distribution can be by undertaking a detailed gap analysis Gap analysis will provide basis for developing service development plans. There is also to strengthen capacity for planning, budgeting and implementing plans to ensure use of limited healthcare resources. Monitoring and evaluation of these entire can enhance effective redistribution of resources to promote healthcare services.

Dr. Santosh Kumar, Brig. (Dr.) Swadesh Puri, Dr. S.D. Gupta in n study of Gap Analysis Report for Ishtakal Hospital has found 2 types of Gaps:

I) Infrastructure related gaps

2) Process related gaps

Infrastructure gaps are insufficient space, make shift buildings, improper signage, poor fire safety measure and disaster plan, piped medical gases not available, shortage of equipment and instruments, old and out of order equipment and instruments, lack of biomedical equipment engineering cell Most of the gaps related to infrastructure related need, external support from the ministry and bilateral donor agencies.

Most of the process related gaps can worked out at the hospital level with proper training and hand holding. Process gaps related gaps were lack of mission/vision and patient charters, lack of training in hospital operations, lack of over re-sources (such as funds, drugs and consumables, equipment, ordnance/general stores) Only few hospitals have quality control department however medical and nursing audits are not done. Equipment did not have AMC/CMC, utilization audit of equipment is not proper BMW Management system did not exist, and security was not organized in three tier manner (outer ring, middle ring, inner ring)

Dr. Santosh Kumar, Brig. (Dr.) Swadesh Puri, Dr. S.D. Gupta in a study or Gap Analysis

Report for rehabilitation Centre has found that is mainly a destitute having 20 beds for disable patients Even though it is housed in poly clinic various sub specialties (such as Medicine, Surgery, ENT, Ophthalmology, and Dental) are available here which seems to be duplicity of resources. The centre does not have proper diagnostic, inpatient or utility services (kitchen, laundry). There is no effective signage to guide the patient with in the centre. The radiology department is virtually open from three sides causing radiation hazards to staff and patients Even though it is the rehabilitation it does not have even the basic physiotherapy equipment. The general housekeeping is very bad; all toilets are broken and sinking Almost all working areas are dirty and unhygienic to work or live Wards are crowded and lack proper ventilation. Most of the linen was dirty. There is shortage of drugs. ICD classification is not used CSSD has only one autoclave which is not sufficient for entire hospital. It lacks quality control measures. There is no disaster plan for the hospital.

SECTION 3 RESEARCH METHEDOLOGY:

Aim of the study

Asses the pre level of quality compliance and post level of hospital quality system after implementation of patient centric standards of NABH.

Area of study: study conducted in the SHCO of jodhpur, which are taking consultancy by HLFPPT Jaipur.

Study design Descriptive and cross- sectional study.

Setting Small health care organizations of jodhpur

Study population Hospital administrator, doctors, Nurses, Housekeeping staff
Inclusion criteria Patient centric area of hospital which include NABH patient centric chapters 1 to5.

1. AAC-
2. COP
3. MOM
4. PRE
5. HIC

Exclusion criteria Management centric areas of hospital which include NABH management centric chapters 6 to 10.

1. CQI
2. ROM
3. FMS
4. HRM
5. IMS

Study tools

1. On site observation.

2. clinical record.

3.Self-assessment toolkit and checklists.

Study duration- 3 months

Data collection

1.Self-assessment toolkit of NABH standard.

2.checklist

3. observation

4. Baseline visit score of PMIS

5. staff telephonic interview

Data analysis

1.By MS excel.
2. Graphical representation.

SECTION 4: GAP ANALYSIS:

4.1. After filling up the self-assessment toolkit, following findings are obtained

a. Average score of each standard.
b. Average score of each chapter.
c. Average score of all chapters.

CHAPTER 1: ACCESS, ASSESSMENT AND CONTINUITY OF CARE (AAC)	AVERAGE SCORE
AAC 1: The organization defines and displays the services that it can provide	0
AAC 2: The organization has a documented registration, admission and transfer process.	0
AAC.3 Patients cared for by the organization undergo an established initial assessment.	0
AAC.4 Patient care is continuous and all patients cared for by the organization undergo a regular reassessment.	3.8
AAC.5 Laboratory services are provided as per the scope of the hospital's services and laboratory safety requirements.	0
AAC.6 Imaging services are provided as per the scope of the hospital's services and established radiation safety programme.	0
AAC.7 The organisation has a defined discharge process.	0
Chapter average score	0.5

Table 1

INTERPRETATION:

Standard 1: The service being provided are not clearly defined and displayed. All staff is not oriented to these services.

Standard 2: There is no Standard policy and procedure documented for registration, Admission and transfer (Stable or unstable patients) process. Staff is not oriented to these services.

Standard 3: There is no documentation of initial assessment and plan of care in patient care area.

Standard 4: Patients are reassessed at regular intervals but do not maintained.

Standard 5: Scope of laboratory service is not commensurate with the hospital services and lab staff is not trained There is no documentation of Laboratory Quality program.

Standard 6: MRI, X-Ray and CT scan facilities are not available.

Standard 7: Not documented discharge is done as per NABH standards.

CHAPTER 2 CARE OF PATIENTS	AVERAGE SCORE
COP.1: Care of patients is guided by accepted norms & practice.	0
COP.2: Emergency services including ambulance are guided by documented procedures.	0
COP.3: Documented procedures define rational use of blood and blood products.	1.7
COP.4: Documented procedures guide the care of patients as per the scope of services provided by hospital in Intensive care and high dependency unit.	2.5
COP.5: Documented procedures guide the care of obstetrical patients as per the scope of services provided by hospital.	3.3
COP.6: Documented procedures guide the care of paediatric patients as per the scope of services provided by hospital.	1
COP.7: Documented procedures guide the administration of anaesthesia.	0.7
COP.8: Documented procedure guides the care of patients undergoing surgical procedures.	2.5
Average score of Chapter	1.7

Table- 2

INTERPRETATIONS:

Standard 1: Policies and procedures for care for uniform care of patients is not provided in setting of the organization and is guided by the applicable laws, regulations and guidelines also not documented. Nursing stations are not located for direct patient monitoring. handrails not provided in patient care areas to avoid fall. Disabled friendly toilets are not available.

Standard 2: There is no documentation about emergency services. Ambulance services provided by the hospital need to be improved, as it is not well equipped. There is no Triage system Which needs to be implemented. No ET tubes, laryngoscopes, ECG machines or defibrillator in the emergency room. Emergency crash Cart is not available

Standard 3: Policies and procedures are defined for the rational use of blood but no reporting of transfusion reactions.

Standard 4: For Intensive Care Unit and High dependency Unit Staff and equipment are not there. Quality assurance program is also not there. ICU services not fulfil the Standard criteria. Crash Carts not available for emergency medicines and instruments instead kept in almirahs.

Standard 5: An obstetrician is there for providing services for high risk cases, but specialized facilities required further improvements. Initial assessment is not documented as NABH requirements.

Standard 6: Paediatric services are not documented; initial assessment is not documented as NABH requirements.

Standard 7: No documented policies and procedures for administration of anaesthesia, PAC not documented.

Standard 8: No policies and procedures are documented for the care of patients undergoing surgical procedures. Also, no quality assurance programme for OT.

CHAPTER 3: MANAGEMENT OF MEDICATION	Average score
MOM.1 Documented procedures guide the organization of pharmacy services and usage of medication.	1
MOM.2: Documented policies & procedures guide the storage of medications.	2.5
MOM.3: Documented procedures guide the prescription of medications.	2.5
MOM.4: Policies & procedures guide the safe dispensing of medications.	3
MOM.5: There are defined procedures for medication administration.	0
Chapter average score	1.8

Table 3

INTERPRETATIONS:

Standard 1: There is documented procedure guide of the organization of pharmacy services and usage of medication, hospital formulary has not been developed.

Standard 2: There is no policies for storage of medicine. Medications are stored properly and saved from theft or loss, but standards need to be maintained as per NABH, there is no LASA arrangement,

Standard 3: Documentation needs to be done for prescription of medication. There is need to be define High risk medicines and process to prescribe them.

Standard 4: Documentation needs be done for safe dispensing of medications.

Standard S: Documentation has done administration, but it is incomplete & not legible and prepared psychotropic substances are not used in the hospital.

