"GAP ANLYSIS REPORT AND ASSESMENT OF COMPLIANCE TO FAMILY FREIDLY HOSPITAL (FFH) STANDARDS FOR OPD & IPD OF DISTRICT HOSPITAL CHANDRAPUR"

A Dissertation Proposal for

Post Graduate Diploma in Health and Hospital Management

by

Dr. Shyamsunder Joshi
Roll No. PG/10/108

International Institute of Health Management Research

New Delh
Date 20ᵗʰ March 2012

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Certificate of Internship Completion

Date: 19-Mar-2012

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dr. Shyamsunder M Joshi has successfully completed his 3 months internship in our Organization from December 19, 2011 to March 19, 2012. During this internship he has worked on GAP ANALYSIS REPORT AND ASSESMENT OF COMPLIANCE TO (FFH) FAMILY FRIENDLY HOSPITAL STANDARDS OF OPD & IPD OF DISTRICT under the guidance of me and my team at Hosmac India Pvt. Ltd. The Internship was completed well in time and we appreciate Dr. Shyamsunder's sincere effort in making this internship project successful.

We wish him good luck for his future assignments.

Dr. Rahul Shastri

Principal Consultant

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Certificate from Dissertation Advisory Committee

This is to certify that **Dr. Shyamsunder M Joshi** a graduate student of the Post- Graduate Diploma in Health and Hospital Management, has worked under our guidance and supervision. He is submitting this dissertation titled " GAP ANALYSIS REPORT AND ASSESMENT OF COMPLIANCE TO FFH STANDARDS FOR OPD & IPD OF DISTRICT HOSPITAL, CHANDRAPUR in partial fulfillment of the requirements for the award of the Post- Graduate Diploma in **Health and Hospital Management**.

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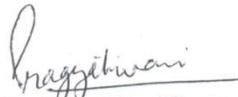
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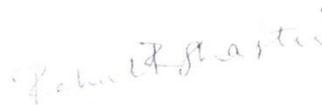
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Certificate of Approval

The following dissertation titled "**GAP ANLYSIS REPORT AND ASSESMENT OF COMPLIANCE TO FAMILY FREIDLY HOSPITAL (FFH) STANDARDS FOR OPD & IPD OF DISTRICT HOSPITAL CHANDRAPUR**" is hereby approved as a certified study in management carried Out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of **Post- Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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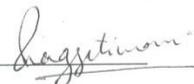
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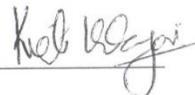
ABSTRACT

Introduction

Government of Maharashtra (GoM) in its bid to bring about a paradigm shift in healthcare delivery system across the state has undertaken initiative for quality improvement in the public health facilities with the active technical assistance of National Health Systems Resource Centre (NHSRC), a technical support wing of Ministry of Health & Family Welfare, Govt. of India.

Quality improvement in these public health facilities is to be initiated through implementation of Quality Management Systems (QMS) as per the FFH standards and the Indian Public Health Standards (IPHS).

Objectives of the study are:

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

Methodology:

Methodology of the study includes the descriptive type of study: there was an exploratory type of study by reviewing existing processes. And there would also be an informal discussion with employees of the hospital.

Results and Recommendations

The study shows the gaps of OPD & IPD department of the hospital which include the process gaps, infrastructure gaps, equipment gaps and manpower gaps for the quality improvement for the ISO certification of the district hospital chandrapur. Also study includes the recommendation and action plan for the fulfillment of the gaps of the department. The result also includes the status of the compliance and the statutory requirement of the district hospital and its status for the quality improvement process.

Conclusion

Special consideration on gaps of the department is given and action plan is prepare and need to be monitor by the hospital's internal of expert consist of Matron , Resident Medical Officer, Civil surgeon and Nursing In Charge. It will help for the quality improvement process of the district hospital chandrapur.

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I am grateful to Principal Consultant Dr Rahul Shastri, Dr Deepa Mohanty and Arundhati Bose, Hosmac India Pvt. Ltd, Mumbai. For having allowed me to do this study at Chamdrpur District hospital under their able guidance, direction and encouragement.

My sincere thanks to the entire doctor's and other staff in the OPD and IPD for their kind cooperation in providing the needed information for the study.

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PART 1: INTERNSHIP REPORT

Hosmac India Pvt.Ltd.

1. Introduction:

Since 1996, HOSMAC India Pvt. Ltd. has evolved into an unmatched centre of skill sets which attend to the various facets of a healthcare facility, ranging from architecture and engineering to hospital management, public health consultancy (PHC), healthcare training and information technology (IT).

We at HOSMAC understand the vision and sentiment behind building a healthcare facility and the unique nature of its demands. Against this backdrop, we provide an invaluable range of Total Solutions to suit the elaborate requirements of our clients not only efficiently, but with precedence to quality service within the framework of an ISO 9001:2008 certification.

Constantly pushing our horizons to excellence, we have designed and coordinated hospital projects worth more than eight billion INR of over eight million square feet of hospital space, as on March 2010. We have provided full-fledged technical assistance to hospitals in India and abroad. Our portfolio already encases 500+ diverse projects dealing with the hospital and healthcare industry with clientele including several private sector giants

2. Scope of work of the organization
1. Consultancy Services

Through over a decade of study and analysis, we have cultivated a method of optimized results using the resources at hand. Organizations come to us to ensure a sure footing before taking up a project, or even to re-engineer an already established hospital.

We understand the subtle and sometimes conflicting dynamics of the healthcare industry. Our deep understanding of the field makes us capable of harmonizing the variables involved to achieve a system that functions like a well-oiled machine. Scrutinizing every process of a healthcare delivery system, we develop an effectively functioning healthcare facility.

2. Design Services

Long before 'patient-centric care' and 'healing architecture' became the key guides of healthcare, Hosmac had begun to comply with a **'form follows function'** principle, where ease, economy and efficiency are ensured together with an emphasis on convenience, hygiene and safety.

We focus all expertise available within the consulting arms to a single point of convergence: the built facility. This ensures total control over the entire process, from the initiation of the project with a market survey through determining financial feasibility, architectural and engineering design, and commissioning the facility, guaranteeing that our client's vision is retained through the entire project cycle.

3. Project Services

Hospital projects, apart from efficient design, also need a well-coordinated approach to actualise the design. Construction management, design coordination, engineering services review, tendering, build certification etc. are some of the key elements to ensure that the project is executed in good time within budgeted cost, and follows all qualitative standards as per building codes.

We are experts at facilitating the coordination of these separate entities into one congruous unit to easily avoid potential time lags and errors. Hosmac provides a range of project service options even to the extent of taking up the entire build operation, depending on the client's need and preference.

4. Health care management consultancy

Over the past 15 years, we have advised leading companies as well as state governments on issues ranging from enhancing operational efficiency to chalking out expansion strategies, and advisory on transaction and framework policies.

Hosmac Management Consultancy scrutinizes every process of a healthcare delivery system to develop an effectively functioning healthcare facility.

With our precise domain knowledge and managing industry dynamics, we ensure that we create and operate quality healthcare organizations and facilities, help clients with best models of systems and policies to generate sustainable results

SERVICES OFFERED

- Preparing Detailed Project Reports
- Organizational Assessment Audits
- Commissioning
- Management Restructuring
- Due Diligence Services
- Validating Business Plans
- Strategy Consulting
- Accreditation Consultancy (JCI, NABH, NABL, ISO 9001)
- Benchmarking surveys
- Developing SOPs, Policies, Tariffs, etc.
- Business Process Re-engineering
- Operational and Retainer Management Consulting
- Hospital Management Information System Consulting
- Transaction Advisory

5. Public health consultancy

We appreciate that public health needs are diverse and huge, challenges of which, one can not resolve alone. To address these issues, our Public Health Consultancy provides technical assistance, training, and information, with a focus on practical solutions that improve services where resources are scarce. We work in partnership with governments, multilateral institutions, and healthcare professionals to make this a reality.

Strategic tie-ups with international organisations and NGOs to bring in global experience has aided us to meet local needs. Other than being technical consultants to the health departments of

various governments, this division has been working with organizations such as WHO, UNICEF, World Bank and European Commission.

Quality improvement of public healthcare facilities to the level of certification/accreditation, HIV/AIDS Control, reproductive & child health, national rural health mission (NRHM), tuberculosis control are some of the 'health system reforms' this service has pulled off across the country.

SERVICES OFFERED

- Accreditation Consultancy
- Research and Review Studies
- Models for PPP
- Transaction Advisory
- Developing Strategic Action Plans
- Evaluation of Health Programmes
- Quality Improvement of Public Sector Hospitals

6. Medical Programming and Planning

We recognize the unique demands of healthcare planning and have cultivated, for well over a decade now, the kind of specialized knowledge necessary to satisfy the myriad demands made by a hospital building. A keen awareness of costs and changing environments permits us to focus on maximum energy conservation without compromising on functionality.

In conformity with our client's requirements, end-user sensibilities and efficient functionality of the hospital premises, we have developed programmes and plans for reputed hospitals across Asia and Africa.

7. Infrastructure Audits

This service is specifically created for hospital owners of old infrastructure, who require changes to keep up with the pace of technological development.

Hosmac's multi-talented pool of resources evaluates the building, and identifies key limitations and deficiences for future improvements.

A phased implementation blueprint, suggesting cost-effective improvements, is developed in close consultation with the users/client.

3. **TASKS UNDERTAKEN AS TRAINEE**:

Government of Maharashtra (GoM) in its bid to bring about a paradigm shift in healthcare delivery system across the state has undertaken initiative for quality improvement in the public health facilities with the active technical assistance of National Health Systems Resource Centre (NHSRC), a technical support wing of Ministry of Health & Family Welfare, Govt. of India.

Quality improvement in these public health facilities is to be initiated through implementation of Quality Management Systems (QMS) as per the FFHstandards and the Indian Public Health Standards (IPHS).

As a management trainee at Hosmac consultancy I was posted at district hospital, chandrapur.

District Hospital, Chandrapur.

Hospital Details

General hospital is inaugurated on 17th January 1941, at the time of inception hospital is known as "Motha Dawakhana Rogi Va Nokrakarita Kholya" then now it is extended to 300 beded hospital and now known as General hospital. The hospital is situated at main road and hence easily accessible. It is approximate 1 km from Bus stand and railway station. As it is located at center of city, can be easily accessible from all sites via auto or city bus. Total area of hospital is approximate 20,234 sq. m., and build up area is 29841.32 sq. m. There are total 9 buldings within hospital premises, out of which one is main building. This main building is having 2 floors and most of the clinical departments are in this building only.

General Hospital, Chandrapur is 300 beded hospital, approximate area of hospital is 20,234 sq. m. Total main departments in hospital are 25 and this hospital serves approximate 264000 patients on OPD and approximate 36000 patients on IPD basis yearly.

Various Departments of the Hospital:-

A   Clinical Services

- Out Patient department
- Accident & Emergency Ward
- Inpatient Department
- Labour Room
- Critical Care Unit (ICU/NICU)
- Operation Theatre
- Blood Bank
- Physiotherapy
- Dialysis
- AYUSH
- ICTC & ART

B   Clinical Support Services

- Diagnostic Laboratory
- Diagnostic Imaging Sciences (X ray Units, Ultrasound &, CT Scan)
- ECG
- Sterile Supply Department
- Pharmacy (Dispensary and Drug Stores)
- Medical Records department
- Ambulance

C   Support Services

- Linen(Outsourced)

- Kitchen & Dietary services (Outsourced)

- Housekeeping

- Main Stores

- Civil & Maintenance (PWD)

- Biomedical Waste management

- Security (Outsourced)

General amenities available for the patients and the staff:

1. drinking water,
2. toilets,
3. intercom,
4. licenses and regulations available for key departments like Blood Bank, BMW
5. Signages available
6. Ecofriendly measures available : solar water heater
7. Power back up facilities
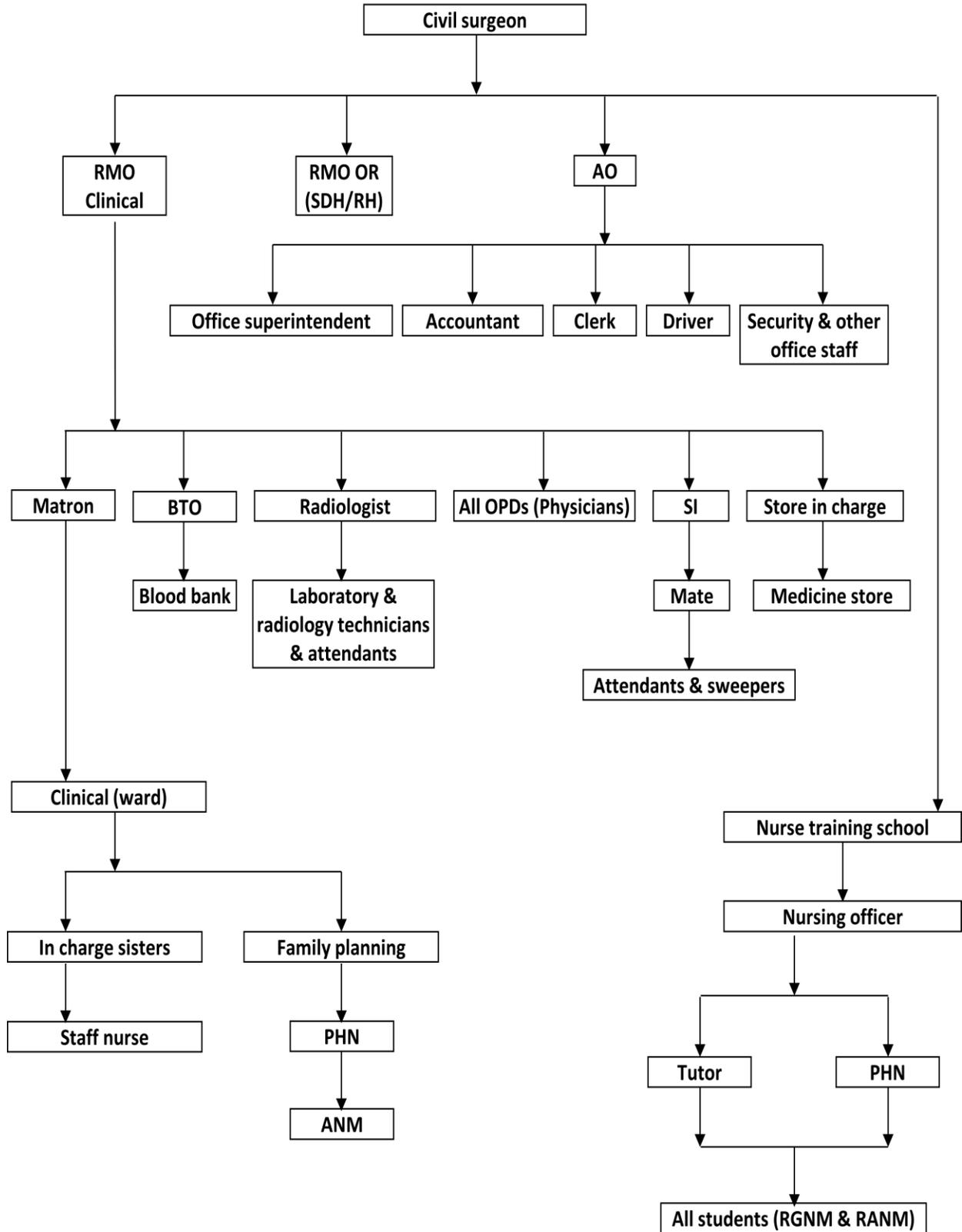
KEY STRENGTHS

- Making a separate unit for **NCD** (Non Communicable Disease).
- Will start Health care for Elderly.
- Good initiative from Top management for Fire Safety of the hospital.
- Good Management support for the quality improvement of the hospital
- Effective involvement of the state health Authorities for the up gradation and overall improvement of the hospital.
- Proper implementation of National programmes.
- Dialysis machine with trained staff are available.
- Demolition of old IMO & MO quarters, Police station, canteen, Parking shed , AIDS and ART centre, proposal for new construction.