Standard 6: Adverse drug are not monitored documented.

Standard 7: Radioactive drugs are not used in the hospital.

CHAPTER 4: PATIENT RIGHTS AND EDUCATION (PRE)	
PRE.1: Patient rights are documented displayed and support individual beliefs, values and involve the patient and family in decision making processes.	1.4
PRE.2: Patient and families have a right to information and education about their healthcare needs.	2.5
Chapter average score	1.9

Table 3

INTERPRETAIONS:

Standard 1 There is documentations about protection of patient and family rights and supporting their individual beliefs values and involving the patients and family in decision making process but no implementations.

Standard 2: A documented process for patient and family's rights and responsibilities but no implementation for the same as per NABH, no signages are placed.

CHAPTER 5: HOSPITAL INFECTION CONTROL (HIC)	
HIC.1: The hospital has an infection control manual, which is periodically updated and conducts surveillance activities.	3
HIC.2: The hospital takes actions to prevent or reduce the risks of Hospital Associated Infections (HAI) in patients and employees.	3.3
HIC.3: Bio-medical Waste (BMW) management practices are followed.	2
Chapter average score	2.8

Table -5 baseline scoring

INTERPRETATIONS:

Standard 1: Hospital does not have an infection control committee and infection control team and manual. There is no surveillance system for infection control. Training of staffs need to start as soon as possible. There is no documented and periodic survey, and monitoring of UTI, intra vascular device infection, surgical site infection, use of PPE of nursing staff. Non availability of liquid hand wash, proper disinfectants, floor cleaners. No autoclaving of instruments performed. Hand hygiene practices not followed. No immunization procedure for staff. No procedures for NSI and ADR.

Standard 2: The organization does not take actions to prevent or reduce the risk of Hospital Associated Infections (HAI) in patients and employees. There need to Hepatitis vaccination for all Staff. Documentation needs to be improving for procedures for sterilizations activities in the organization.

Standard 3: BMW is not segregate properly at definite source and final disposal not done properly as per NABH standard guidelines.

SECTION 5 IMPLIMENTATION PLAN:

4.2. Following work to be done to fulfil NABH standard.

Following work has been done on priority basis, these are:

1- Documentation
2- Training
3- Infrastructure and laws/licences
4- Forms and formats
5- Quality indicator
6- Signages.

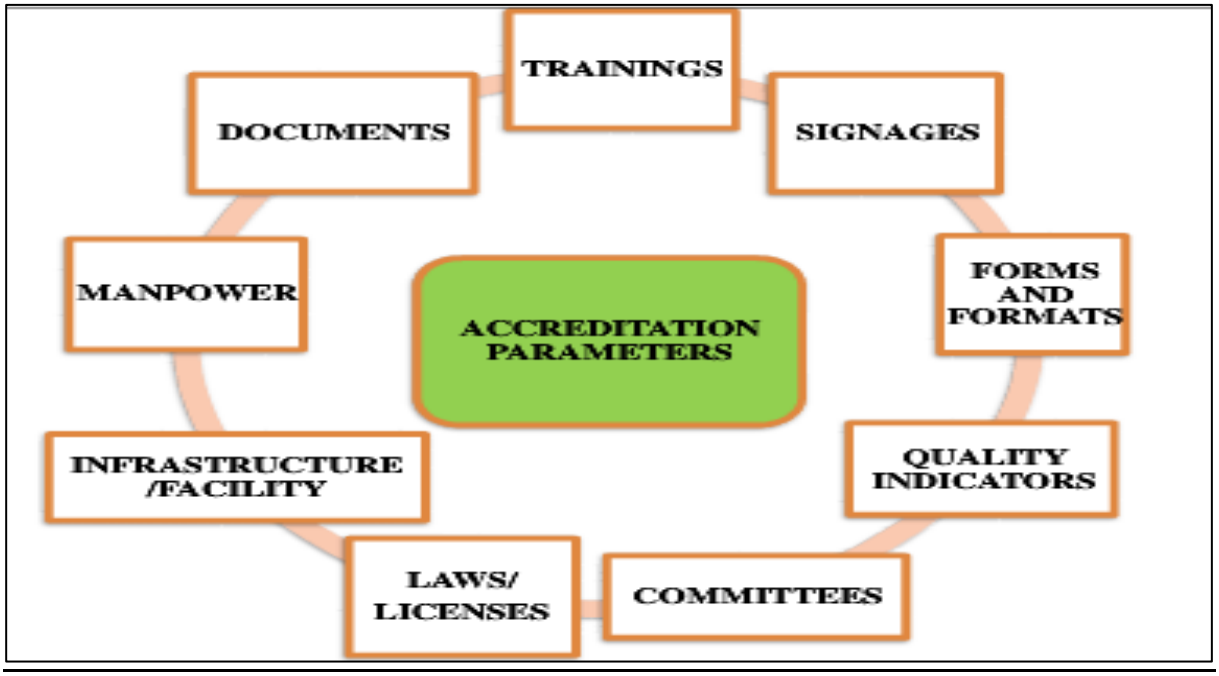

Fig- 1 work to be done for implementation.

Now planning has been done to improve the present quality standards by following methods. It includes making the department manuals, process flowcharts, trainings for hospital staff, infrastructure changes, fulfilling legal requirements, reviewing the clinical records, non-clinical records, forms and formats, developing quality indicator for different departments of hospital, collecting data on regular basis and analysing.

4.3. It also includes the following tasks:

- **Formation of quality department**,
  a. Head of department of quality
  b. Quality executive

- **Establish project team:**
  a. Quality head & project head
  b. Quality executive

c. Maintenance in-charges
d. HOD- Human resource
e. Nursing superintendent
f. Medical superintendent
g. Infection control nurse
h. Stores head

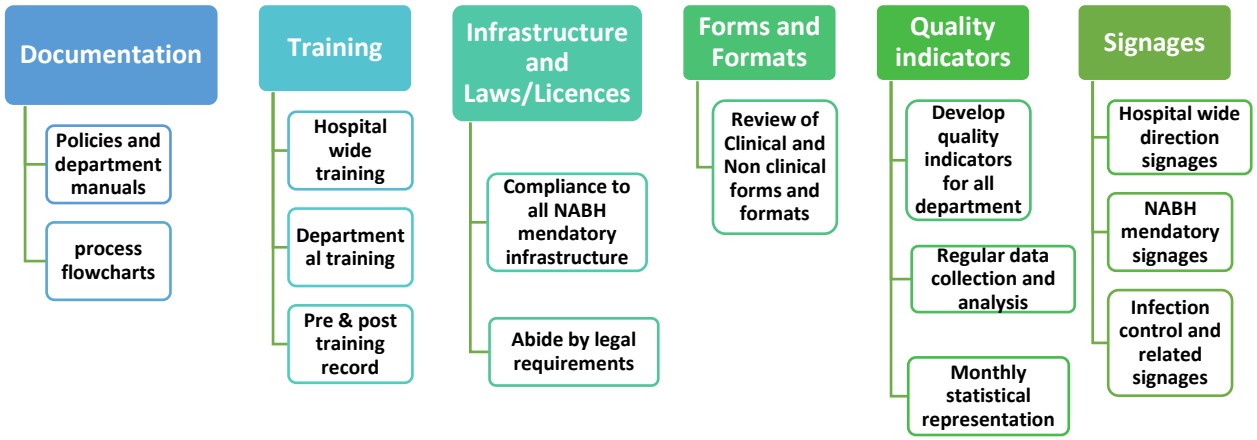

Fig 2- plan to achieve required standards.

4.4. **Establishing committees:**

To promote sub disciplinary and collaborative decision-making actions in hospital we established committees to operate efficiently and effectively work. The hospital has following committees for developing, implementing and monitoring programs to improve the patient care in the hospital.

a. Quality committee.
b. Hospital safety management committee.
c. Infection control committee.

4.5. **Licencing and legal compliances**:

- NOC from chief fire officer
- NOC from pollution control board
- Radiation protection certification
- RSO certificate.
- Radiation room layout approval
- Approval for lift and Escalator
- Registration of ambulances
- Billing registration
- Pharmacy registration.

4.6. **Policies and procedures:**

Develop documents including quality manuals, procedures, and work instruction to indicate process, to maintain optional functionality within the existing resources and process. Documented all policies and procedure according to NABH chapters as follows:

a. Policy of registration admission and discharge
b. Policy and infection control programs
c. Policy on Blood transfusion
d. Anaesthesia policy
e. Emergency.