KEY WEAKNESSES

- Inadequate manpower under IPHS norms.
- Lack of communication between Staff and top management.
- Improper security services.
- Inadequate infrastructure and equipments in critical areas like Emergency and Operation theatre etc.
- Less number of warmers at NICU, and patient load is high.
- Regular meetings within hospital staff are not held.
- Cleanliness is poor.
- Irregular meeting of Rogi kalyan Samiti of the hospital.
- Although Dialysis setup is there, but don't have consultant. & technicians.
- Poor maintenance for building and equipments.
- Insufficient fund.

KEY OPPORTUNITIES

- Provide duties & responsibilities to the staff.
- Employee recognition and reward management.
- Development of better communication system among staffs.

- Establishing quality protocols and providing training towards the effective implementation of the protocols.
- Planning for Day Care Unit, specially for Chemotherapy.
- Applied for blood component unit.

CHALLENGES (AS PERCEIVED BY THE LEADERSHIP TEAM)
- Lack of trained staffs
- Improper monitoring of the support services like housekeeping etc.
- Technological advancement and use of modern equipments and facilities for providing quality care.
- Lack of devotion towards theirs services among clinical & non clinical staff

The main tasks performed as a management trainee are

- **Process Mapping & Gap Analysis**
- **Assessment against ISO standard**
- **Preparation of Action Plan:**
- **Compliance score on the basis of FFH (Family Friendly Hospital) checklist.**
- **Training Need Assessment of the employee of the Hospital.**
- **Collection of Forms and Format of the Hospital**
- **Patient Satisfaction Survey**
- **Employee Satisfaction Survey**

4. LEARNINGS:

- Understanding the ISO Certification process
- Detailed Process mapping and process flow of all departments of Hospital
- Gap identification & Gap analysis of all departments of the hospital for quality improvement.
- Implementation of the quality process in hospitals
- Preparation of the action plan.

PART 2: DISSERTATION REPORT

Chapter 1: Introduction

Delivering the right care at the right time in the right setting is the core mission of hospitals. This can be achieved only by quality. Ensuring the safety of patients and hospital care providers and improving quality of patient care have become important objectives for health systems.

Until the late 19th century hospitals were not a place where health was created, but rather, a place to die. But now, there is rapid improvement with the development of aseptic and antiseptic techniques, more effective anesthesia, greater surgical knowledge and skills, trauma techniques, blood transfusion, coronary artery bypass surgery, effective pharmaceuticals, transplantation techniques and minimal invasive surgery has called for quality management system in the hospitals. All organizations periodically need a companywide assessment of quality. This involves quality control program i.e. planning, control and implementing. For hospital quality control, audits are carried, internal audits and external audits. Some Organizations which carry external audits are: ISO, NABH, JCI, JACHO and others.

Most of the modern Hospitals are ISO certified. ISO's declared mission is to be the leading value-adding platform and partner for the production of globally and market-relevant international standards, covering product specifications, services, test methods, conformity assessment, management and organizational practices.

Certification applicable for hospitals is ISO 9001:2000. Hospitals get certified in order to identify, define, document, implement (follow), monitor/measure, and continually improve the effectiveness of their patient care processes.

For hospitals, ISO 9001 means identifying the elements in clinical and administrative practices that contribute to desirable outcomes, documenting those elements and instituting them as standard practice. Some examples include improved communication among staff members, revisions to policies to reflect best practice, standardization of forms used for documentation of patient care activities, and detection of problem-prone issues.

The website of International Standards Organization (**www.iso.org**) on ISO certification for hospitals Healthcare Quality Management through the Application of ISO 9001 states that using

the ISO family of standards, the organization can establish a comprehensive Quality / Business Management System which:

- Provides a solid basis for compliance with all imposed requirements and healthcare quality certifications (e.g., JCAHO, AOA, Federal and State regulations).
- Makes all other healthcare quality certifications & accreditations processes easier and less costly.
- Facilitates improved understanding of roles & responsibilities among employees; and enhanced communication and coordination between departments.
- Requires the establishment of measurable improvement objectives and accountability to those objectives through monitoring, measuring and reporting.
- Results in improved systems, processes, and outcomes.

Government of Maharashtra (GoM) in its bid to bring about a paradigm shift in healthcare delivery system across the state has undertaken initiative for quality improvement in the public health facilities with the active technical assistance of National Health Systems Resource Centre (NHSRC), a technical support wing of Ministry of Health & Family Welfare, Govt. of India.

Quality improvement in these public health facilities is to be initiated through implementation of Quality Management Systems (QMS) as per the FFHstandards and the Indian Public Health Standards (IPHS).

The main objectives of implementing the QMS in these facilities are:

- To facilitate the development of a sustainable system of quality improvement based on rational utilization of available funds and participatory management structures as applicable to the delivery of services in public health facilities. Such methodology also factor in patient's perception, equity and access and identify measures to monitor them.

- To develop the system such that the introduction of Quality Health services is part of a road map that leads on to certification of the hospital for comprehensive health care services.

In its efforts to implement the QMS in these facilities, Government of Maharashtra along with NHSRC has appointed Technical Support Partners (TSP) for assisting in implementation of QMS. Hosmac India Pvt. Ltd. is assisting Government of Maharashtraand NHSRC in implementation the ISO and MPHS standards in the public health facilities in the Vidarbha Region of Maharashtra. The type of facilities ranges from Primary Health centre (PHC), Rural Hospital (RH), Sub-District Hospital (SDH) and District Hospital (DH).

Hosmac India Pvt. Ltd. is the technical support partner to the public healthcare facilities in the following districts

Akola Circle	Nagpur circle
• Akola • Amaravati • Buldana • Washim • Yavatmal	• Bhandara • Chandrapur • Gondia • Gadchiroli • Nagpur • Wardha

Registration

Process Group	OPD Management	Sub-Process	OPD Registration
Process Location	Registration Counter cum General OPD Consultation (Room No 17)	Process Owner	Registration staff
Input(s)	Patient's personal detail	Output(s)	OPD Card (computerized printed & manual) with OPD registration number

Process Flow / Process Description

1. The patient, who comes for OPD consultation, goes to OPD registration counter. Which is accessible from 3 different directions, either from emergency entrance or from outpatient department entrance, or from one more entrance point made which is generally closed after OPD hrs.
2. Once patient enters the lobby, goes to registration counter for registration. Registration counter is divided into 4 sections, as- for male (20-59yrs), for female (20-59yrs), for geriatric (above 60 yrs) and for children (0-19 yrs).
3. Patient stand in respective queue for registration.
4. Only at 2 points i.e. at male and female registration counter, computers are there and computerized registration slips are generated. The other two counters are manually operated.
5. At the registration counter the staff records details of patient in the OPD paper which contains, name, age, sex, address, occupation, monthly income, caste, and duration of ill. On the basis of these basic details a registration number. is generated. At the Male and Female (20-59yrs) counter computerized OPD tickets are generated. At the other two counters the OPD ticket is generated manually with the same details. Both, the computerized and the manual OPD tickets are generated in the local language Marathi.
6. The details entered in the OPD ticket are also maintained in the OPD Register which is also maintained by the registration clerk.
7. In case of female patients who are not sure about their pregnancy, they are registered in the general OPD for the pregnancy test If her test results are positive then she is registered for ANC .
8. Patients are charged Rs. 5 towards the registration fee and this ticket is valid for a week.
9. If the patient comes within a week then he/she doesn't have to pay anything for registration. He/ she only have to come to the registration counter to get the seal of that particular day And the OPD ticket number of the old patient is entered in the OPD register. And in this way staffs at the registration counter is able to maintain the record of new cases and old (follow up) cases.
10. After the registration process is completed the patient is directed to go to the concerned

consultation chamber			

Process Records	Patient's details required for registration are recorded and maintained in the computer, and registers are also maintained for manual registrations, OPD Patient Card

Consultation

Process Group	OPD Management	Sub-Process	OPD Consultation
Process Location	General OPD Consultation Room & Other Specialty OPD	Process Owner	Concern OPD Consultants
Input(s)	Patient & OPD Patient Card	Output(s)	Doctor's Advice & written prescription on OPD card

Process Flow / Process Description

1. When patients waits outside the OPD chamber, the queue is managed by the attendant, one attendant is present at each consultation chamber, then patient enters the OPD chamber.
2. As soon as patient enters inside the chamber, doctor writes his/her registration no. in the register and also enters whether the patient is new or old. Simultaneously asked patient about the complaint.
3. Based on the diagnosis doctor prescribe the medicines, suggest for laboratory investigations or radiology investigations.
4. Doctor writes down the medication or investigations on the OPD card/ OPD ticket, after seeing the patients for avg. 2.5 min.
5. If patient needs any specialist consultation, he /she are referred to the concerned Doctor and the chamber no. of that particular Doctor is noted on the patient's OPD card.
6. Again patient has to follow the same waiting process and then consultation with the concerned Doctor. Specialist also enters patients' registration no. in the register.
9. If patient is advised for any injection, dressing or any medical investigation etc. then patient is required to follow a separate process.

Process Records	OPD Patient Card, OPD consultations register

Dispensary

Process Group	OPD Management	Sub-Process	Out-Patient Medicine Issue
Process Location	Dispensary	Process Owner	Pharmacy Staff
Input(s)	Doctor advice on OPD card	Output(s)	Issue of medicines to the out-patients

Process Flow / Process Description

1. Doctor writes medicines on patient's OPD card.
2. Patients come and stand in queue in front of Hospital Dispensary (separate for male, female and children) for an avg. 6 min .
3. When patient's turn comes he/she gives the OPD card to Dispensary staff.
4. Pharmacist then enters the registration no. and name of medicines into the logbook. Then staff gives the medicine for next 3 days to the patient based on the prescription and also explain to him/ her how to take the medicines (doses).
5. After 3 days patients again comes to OPD registration counter and get renewed the OPD card(by taking the stamp of the date), and goes to the consultant. Based on the condition and the effect of medicines consultant either writes CT ALL (continue all) or change the medicine, then patient again follow the same procedure for taking the medicine.
6. If the patient is having BP / Psychiatric disease / Pregnancy, then medicines given for all the prescribed days.
7. After marking (√) over the medicines which have been given to patient, pharmacist returns the OPD card to patient.
8. If any medicine is not available in hospital pharmacy then patient is asked to purchase the medicine(s) from outside.

Note: - At OPD Dispensary they only keep tablets, syrups and sachets. (don't keep injections)

Process Records	Patient's OPD card, Medicine Stock Register.

Injection

Process Group	OPD Management	Sub-Process	Injection Administration
Process Location	Injection Room (room no. 20)	Process Owner	Injection Room In-charge
Input(s)	Patient OPD Card	Output(s)	Administration of Injection

1. Doctor advices for injection on patients' OPD card.
2. Patient has to stand in a queue outside the injection room to receive inject able drug which is administered by the nurse on duty in the injection room.
3. On duty nurse administers injection as per Doctor's prescription on the OPD card. But before injecting she asked whether patient has taken food or not, if not she suggest to go and have something and then come back.
4. She enters the registration no. and name of injection into the register given to her and marks (√) on patient's OPD card.

Process Records	OPD Card, Injection Register

Dressing

Process Group	OPD Management	Sub-Process	Dressing
Process Location	Dressing Room (room no 19)	Process Owner	Dressing Room ward boy
Input(s)	Patient, OPD ticket	Output(s)	Dressing done,

1. Doctor advices for dressing on patients' OPD card.
2. Patient has to stand outside the dressing room (separate for male & female) for dressing.
3. Patient enters dressing room along with the OPD card, ward boy enters the registration no. into the register and do the dressing. And do the marking (√) on the OPD card of the patient.
4. The patient is advised for the precautions to be taken for the dressing and is asked to visit again after a specific time for repeat dressing.

Process Records	OPD card, dressing record book, autoclave book

In Patient Department

REGISTRATION/ ADMISSION

Process Group	IPD Management	Sub-Process	IPD Registration/Admission
Process Location	Emergency department & Registration Counter	**Process Owner**	Registration In-charge
Input(s)	Patient's personal detail	**Output(s)**	Indoor paper

Process Flow / Process Description

1. Patients get admission through OPD/emergency/referral cases from outside; get the registration no. and the indoor paper from the emergency registration counter.
2. If doctor advices admission to the OPD patient, then he (Doctor) writes Admission of OPD paper and advices to the patient to go to the operator and get the Inpatient paper. Through operator, patient gets inpatient paper which is filled with basic demographic details by operator (Name of patient, sex, age, Address, DOA & time of Admission, Name and address of kin, name of CMO & DMO, and gives registration no.)
3. After filling basic, patient advised to go to the casualty, there CMO see the OPD papers and findings written by OPD consultant, and based on that he/she writes the further instructions (medicines & investigation) or some consultants writes investigations on OPD papers itself and then patient is shifted to ward as advised by CMO.
4. If the patient is ambulatory then patient is shifted along with the patient relatives. But if the patient is non-ambulatory or critical then shifted on trencher or wheelchair to ward by attendant.
5. If patient is psychiatric and violent, then casualty doctor instruct the attendant to use physical restraint while shifting the patient to the psychiatric ward.
6. Sister receives the patients after checking the indoor paper, case history, if all the details are not filled completely or correctly then they send the paper back to registration counter. As soon as patient comes to ward sister also checks for MLC paper, if the patient is MLC case. In case of non availability of MLC paper immediately sister inform to police station within premises of hospital, to get ready the MLC paper.
7. Sister receives the patient and based on the GC (General Condition) of the patient and availability of bed allotted to the patient. If patient is more serious then a bed towards the nursing station allowed to the patient and if the condition is OK then bed allot in between the ward.
8. After that patients registration done in admission register (IPD no., name, age/sex, Address, DOA, Diagnosis, Refer/Direct) and the medicine details entered in the treatment book.
9. And follows all the instructions as per the doctor prescription, samples also sent as per instructions written on inpatient paper.
10. Doctor takes round 2 times in a day, and if there is any emergency in between then call given to DMO (there is a separate call book). If DMO not able to solve the situation then

he calls consultant.

11. After admission and basic treatment, sister makes the diet list for all the old and new patients of the ward for next day.
12. If patient required dressing, there is dressing trolley and a common dresser for all the wards.

Process Records	Patient's details required for registration are recorded and maintained in the register, and the BHT

CONSULTATION

Process Group	IPD Management	Sub-Process	IPD Consultation
Process Location	In patient Ward	Process Owner	Treating Doctor/Consultant
Input(s)	Patient & patient's BHT	Output(s)	Doctor's notes on BHT, Nursing notes in the ward registers

Process Flow / Process Description

1. Doctors take the round in the morning (varies between 8am- 11am) along with sister and sister in charge.
2. Before Doctor's round sister keeps patient's case sheet with respective patient either on patient bed or at the tray / box provided bedside.
3. During the rounds, doctors write the conditions and progress of the patients in the patients' record and write all the treatment given or are to be given, medicines, their dosage with date and doctors signature.
4. After rounds again case papers of patients collected kept at the nursing station.
5. Sister makes the necessary changes in the treatment book after round.
6. All the investigations reports are attached with the patient's records only.
7. After round, Doctor decides for further treatment, discharge or any procedure.
8. After surgeons round he decides the which patient get operated next day. After that Doctor/ Sister makes the OT list one day prior and sign it. Same information is entered into the Pre-OP book of ward by sister (Registration no., Name of the patient, Age/Sex, Address, Diagnosis, Operation, DOA, DOP, Sign of sister, OT sister). Then sister on duty send the list to the OT and get it signed by the nurse on duty of OT.