4.7. **Implementing emergency codes:**

we implemented 5 emergency codes in the hospital which are as below:

CODES	CONDITION
Red	Fire
Blue	Medical emergency
Pink	Child abduction
Yellow	Hazardous Spill
Orange	External disaster

Table 6

4.8. **Display of Signages, TAT and scope of services:**

1. We displayed the signages at reception area, lobby area, all necessary signages of laboratory, imaging services, fire safety, stairs, lift, direction signages, BMW area signages etc.
2. We displayed the scope of services in laboratory, imaging service also.
3. Displayed organogram and emergency contact number at reception.
4. Displayed RACE-PASS signages near fire extinguisher.
5. Displayed hazardous signages wherever required.
6. Placed TAT in laboratory and imaging service.
7. Displayed hand hygiene and five moments of hand hygiene posters.
8. BMW segregation in respective colour coded dustbins posters placed.
9. Emergency TRIAGE codes poster also placed
10. Labelling of necessary equipment.

4.9. SOME IMPLEMENTATION IMAGES:

Fig- LASA arrangement

Fig- organised labour room

Fig- compulsory poster

Fig- Disinfectant Room

Fig- BMW segregation in colour coded bins with hazardous signage

Fig- in case of fire signage

Fig- WHO 5 moments

Fig Fire extinguisher with RACE-PASS

Fig- Ellbow tap

Fig- Staff in wearing proper PPE

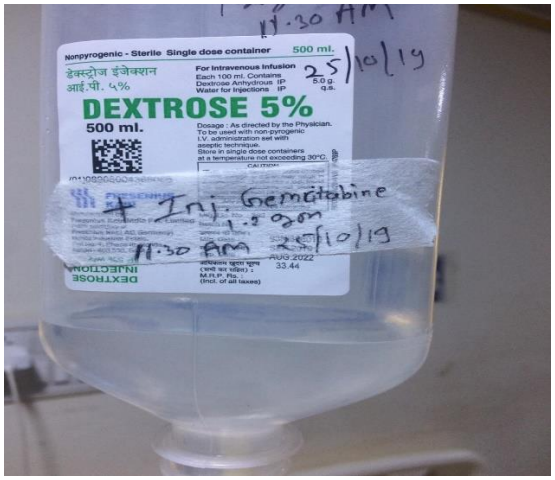

Fig- reassessment labelling

Fig- Training of staff

Fig- Delivery box

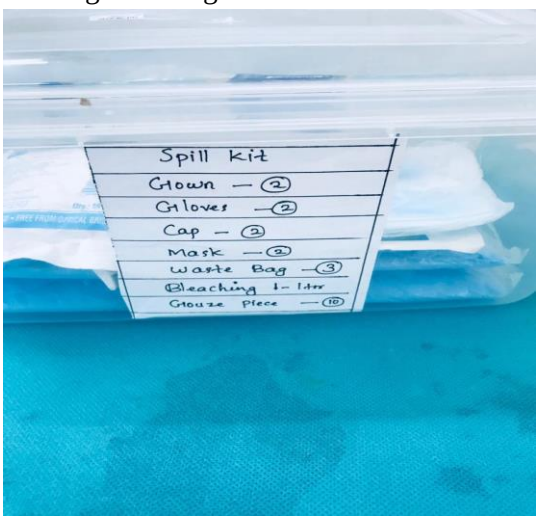

Fig- Spill kit

Fig- Hazardous box

Fig- signage

SECTION 6: POST IMPLEMENTATION SCORING:

CHAPTER 1: ACCESS, ASSESSMENT AND CONTINUITY OF CARE (AAC)	AVERAGE SCORE
AAC 1: The organization defines and displays the services that it can provide	6.6
AAC 2: The organization has a documented registration, admission and transfer process.	5
AAC.3 Patients cared for by the organization undergo an established initial assessment.	8.3
AAC.4 Patient care is continuous and all patients cared for by the organization undergo a regular reassessment.	5
AAC.5 Laboratory services are provided as per the scope of the hospital's services and laboratory safety requirements.	7.5
AAC.6 Imaging services are provided as per the scope of the hospital's services and established radiation safety programme.	6.2
AAC.7 The organisation has a defined discharge process.	5
Chapter average score	6.2

Table 7

CHAPTER 2: CARE OF PATIENTS	AVERAGE SCORE
COP.1: Care of patients is guided by accepted norms & practice.	5
COP.2: Emergency services including ambulance are guided by documented procedures.	6.6
COP.3: Documented procedures define rational use of blood and blood products.	8.3
COP.4: Documented procedures guide the care of patients as per the scope of services provided by hospital in Intensive care and high dependency unit.	7.5
COP.5: Documented procedures guide the care of obstetrical patients as per the scope of services provided by hospital.	6.6
COP.6: Documented procedures guide the care of paediatric patients as per the scope of services provided by hospital.	6
COP.7: Documented procedures guide the administration of anaesthesia.	5
COP.8: Documented procedure guides the care of patients undergoing surgical procedures.	5.8
Average score of Chapter	6.35

Table 8

CHAPTER 3: MANAGEMENT OF MEDICATION	Average score
MOM.1 Documented procedures guide the organization of pharmacy services and usage of medication.	5
MOM.2: Documented policies & procedures guide the storage of medications.	6.2
MOM.3: Documented procedures guide the prescription of medications.	5
MOM.4: Policies & procedures guide the safe dispensing of medications.	7
MOM.5: There are defined procedures for medication administration.	5
Chapter average score	5.64

Table 9

CHAPTER 4: PATIENT RIGHTS AND EDUCATION (PRE)	AVERAGE SCORE
PRE.1: Patient rights are documented displayed and support individual beliefs, values and involve the patient and family in decision making processes.	5
PRE.2: Patient and families have a right to information and education about their healthcare needs.	7.5
Chapter average score	6.25

Table 10

CHAPTER 5: HOSPITAL INFECTION CONTROL (HIC)	
HIC.1: The hospital has an infection control manual, which is periodically updated and conducts surveillance activities.	6
HIC.2: The hospital takes actions to prevent or reduce the risks of Hospital Associated Infections (HAI) in patients and employees.	5
HIC.3: Bio-medical Waste (BMW) management practices are followed.	6
Chapter average score	5.6

Table 11

SECTION 7 GRAPHICAL ANALYSIS OF PRE-POST IMPLEMENTATION:

GRAPHICAL ANALYSIS OF CHAPTER-1

BEFORE IMPLEMENTATION

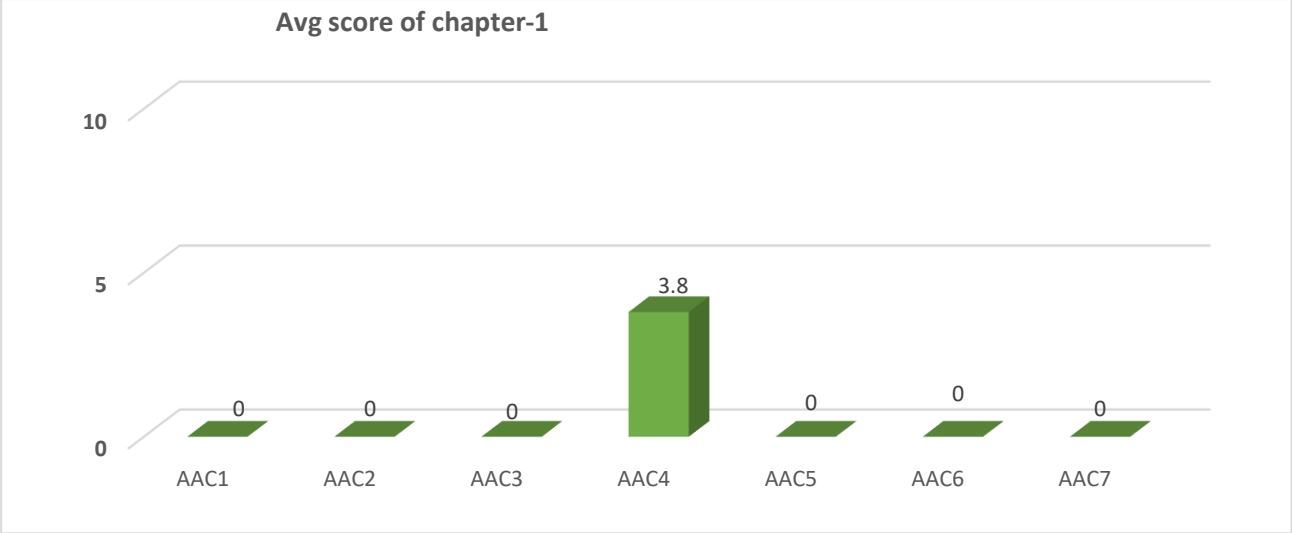

Fig 3- chapter 1 baseline analysis

AFTER IMPLEMENTATION

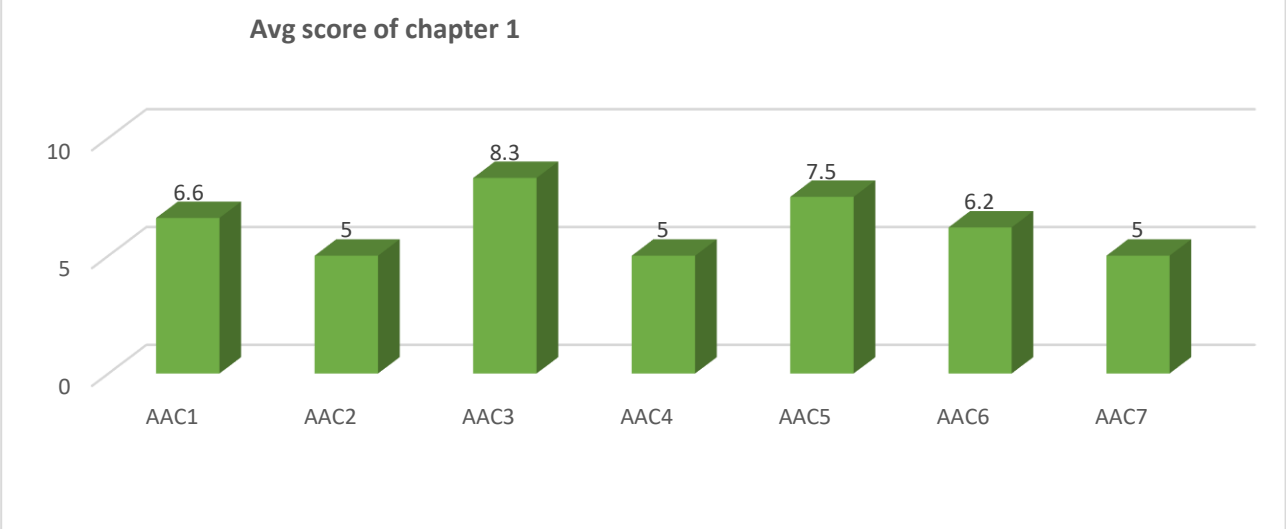

Fig 4-chapter 1 ongoing analysis

GRAPHICAL ANALYSIS OF CHAPTER-2

BEFORE IMPLEMENTATION

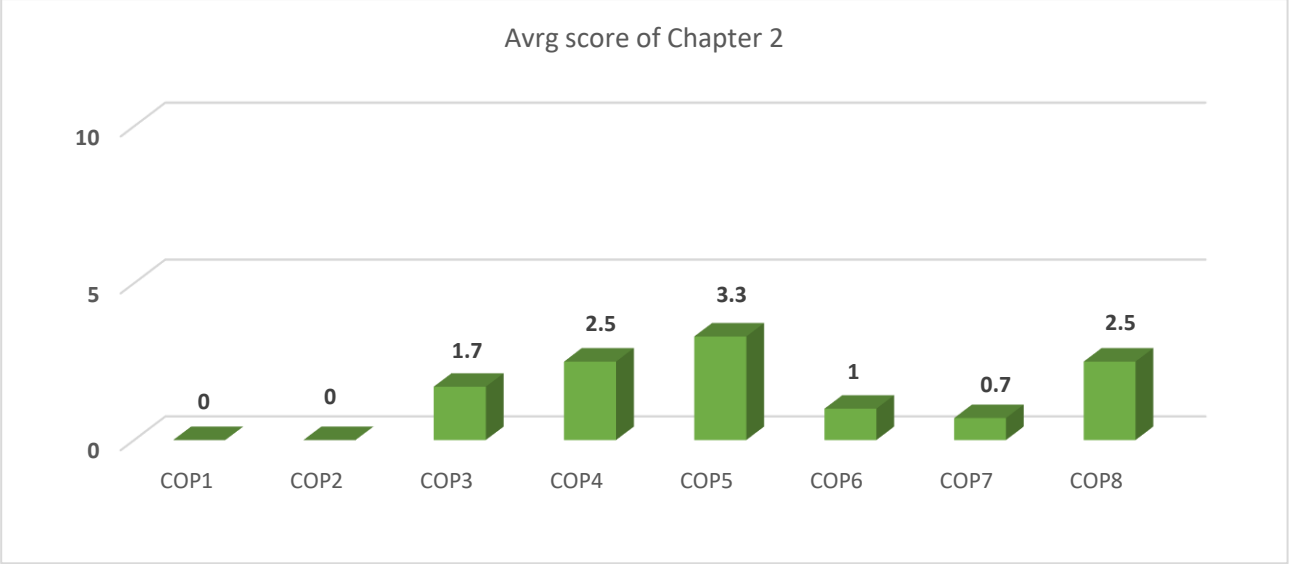

Fig -5-chapter 2 baseline analysis

AFTER IMPLEMENTATION

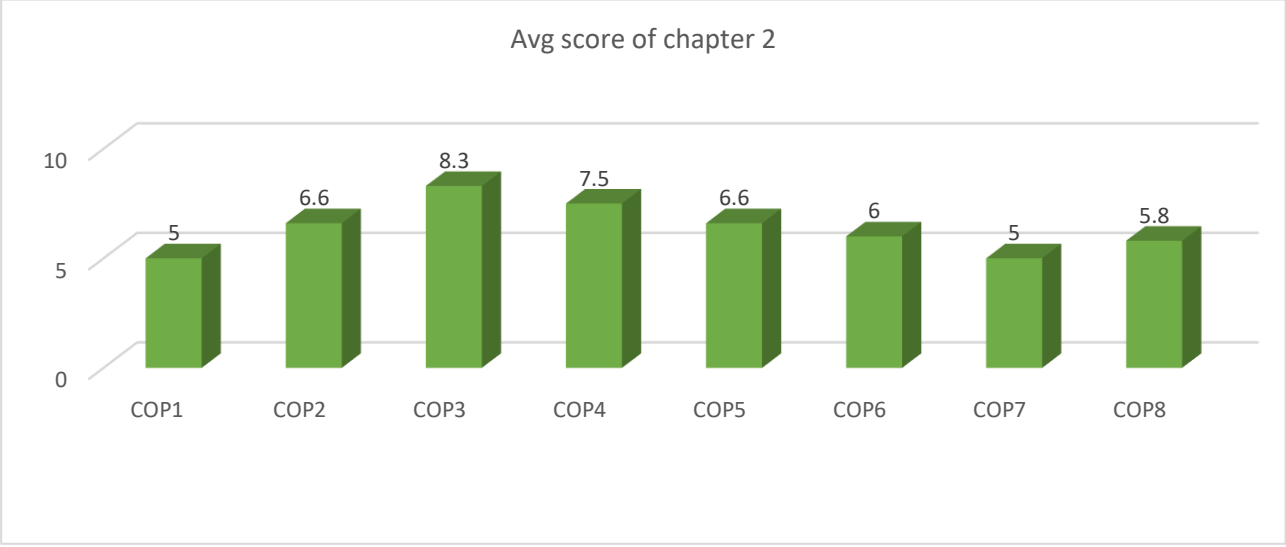

Fig 6-chapter 2 ongoing analysis

GRAPHICAL ANALYSIS OF CHAPTER 3:

BEFORE IMPLEMENTATION

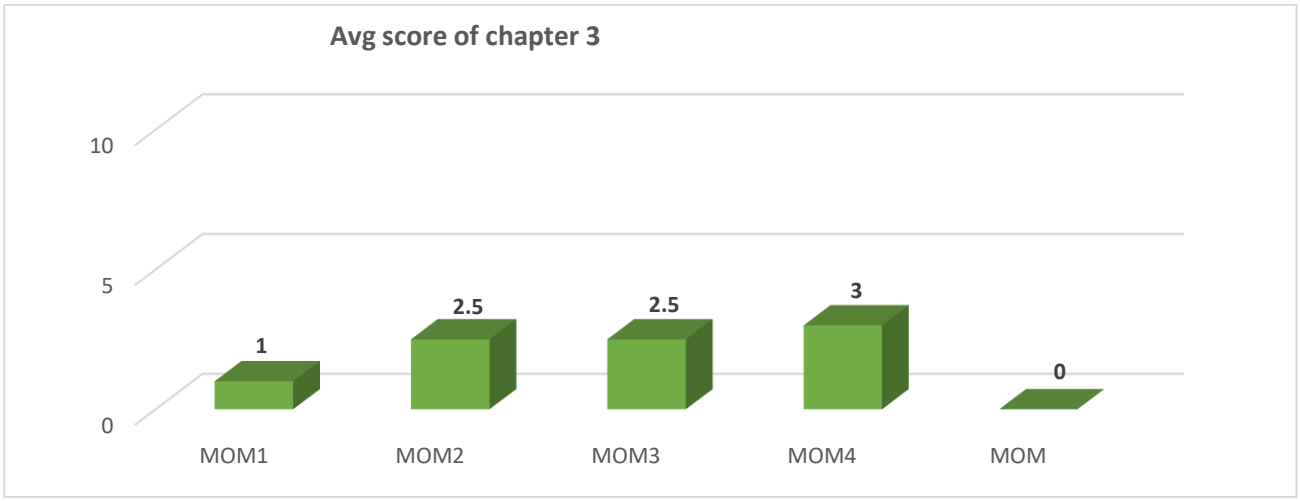

Fig 7- chapter 3 baseline score

AFTER IMPLEMENTATION

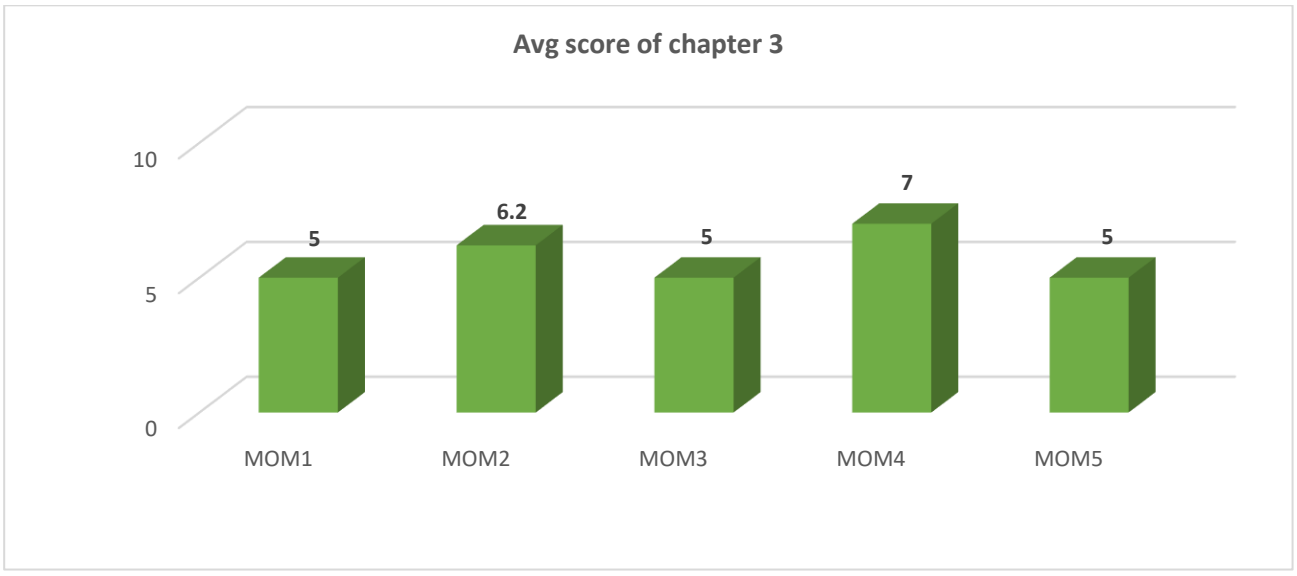

Fig 8- chapter 3 ongoing score

GRAPHICAL ANALYSIS OF CHAPTER 4:

BEFORE IMPLEMENTATION

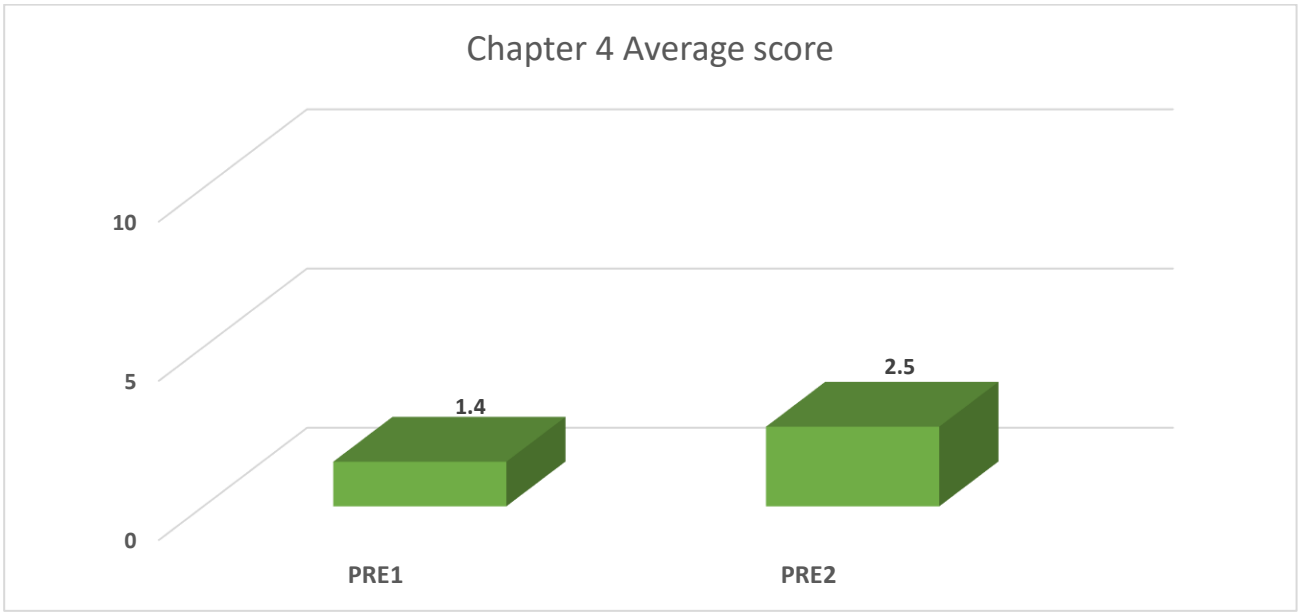

Fig 9- baseline score chapter 4

AFTER IMPLEMENTATION

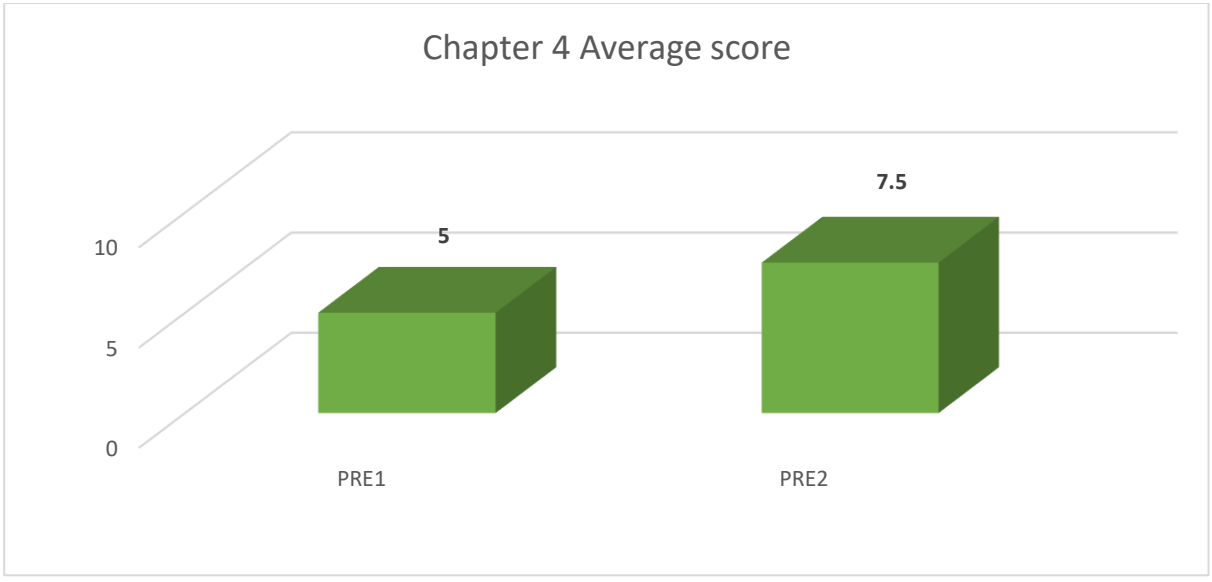

Fig 10- ongoing score of chapter 4

GRAPHICAL ANALYSIS OF CHAPTER 5:

BEFORE IMPLEMENTATION

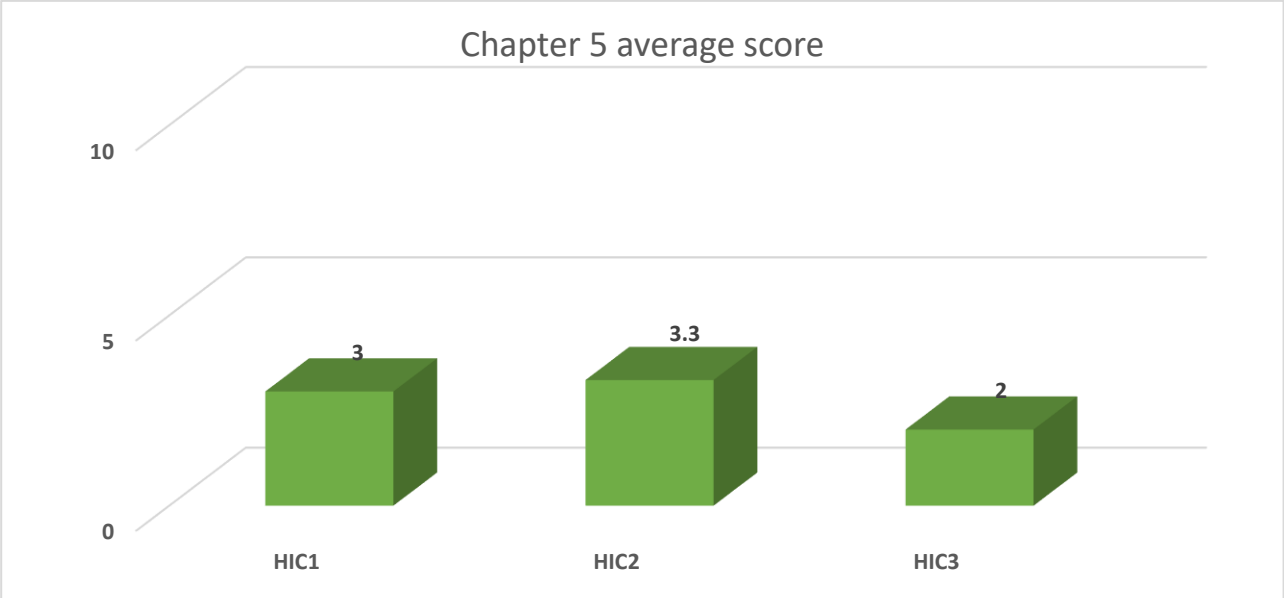

Fig 11- baseline score chapter 5

AFTER IMPLEMENTATION

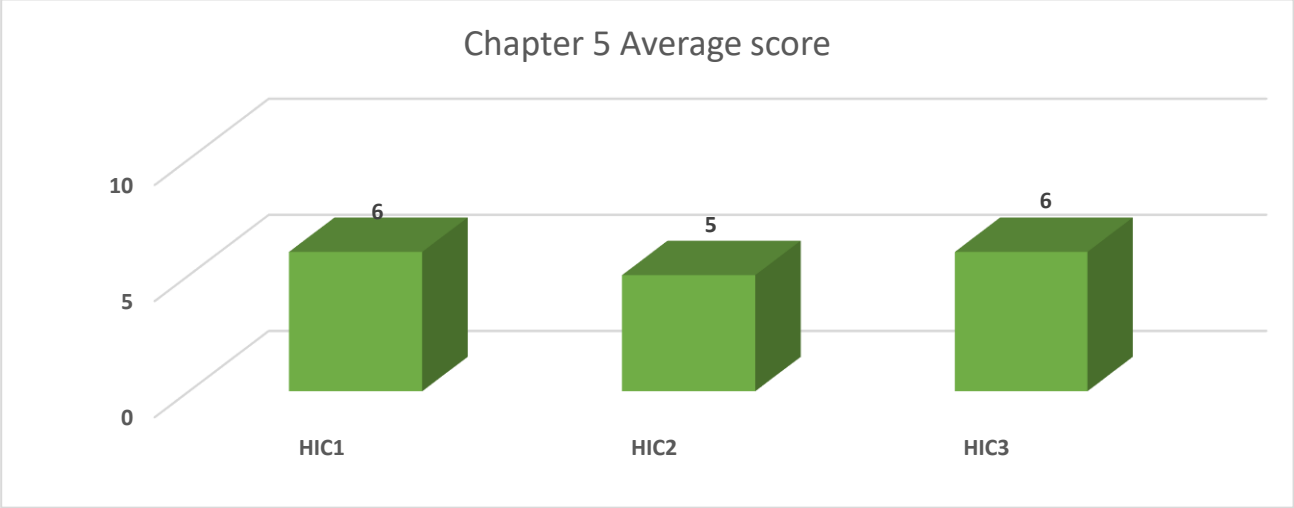

Fig 12- ongoing score of chapter 5

INTERPRETATION:

1. After implementation as per the implementation planning, the average score of standards increases.
2. Average score of chapters also increases.
3. After implementation and displaying the signages, scores have been increasing.

SECTION 8 NABH ACCREDITATION WITH THE HELP OF AVERAGE SCORES

- ✓ **Pre-accreditation entry level:**

Conditions for qualifying to this award are as below:

- All the regulatory legal requirements should be fully met.
- No individual standard should have more than two zeros.
- The average score for individual standard must not be less than 5.
- The average score for individual chapter must be more than 5.
- The overall average score for all standards must exceed 5.

"The validity period for pre-accreditation entry level stage is from a minimum 6 months to a maximum of 18 months. It means that a hospital placed under this award cannot apply for assessment before 6 months.

- ✓ **Pre accreditation progressive level:**

Condition for qualifying to this award are as below:

- All the regulatory legal requirements should be fully met.
- No individual standard should more than two zeros.
- The average score for individual standard must not be less than 5.
- The average score for individual chapter must be more than 6.
- The overall average score for all standards must exceed 6.

The validity period for pre-accreditation entry level stage is from a minimum 3 months to a maximum of 12 months. It means that a hospital placed under this award cannot apply for assessment before 3 months.

- ✓ **Accredited:**

Condition for qualifying to this award are as below:

- All the regulatory legal requirements should be fully met.
- No individual standard should more than one zero.
- The average score for individual standard must not be less than 5.
- The average score for individual chapter must be more than 7.
- The overall average score for all standards must exceed 7.

validity period of accreditation is 3 years subject to terms and conditions.

SECTION 9 RESULTS:

After the Pre and Post analysis of scores of all the five patient centric chapters of NABH we found that, before implementation average score of chapters were very low, but after implementation of NABH standards the scores were increase. It can be seen in below graph of pre-post analysis of average scores of NABH chapters.

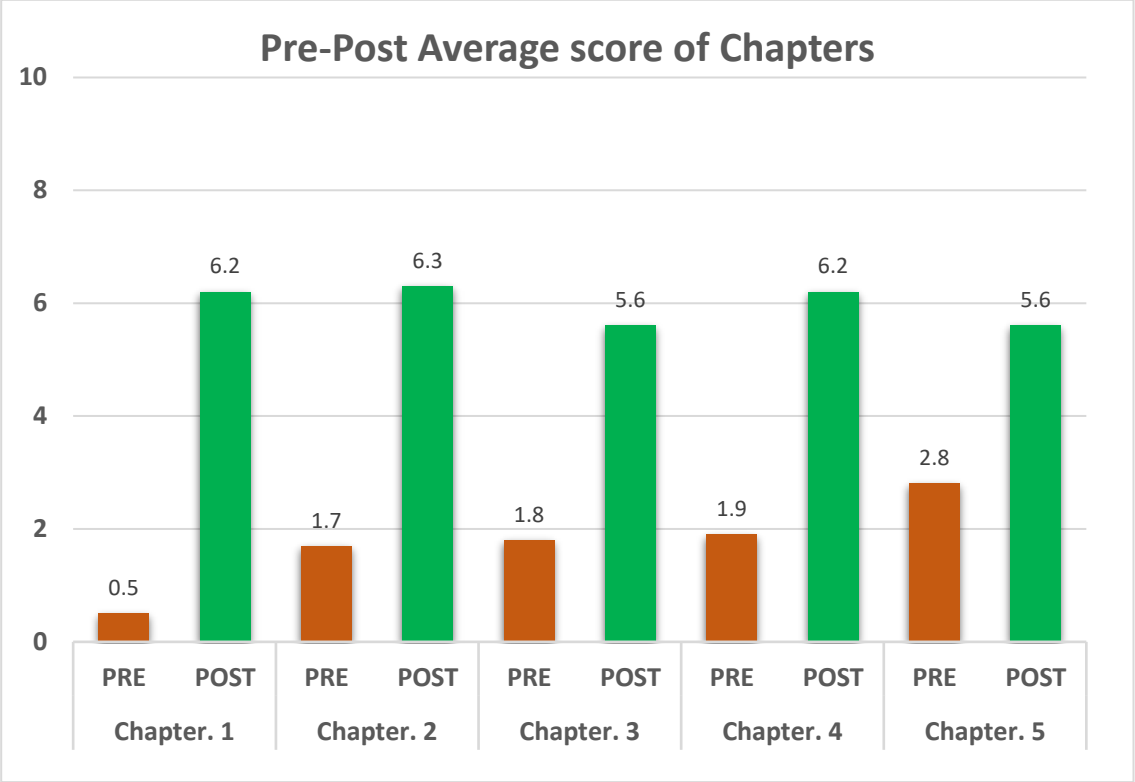

Fig 13 pre-post analysis

Chapter 1 average score before implementation of NABH standards was 0.5 but after implementation it was 6.2. and chapter 2 average score before implementation was 1.7 but after implementation it becomes 6.3, same as chapter 3 average score was 1.8 before implementation and it hiked to 5.6 after implementation. Chapter 4 average score was 1.9 before implementation of NABH standard but it becomes 6.2 after implementation. Same average score of chapter 5 was 2.8 but it become 5.6 after implementation.

SECTION 10 RECOMMENDATIONS:

After analysis the pre-post gaps and findings recommendations are:

- ✓ Facilities should opt for NABH accreditation as they get quality at less efforts.
- ✓ Facilities Should more focus on fundamental things like staff trainings, Signage, availability of all registers and forms.
- ✓ Facilities Should more focus on assessing the gaps as per the toolkit of NABH.
- ✓ Facilities should more focus on continuity and monitoring of all compliances.
- ✓ More Trainings should be given so Staff Can follow safe and qualitative practices.
- ✓ Mock Drills be conducted for hospital staffs so that they can handle emergency situations easily
- ✓ Higher authority of hospital should have active participation in the improvement of the hospital.
- ✓ Proper records should be available in all documents on time to time basis.
- ✓ Transfer in and transfer Out should be regularly practiced for High risk medicine and manifolds etc.
- ✓ All staff should be motivated on regular basis for filling complete documents with their signatures, date and seal.
- ✓ All indicators of quality Should be recorded regularly for monitoring.
- ✓ Patient feedback should be taken so that hospital can improve their satisfaction by putting efforts into their grievance solutions.

  SHCOs serving to very big segment of patients which needs to improve their quality well safety for patients. This can be done with efforts for the fulfilment of objective elements of NABH.

SECTION 11 CONCLUSION:

The gap analysis has revealed non-compliance as per NABH standards which need to be addressed for quality improvement of the hospital. By achieving the quality care hospital is able to get certification of NABH. Gaps of the study were process gaps, infrastructure gaps, equipment and manpower gaps. Study also revealed that properly implementation of standards can reduce the gaps. Trainings are the necessary part of quality care, it should be conducted time to time for nurses, doctors, and all the other staff

Study also revealed that after implementation of the standards most of the gaps and findings were closed as required for NABH certification.

SECTION12 BIBLIOGRAPHY

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3. Hospital documents.
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SECTION 13 ANNEXURES

Self Assessment Toolkit

Organisation is required to provide self assessment report in the format 'Self Assessment Toolkit' given below. All the entries are to be properly filled up. Regarding scoring following criteria would be applicable.

Compliance to the requirement: 10
Partial compliance to the requirement: 5 (if any of the sample is found to be noncomplying out of total samples selected)
Non-compliance to the requirement: 0
Not Applicable: NA

Evaluation Criteria:

- Overall score of minimum 50% in all standards
- Overall score of minimum 50% in each chapter

(Name & Address of the Hospital)

SELF ASSESSMENT TOOLKIT						
Elements			Documentation (Yes/ No)	Implementation (Yes/ No)	Evidence (cross reference to documents/ manuals etc.)	Scores (0/ 5/ 10)
Chapter 1: ACCESS, ASSESSMENT AND CONTINUITY OF CARE (AAC)						
AAC.1: The organization defines and displays the services that it can provide.						
	a	The services being provided are clearly defined.				
	b	The defined services are prominently displayed.				
	c	The staff is oriented to these services.				
AAC.2: The organization has a documented registration, admission and transfer process.						
	a.	Process addresses registering and admitting out-patients, in-patients and emergency patients.				
	b.	Process addresses mechanism for transfer or referral of patients who do not match the organizational resources.				
AAC.3 Patients cared for by the organization undergo an established initial assessment.						
	a.	The organization defines the content of the assessments for the out-patients, in-patients and emergency patients.				
	b.	The organization determines who can perform the assessments.				
	c.	The initial assessment for in-patients is documented within 24 hours or earlier.				
	d.	Initial assessment of inpatients includes nursing assessment which is done at the time of admission and documented.				

AAC.4 Patient care is continuous and all patients cared for by the organization undergo a regular reassessment.						
	a.	During all phases of care, there is a qualified individual identified as responsible for the patient's care who coordinates the care in all the settings within the organization.				
	b.	All patients are reassessed at appropriate intervals.				
	c.	Staff involved in direct clinical care document reassessments.				
	d.	Patients are reassessed to determine their response to treatment and to plan further treatment or discharge.				
AAC.5 Laboratory services are provided as per the scope of the hospital's services and laboratory safety requirements.						
	a.	Scope of the laboratory services are commensurate to the services provided by the organization.				
	b.	Procedures guide collection, identification, handling, safe transportation, processing and disposal of specimens.				
	c.	Laboratory results are available within a defined time frame and critical results are intimated immediately to the concerned personnel.				
	d.	Adequately trained personnel perform, supervise & interpret the investigations.				
	e.	Laboratory personnel are trained in safe practices and are provided with appropriate safety equipment/ devices.				
	f.	Laboratory tests not available in the organization are outsourced.				
AAC.6 Imaging services are provided as per the scope of the hospital's services and established radiation safety programme.						
	a.	Scope of the imaging services are commensurate to the services provided by the organization.				
	b.	Imaging signages are prominently displayed in all appropriate locations.				
	c.	Imaging results are available within a defined time frame and critical results are intimated immediately to the concerned personnel.				