Process Records	BHT, IPD consultations register, Short slip for medicines to be taken from pharmacy (if required).

HANDING OVER

Process Group	IPD Management	Sub-Process	IPD Handing over
Process Location	IPD – Wards	Process Owner	Staff Nurse
Input(s)	Patient's BHT	Output(s)	Patient BHT and additional / change in plan of care

Process Flow / Process Description

1. At the time of shift change, sister gives bed to bed handing over to the next duty sister.
2. On giving handing over, she only takes the case sheets of new admitted patients not of old patients.
3. At nursing stations they have Handing over book, but they don't write only special instructions in that.

Process Records	Patient's BHT, Handing over book

DISCHARGE

Process Group	IPD Management	Sub-Process	IPD Discharge
Process Location	IPD – Wards	Process Owner	Staff Nurse & Treating doctor
Input(s)	Patient's BHT	Output(s)	Discharge summary

Process Flow / Process Description

4. If doctor decides to discharge the patients, then doctor discuss with the patients and write it on the case sheet about the discharge during the morning round.
5. Sister makes a note of that in their register, and prepares the discharge summary of the patient.
6. After that patients attendant have to make the payment for the services at the nursing station, then duty sister collects the amounts for all the discharges (no receipt is given to the patient) and deposit it to OPD registration clerk , and kept the record for the same.
7. Discharge summary contains patient's demographic details, DOA, DOD, Address of patient, diagnosis, treatment given, treatment adviced, investigations, condition on admission and condition on discharge,
8. If any precaution is to be taken then doctor explains the details to the patient and relatives.
9. Sister explains about the medicine and dosage to the patients.

Process Records	Patient's BHT, Discharge summary, Outdoor

			medicine slip

REFERRED OUT

Process Group	IPD Management	Sub-Process	Referral out
Process Location	IPD – Wards	**Process Owner**	Treating doctor
Input(s)	Patient's BHT	**Output(s)**	Discharge summary & Referral out notes/letter

Process Flow / Process Description

1. If doctor decides to refer out the patients then write it in the registration slip with the name of the hospital and fill the referral note.
2. This note is attached with the case sheet, and all the details are noted down in the ward register by the sister.
3. All the treatment given and diagnosis done is written in the case sheet of the patients.
4. Then discharge summary and the case sheet with that referral note is handed over to the patients and referred out.
5. For the patients who takes DAMA / LAMA, no notes or summary given by hospital.

Process Records	Patient's BHT, Discharge summary, Referral note

Scope of work

Scope of work includes facilitation during first year for building the system leading to Quality Management System certification of the facilities for achieving certification status. To achieve the above objective, the scope of services is as follows:

a) Conduct a detailed organizational survey of the healthcare facility, based on the IPHS standards. This will include the following:

    1. As Is survey including observation
    2. Documentation and review of human resource available with the healthcare facility
    3. Equipment and Infrastructure review
    4. Processes mapping and training requirements for the facility
    5. Capacity building activities
    6. Services & facilities provided
    7. Legal compliances etc.

b) Besides, the above points, the format for "Facility Survey" available in IPHS guidelines shall be captured in "As Is" reports. This includes all support processes including:

    8. Nursing services
    9. Housekeeping
    10. Laundry services,
    11. Security services,
    12. Dietary services
    13. Ambulance services
    14. Information support services etc.

Chapter2- Literature Review

Now day's hospitals are very keen to get accreditations against standards, for e.g. Christian medial association of India (CMAI) gave technical inputs for the process for getting NABH accreditation of the Hospital and improving quality care services. CMAI team visited the hospital for initial assessment against the NABH accreditation. The assessment is divided into three stage physical gap analysis, legal and statutory gap analysis, and documentation of gap analysis. The Assessment had revealed many non compliance issues as per NABH standards, which need to be addressed. These gaps were elaborated for further process. As per the scheduled Plan of Action, it is recommended that the Hospital will attempt to fill the identified gaps until the next Gap Assessment is carried out.(1)

One more report presents the finding of an evaluation of first systematic quality management system tested and evaluated in a Yemeni Hospital. Khalifa hospital was selected for the experiment because it was a fairly typical150 bed rural regional general hospital. The objectives of the experiment were to assess whether a simple quality management system including supervision by all levels of the health system, could be implemented in 9 months, and any results for personnel, practices and patient outcomes.The study result and evidence collected shows that a quality management system was about 70% implemented in a rural 150 bed hospital. And hospital has also gained considerable experience and expertise about how to improve quality with less resource.(2)

Indian Public Health (IPHS), NHSRC took up a pilot project for improving the quality of services at one district hospital each in eight EAG states respectively. Objectives of the reports were to facilitate quality improvement as applicable to public health facilities based on participatory management and patient's perception and to hold the quality care facility on site and towards achievement of prevailing ISO 9001 in the presence of competent personnel. With the help of technical support six out of eight district hospital obtained ISO certification.(3)

A number of advantages are found from using ISO. The focus on patients has been re-established. All processes are identified and subject to continuous improvement. Performance measurements were introduced and give an integrated picture of results. Measurements

subsequently lead to improvement of quality of care and to quality system improvements. The documentation system serves the organization's needs without leading to bureaucracy. Positive effects on patient safety could be demonstrated compared with ten other hospitals. (4)

There are actually two quality management tools which got transferred from other industries to hospitals; the ISO 9000 standards and Six Sigma. The research was performed parallel to the actual organizational change related to quality management in the Red Cross Hospital. The main body of the study based on a strategic analysis: to implement a quality management system in hospital based on ISO 9002:1994. (5)

Chapter 3: Aims & Objective

Aim:

To build the system leading to Quality Management System certification of the District Hospital, Chandrapur for achieving ISO certification on the basis of FFH checklist.

Objectives of the study are:

- ➢ To assess compliance to FFH standards
- ➢ To identify gaps of OPD & IPD of the hospital.
- ➢ To prepare action plan to fulfill the gaps, if any.

Specific objective

- • Develop methodology to implement quality improvement as applicable to public health facilities based on rational utilization of resources and participatory management structures to reach the desired standards, while factoring in patient's and employee's satisfaction with the hospital and identify measures to monitor them.

Chapter 4 :Methodology

Study design- Descriptive study

Sample size

OPD

Annual pt turnover- 260000

Every month= 21660

20 OPD so in each opd for 1 month= 21660/20= 1080

So in each day= 1080/30= 30 on an average

So only two general OPD'S i.e. male and female were selected and followed for 1 month as they have the highest rush of patients.

So thus we followed the process flow of the patient starting from registration, consultation, dressing, pharmacy and injection. And thus 10 patients were covered per day from the general opd. So a sample of 300 was covered in a month.

IPD

Annual pt turnover(Approx-10% OF OPD)- 26000

Every month= 2166

8 IPD so in each opd for 1 month= 2166/8= 270

So in each day= 270/30= 9 on an average

So 9 patients were tracked each for 30 days so a total of 270 patients + 10% error= 300 sample size was taken from IPD.

Selection criteria- randomized sampling was done.

Data collection technique-
Direct observation
Review existing process/ reports/ manuals

Data analysis technique-

Process mapping was tracked in the hospital for 2 months. And the gaps were compared with the FFH checklist

Detailed Methodology:

Process Mapping & Gap Analysis: This was carried out by following few patients in two department of the hospital. This was conducted to know about process flow of the department and identification of gaps during the observation of process mapping.

Assessment against ISO standard: This was carried out with the help of two checklists- FFH checklists.