	d.	Imaging personnel are trained in safe practices and are provided with appropriate safety equipment/ devices.				
AAC.7 The organisation has a defined discharge process.						
	a.	Process addresses discharge of all patients including Medico-legal cases and patients leaving against medical advice.				
	b.	A discharge summary is given to all the patients leaving the organization (including patients leaving against medical advice).				
	c.	Discharge summary contains the reasons for admission, significant findings, investigation results, diagnosis, procedure performed (if any), treatment given and the patient's condition at the time of discharge.				
	d.	Discharge summary contains follow up advice, medication and other instructions in an understandable manner.				
	e.	Discharge summary incorporates instructions about when and how to obtain urgent care.				
	f.	In case of death the summary of the case also includes the cause of death.				
Chapter 2: CARE OF PATIENTS (COP)						
COP.1: Care of patients is guided by accepted norms & practice.						
	a	The care and treatment orders are signed and dated by the concerned doctor.				
	b	Critical Practice Guidelines are adopted to guide patient care wherever possible.				
COP.2: Emergency services including ambulance are guided by documented procedures.						
	a	Documented procedures address care of patients arriving in the emergency including handling of medico-legal cases.				
	b	Staff should be well versed in the care of emergency patients in consonance with the scope of the services of hospital.				

	c	Admission or discharge to home or transfer to another organization is also documented.				
	d	Ambulance is appropriately equipped.				
	e	Ambulance(s) is manned by trained personnel.				
COP.3: Documented procedures define rational use of blood and blood products.						
	a	Documented policies and procedures are used to guide the rational use of blood and blood products.				
	b	Documented procedures govern transfusion of blood and blood products.				
	c	The transfusion services are governed by the applicable laws and regulations.				
	d	Informed consent is obtained for donation and transfusion of blood and blood products.				
	e	Procedure addresses documenting and reporting of transfusion reactions.				
COP.4: Documented procedures guide the care of patients as per the scope of services provided by hospital in Intensive care and high dependency unit.						
	a	Care of patients is in consonance with the documented procedures.				
	b	Adequate staff and equipment are available.				
COP.5: Documented procedures guide the care of obstetrical patients as per the scope of services provided by hospital.						
	a	The organization defines the scope of obstetric services.				
	b	Obstetric patient's care includes regular ante-natal check ups, maternal nutrition and post-natal care.				
	c	The organization has the facilities to take care of neonates.				

COP.6: Documented procedures guide the care of pediatric patients as per the scope of services provided by hospital.					
a	The organization defines the scope of its pediatric services.				
b	Provisions are made for special care of children by competent staff.				
c	Patient assessment includes detailed nutritional, growth, and immunization assessment.				
d	Procedure addresses identification and security measures to prevent child/ neonate abduction and abuse.				
e	The children's family members are educated about nutrition and immunization				
COP.7: Documented procedures guide the administration of anesthesia.					
a.	There is a documented policy & procedure for the administration of anesthesia.				
b.	All patients for anesthesia have a pre-anesthesia assessment by a qualified/ trained anesthetist.				
c.	The pre-anesthesia assessment results in formulation of an anesthesia plan which is documented.				
d.	An immediate preoperative re-evaluation is documented.				
e.	Informed consent for administration of anesthesia is obtained by the anesthetist.				
f.	Anesthesia monitoring includes regular and periodic recording of heart rate, cardiac rhythm, respiratory rate, blood pressure, oxygen saturation, airway security and patency and End tidal carbon dioxide.				
g.	Each patient's post-anesthesia status is monitored and documented.				
h.	Defined criteria are used to transfer the patient from the recovery area.				
i.	Adverse anesthesia events are recorded and monitored.				

COP.8: Documented procedure guides the care of patients undergoing surgical procedures.					
a.	Surgical patients have a preoperative assessment and a provisional diagnosis documented prior to surgery.				
b.	An informed consent is obtained by a surgeon prior to the procedure.				
c.	Documented procedure addresses the prevention of adverse events like wrong site, wrong patient and wrong surgery.				
d.	Qualified persons are permitted to perform the procedures that they are entitled to perform.				
e.	The operating surgeon documents the operative notes and post-operative plan of care.				
f.	The operation theatre is adequately equipped and monitored for infection control practices.				
g.	Patients, personnel and material flow conform to infection control practices.				
Chapter 3: MANAGEMENT OF MEDICATION (MOM)					
MOM.1: Documented procedures guide the organization of pharmacy services and usage of medication.					
a	Documented procedure shall incorporate purchase, storage, prescription and dispensation of medications.				
b	Documented procedures address procurement and usage of implantable prostheses.				
MOM.2: Documented policies & procedures guide the storage of medications.					
a	Documented policies and procedures exist for storage of medication				
b	Medications are stored in a clean, safe and secure environment, and incorporate manufacturer's recommendations.				
c	Sound alike and look alike medications are stored separately.				

	d	Beyond expiry date medications are not stored/used.				
	e	List of emergency medicines is defined, stored, and available all the time.				
MOM.3: Documented procedures guide the prescription of medications.						
	a	The organization determines who can write orders.				
	b	Orders are written in a uniform location in the medical records.				
	c	Medication orders are clear, legible, dated and signed.				
	d	The organization defines a list of high risk medication & process to prescribe them.				
MOM.4: Poilicies & procedures guide the safe dispensing of medications.						
	a	Medications are checked prior to dispensing, including the expiry date to ensure that they are fit for use.				
	b	High risk medication orders are verified prior to dispensing.				
MOM.5: There are defined procedures for medication administration.						
	a	Medications are administered by trained personnel.				
	b	Prior to administration medication order including patient, dosage, route and timing are verified.				
	c	Prepared medication is labelled prior to preparation of a second drug.				
	d	Medication administration is documented.				
	e	A proper record is kept of the usage, administration and disposal of narcotics and psychotropic medications.				
MOM.6: Adverse drug events are monitored.						

	a	Adverse drug events are defined & monitored.				
	b	Adverse drug events are documented and reported within a specified time frame.				
MOM.7: Documented policies & procedures govern usage of radioactive drugs.						
	a	Documented policies and procedures govern usage of radioactive drugs.				
	b	Policies and procedures include the safe storage, preparation, handling, distribution and disposal of radioactive drugs.				
Chapter 4: PATIENT RIGHTS AND EDUCATION (PRE)						
PRE.1: Patient rights are documented displayed and support individual beliefs, values and involve the patient and family in decision making processes.						
	a.	Patient rights include respect for personal dignity and privacy during examination, procedures and treatment.				
	b.	Patient rights include protection from physical abuse or neglect.				
	c.	Patient rights include treating patient information as confidential.				
	d.	Patient rights include obtaining informed consent before carrying out procedures.				
	e.	Patient rights include information on how to voice a complaint.				
	f.	Patient rights include information on the expected cost of the treatment.				
	g.	Patient has a right to have an access to his / her clinical records.				
PRE.2: Patient and families have a right to information and education about their healthcare needs.						
	a	Patients and families are educated on plan of care, preventive aspects, possible complications, medications, the expected results and cost as applicable.				

	b	Patients are taught in a language and format that they can understand.				
Chapter 5: HOSPITAL INFECTION CONTROL (HIC)						
HIC.1: The hospital has an infection control manual, which is periodically updated and conducts surveillance activities.						
	a	It focuses on adherence to standard precautions at all times.				
	b	Cleanliness and general hygiene of facilities will be maintained and monitored.				
	c	Cleaning and disinfection practices are defined and monitored as appropriate.				
	d	Equipment cleaning, disinfection and sterilization practices are included.				
	e	Laundry and linen management processes are also included				
HIC.2: The hospital takes actions to prevent or reduce the risks of Hospital Associated Infections (HAI) in patients and employees.						
	a	Hand hygiene facilities in all patient care areas are accessible to health care providers.				
	b	Adequate gloves, masks, soaps, and disinfectants are available and used correctly.				
	c	Appropriate pre and post exposure prophylaxis is provided to all concerned staff members.				
HIC.3: Bio-medical Waste (BMW) management practices are followed.						
	a	The hospital is authorised by prescribed authority for the management and handling of Bio-Medical Waste.				
	b	Proper segregation and collection of Bio-Medical Waste from all patient care areas of the hospital is implemented and monitored.				
	c	Bio-Medical Waste treatment facility is managed as per statutory provisions (if in-house) or outsourced to authorised contractor(s).				
	d	Requisite fees, documents and reports are submitted to competent authorities on stipulated dates.				