- Quantitative study was done with the help of FFH checklist in which scores are given- Each area/department of the facility was scored as 0 (if there is non-compliance to the requirement) 5(partial compliance to the requirement) or 10 (full compliance to the requirement) If any of the requirements was not applicable to a facility, it was marked ad N/A

-

Preparation of Action Plan:

➢ After mapping of processes and analysis of the gaps in them with respect to the laid down requirements of the FFH, a detailed "Action Plan" will be developed and improvement of systems and processes of service delivery in the healthcare facilities will be undertaken to meet the laid down standards.

Operational plan of the study:

Step 1: Briefing the managers about the dissertation topic and asking for permission

Step 2: Asking Civil Surgeon of the hospital for issuing a circular for doing project work in all the departments.

Step 3: Reviewing of existing process, manuals, forms & formats.

Step 4: Gaining knowledge and understanding about Organogram and responsible persons for every process

Step 5: Developing tools for the study: checklists

Step 6: surveying and observing the process of OPD & IPD, identification of gaps and assessment against FFH standards with the help of the tools

Step 7: Putting all the data in MS excel sheet and analysis of the data

Step 8: Making a full-fledged report of the study

Step 9: Analysis of the report

Chapter 5 Results

Out Patient Department

Flow Chart OPD:-

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                        Patient In

                        Registration

                        Consultation          Radiology Investigation

Injection & dressing                          Lab. Investigation

                        Pharmacy

                        Patients walk out of
                        the hospital
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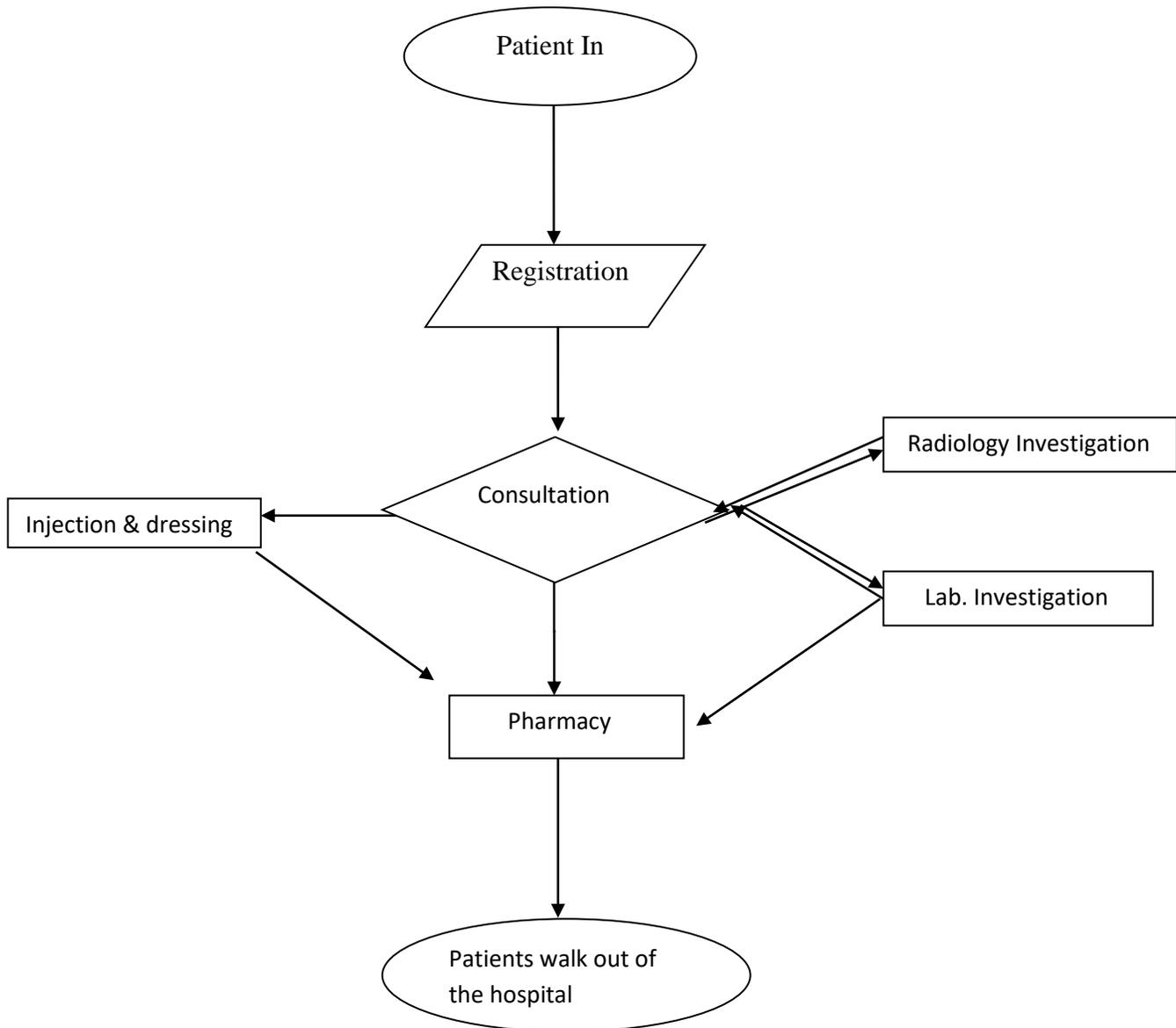
OPD Gaps:

| GAP STATEMENT	RATIONALE / EXPLANATION
OPD timings not followed strictly	OPD timing is 9:00 A.M to 1.00 P.M but main patient load is from 10 AM – 12:30 PM as a result in huge crowd in the OPD, which the current infrastructure is not able to support
	No mechanism to monitor the availability of doctors during OPD hours.
Health & Safety of the employees ignored.	There is no policy of health & safety of the hospital staff in place. The hospital staffs are not aware about their health & safety rights.
	Training has not been provided to the staff on Occupational Safety and Universal Precautions.
No mechanism for reporting of accidents, incidents or any infectious disease.	There is no mechanism for reporting of any incidence like needle stick injury, mercury spillage, patient fall.
	There is no record for the sentinel events, near miss, and adverse events.
The patient has no medical record of his on-going treatment.	The OPD slip is collected back by the dispensing pharmacist after issuing the medicines
	This causes a lot of confusion for the registration of the old patients and extra work for the OPD staff.
Patient privacy during examination is not strictly adhered to.	No system for calling in Patients one by one. All the patients stand around the doctor's table while consultation of one patient is going on. Therefore the patient privacy is compromised.
	Absence of Nurse / Female attendant as witness to the examination of the patients
	Although the screens are available in almost all the OPD clinics but they are kept aside.
Registration process for Old patients is time consuming.	The old patients have to retrieve the old OPD slip first and then again get the entry done in Old OPD patients register by the clerk. This entire process takes around 10 – 15 mins.
Over Crowding in the OPD during OPD hours.	Dimension of OPD waiting is 42 X 43 feet (1806 sq. ft.) out of which around 487 sq. ft. area is occupied by the registration counter (115 sq. ft.), May I help you Desk (132 sq. ft.) and pharmacy dispensing counter (240 sq. ft.).
	Only 1319 sq. ft. area is available for waiting and seating where as the daily average OPD attendance are around 550 and on certain days it goes up to 700.

	The queue for the female patients gets very long in the peak hours (10:00am – 12:00pm) as the speed for the Clerk sitting for the female registration is very slow in doing registration. The clerk takes average 5 mins for doing registration.
	Retrieval time of Old OPD slips is around 10 mins which leads to overcrowding at registration counter as there are no dedicated staffs available to retrieve the old OPD slips.
	Many times patients keep waiting in front of other speciality doctor and then doctor guides him to another doctor which again takes huge time.(e.g. Surgery patients waiting in front of medical OPD)
Speciality wise OPD Register not maintained by the doctor in the OPD.	Doctor does not maintain the OPD register in the OPD. Due to which the speciality wise attendance is not generated correctly.
Registration clerk is unaware about the OPD timing.	The registration clerk is not aware about the OPD timing. Also the time displayed in the OPD area is incorrect (9:00 am – 12:00 pm).
May I help you desk available but non functional.	"May I help You" desk is available but nobody is available on the desk for answering the patient query.
	A social worker is assigned the job but do not sit on the desk.
The medicine kept in the dispensing counter is not properly labelled.	The medicines kept in the white boxes for dispensing are not labelled on the boxes
	Some of the boxes are labelled but not in legible.
	The medicines are also taken out of the packing wrapper and hence it is very difficult to identify them in case the labelling is not legible.
OPD duty doctors availablilty schedule not available in OPD	There is no doctor availablilty schedule available in the OPD as to which doctor will be available in which OPD
	Also the information is npot given to OPD in charge as which doctor is on leave and when they will be next avaialble in the OPD
Wheel chairs are not used for OPD patients when required	Though wheel chairs have been issued to the department but they are kept in the store and are not available for the patients.
	The non availability of the wheel chairs causes a great deal of inconvenience for the patients and as a result it is not patient friendly.

Basic equipments like BP apparatus, weighing scale, thermometer is not available.	There is only one set of BP apparatus, weighing scale, thermometer in the OPD which is kept in injection room.
X-ray view box not available in the orthopaedic OPD	Orthopaedic OPD do not have X-ray View box for viewing the X-ray film.
Waiting time for OPD consultation is very high.	The average waiting time for OPD consultation is 28 mins. The waiting time is high especially for the medicine OPD as the medicine OPD counts for 40 – 45% of total OPD censes.
	A huge patient load for medicine OPD is always present and only one doctor is present
Non availability of doctors in peak hours.	The OPD timing is 9 A.M to 1:00 P.M but the doctors do not sit in the OPD with regularity which causes a lot of inconvenience to the patients.
	Actuate shortage of specialist doctors. A same doctor has to take rounds of the wards during OPD hours.
	There is only one medical specialist available in the hospital while the OPD attendance of the medicine department is about 45 – 50 % of the total OPD.
There is no designated doctor in charge for OPD.	There is no designated doctor in charge for OPD due to which the problems of OPD are not addressed on time like availability of medicines in pharmacy, availability of equipments, maintenance of equipments, monitoring of availability of doctors in OPD hours.
There is no implied consent displayed in the OPD area.	The Information explaining implied consent is not displayed in the OPD area.
No drinking water facility in the OPD area.	There is only one water cooler installed near the casualty dept which is also not working from last six months.
Seating arrangement for OPD patients is insufficient.	10 wooden benches are placed in front of OPD clinics (including USG, X- ray rooms) and 3 chairs in front of dressing room which maximum can accommodate 40 - 45 patients at a time.
	At peak hours the patient flow is 150 – 200 people which create chaos in the OPD hours
	All the OP clinics do not have seating arrangements outside
No proper Signage system in OPD	The signage system is very poor.

	At the entrance there is no signage for the various departments like casualty, Lab, paying counter for investigations due to which many times patients gets confused.
	Pictorial signees are not present at many places in OPD.
There is no designated place for storage of old OPD slips.	The old OPD slip is kept at the registration counter.
	The bundles are kept lying under the OPD registration counter in such a way that can be easily stolen, torned.
	There is no provision for the security for the old OPD slip and can be easily accessed by anybody after the OPD hours when the counter is unmanned.
Illumination not as per BIS IS 4347 of 1967 recommended lux in the OPD	OPD area is not well illuminated. The current illumination is 110 lux whereas the minimum recommended illumination ranges between 150-300 lux.
	The OPD corridors do not have sufficient tube lights.

1. **Overcrowding in the OPD Waiting Area properly**
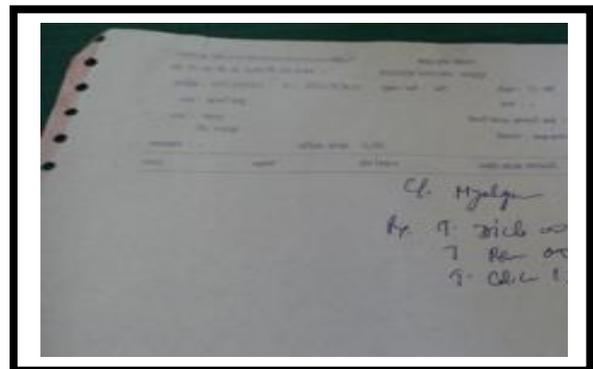
2. **OPD case sheet is not filled**

3. **Overcrowding at the OPD registration counter properly**

4. **OPD timings are not displayed**

In Patient Department:

Flow Chart:-

```
        ┌─────────────────────────┐
        │  REGISRTATION AT OPD    │
        │  OR CASUALTY            │
        │  REGISTRATION           │
        └─────────────────────────┘
                    │
                    ▼
               ◇ DOCTORS
                 CONSULTATION ◇
        ┌──────────┼──────────┐
        ▼          ▼          ▼
   ┌──────────┐ ┌────────┐ ┌────────┐
   │LABORATORY│ │IPD     │ │ X-RAY  │
   └──────────┘ │PAPER   │ └────────┘
        │       └────────┘      │
        │          │            │
        │          ▼            │
        │      ┌──────────┐     │
        │      │ADMISSION │     │
        │      └──────────┘     │
        │          │            │
        ▼          ▼            ▼
        ┌────────────────────────┐
        │        WARD            │
        └────────────────────────┘
                    │
                    ▼
               ◇ DOCTORS
                 CONSULTATION ◇ ──────► ┌────┐
        ┌─────────┼─────────┐           │ OT │
        ▼         ▼         ▼           └────┘
    ┌───────┐ ┌────────┐ ┌──────┐   ┌───────┐
    │REFERR │ │Discharge│ │ LAMA │   │ Death │
    └───────┘ └────────┘ └──────┘   └───────┘
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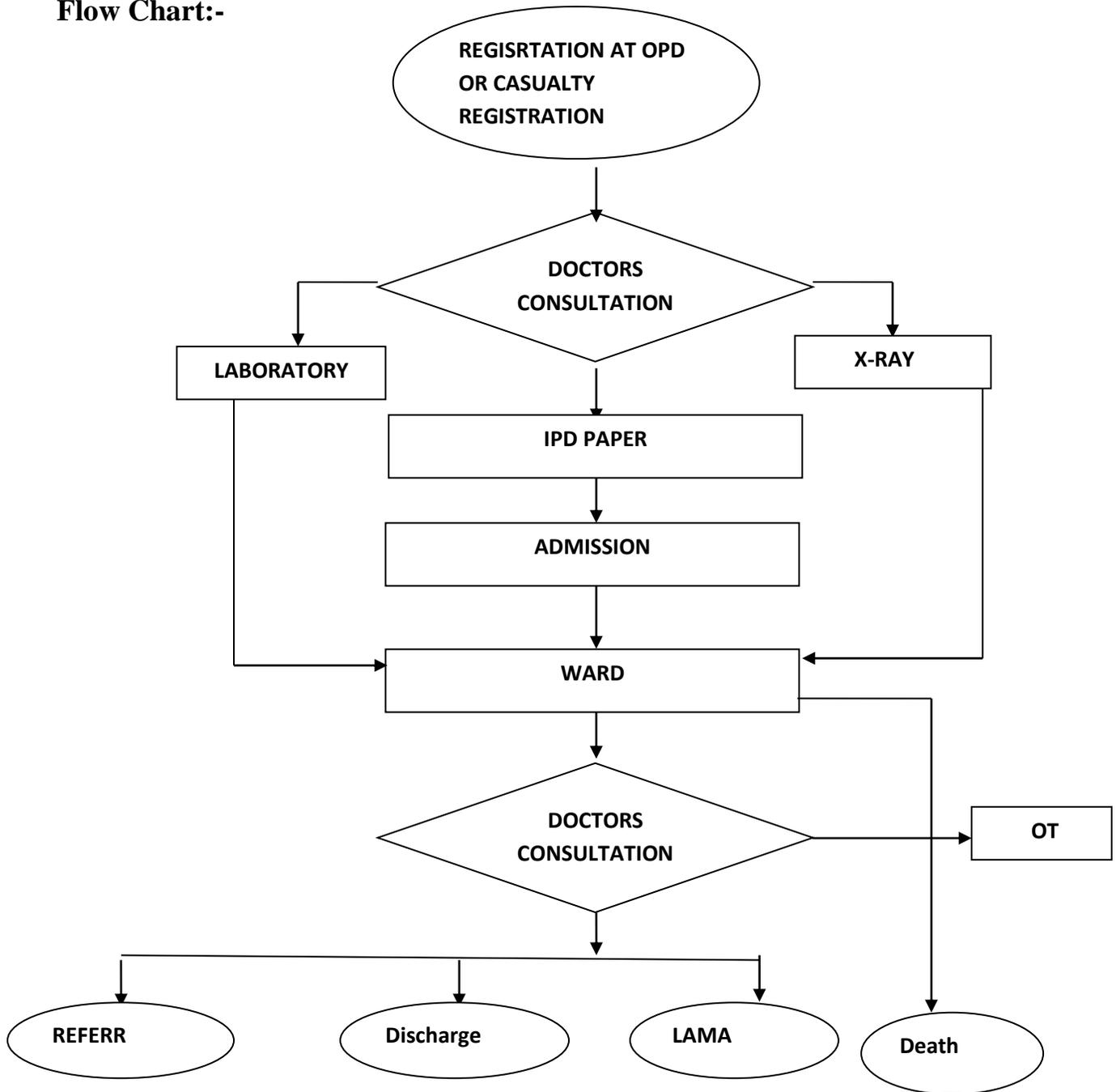
IPD Gaps:

Patient Rights are not taken care of.	Patient is not explained about the treatment being given and the complications associated.
	Discharge plan is not explained to patient/ Relatives.
There are no standard policies for infection control in the wards	There are no policies for preventing infection in the ward.
	There is no monitoring for infection rates in the ward e.g. catheter related infection rate, surgical site infection rate, and bed sores rate.
	Although the infection control committee is in place, regular monitoring of infection control practices are not done
	Fumigation and swab cultures not done regularly in wards
	Surveillance is not done for identifying and preventing post operative infections.
	There are no policies for preventing infection in the burns ward and ICU where chances of infection are high.
	infection control protocols not displayed in the hospital
Information regarding treatment is not given to the patient or patient relatives.	Patients admitted in the surgical wards are not informed about when the surgery will be done or if cancelled. 9 out of 13 patients interviewed were unaware regarding the schedule of their operation.
	In case the operating surgeon/anaesthetist not available on scheduled date of operation and the operation is rescheduled the patient is not informed about the rescheduling/postponement of surgery well in advance.
	The information regarding the discharge is not given to the patients well in advance
No pest or rodent control done in the wards	Rats, lizards, cockroaches, spiders, etc were found in the wards
The samples collected in the wards do not have the date of collection labelled on them.	The samples do not contain the date of collected labelled. The date is mentioned on the requisition sent along with it.
No monitoring of Quality Indicators or incident reporting in IPD	There is no mechanism of monitoring of any quality indicators like incidence of medication error, incidence of patient fall, incidence of any near miss or sentinel events.

	Also there is no mechanism of reporting needle stick injury.
Discharge process is very time consuming	The discharge process takes an average time of about 4-5 hours.
	The entire process is time consuming as the patient has to stand in OPD registration queue, get himself/herself registered as Out - patients , visit doctor in OPD for getting medicine (written on discharge slip) rewritten on OPD slip ,stand in queue at pharmacy, receiving medicines.
	The patient has to follow the above process only because the system does not allow the pharmacist to dispense on IPD discharge card and the OPD slip has to be collected back at the time of medicine dispensing.
In wards there are no criteria/ protocol for allotment of beds to the patients	In wards there is no criterion for issuing beds to the critical patients given beds closer to the nursing station.
Inpatient records can be easily access by outsiders. Space for storing/ keeping the medical files of the patient at the nursing station is not available	Patient BHTs, Lab reports are kept on the table in the nursing station.
	During rush hours when the nurses are busy attending the patient the nursing room remains unsupervised and it is easy to tamper/steal/manipulate the patient records.
	Easy access to records that they can be in wrong hands and be misused.
Hand Hygiene not properly maintained	Hand hygiene is not properly maintained.
	The doctors and staff do not wash hands before and after assessing each and every patient except in Operation Theatre.
	IEC Material related to Hand Hygiene is not displayed.
	Surgical scrub is not available in the Operation Theatre.
Dirty bed sheet spread on the bed	In many wards the linens which are spread in the morning are dirty and blood stained.
	Many a times, if the linen is not dirty, linens are not changed when new patient is arrives
The Pre – operative instruments are not sterilized	The shaver used for shaving patients before operation or delivery is not sterilized before and after use, thus increasing the chance of infection.
	There are only two shavers in labour room whereas every day the around 25-30 patients are prepared for either delivery or LSCS. Therefore the shaver is not disinfected before using it on every patient.

Staff not aware about Post Exposure Prophylaxis	The staff is not aware about the PEP specially the class IV employees.
	Training for the same is required
Recapping of the needles being practiced.	A practice of recapping the needle is very common in the wards and Labour Room.
	The needles are recapped and kept and been discarded later after the nurses gets free time after all their routine work
Visitors policy is not followed in the IPD	A board mentioning the visiting hours is displayed in front of all the wards but it is not followed.
	2 -3 visitors and sometimes even more visitors sit with the patient. Many times the visitors are found sleeping on the patient's bed.
	Visitors are allowed throughout the day causing hindrance in the day to day working of the nursing staff.
	Due to overcrowding cleanliness in the wards cannot be maintained.
	Patients do not get the required rest due to the constant presence of visitors in the wards
Patient Rights are not taken care of.	Patient is not explained about the treatment being given and the complications associated.
	Discharge plan is not explained to patient/ Relatives.
Behaviour of the staff is rude towards the patients and their relatives.	The staffs since being over burdened with the work show rude behaviour towards the patients and their relatives.
	This happens also due to shortage of manpower in the wards.
No proper handing-over taking-over in wards at the time of change of shift	Although there is a handing over- taking over register available in the wards but it is merely filled to maintain the record.
	Bed to bed handing over taking over is not done.
	Usually at the time of shift change the information regarding the patients is given verbally which may lead to communication gap of the nurses while giving treatment to the patient.
There is no interaction of the Doctor in charge of the wards and the Nurse In charge of each wards.	Although there is a designated doctor in charge for each ward, the doctor in charge and sister in charge do not discuss the issues related to the ward except the treatment plan of the patient admitted in the ward.
	There is no record/MOM/letter available in ward to substantiate that there is interaction between doctor in charge and sister in charge.

Adequate personal protective measures not being taken.	In wards the nurses do not wear masks, gloves for any procedures in spite of being provided to them.
	The sweepers while disposing the BMW do not wear gloves, masks, gum boots and water proof aprons.
Disinfection solution (Sodium Hypo chloride) is not prepared daily	Although it is claimed that chemical disinfection is carried out but the solution prepared is in effective as it is not freshly prepared. The same solution is used for more than two days
	The solution is left open and thereby loses efficacy
Important Infection control rates as per given in HICM are not monitored regularly.	There is no system for monitoring of Infection rates like
	- Catheter related infection
	- Surgical site infection
	- Ventilator associated pneumonia
	- Bed sores
	No record is maintained.
Patients are not aware of their rights and responsibilities	Rights and responsibility of the patients are not displayed in wards. Rights regarding privacy, filing complaint, periodic details of bill, etc are neither displayed nor communicated to the patient.
	Responsibility of the patient is not displayed in the wards. Responsibility like following doctors instruction diligently , to respect the treating doctor and nurse, to pay the bills for the treatment received are not displayed as well as communicated to the patients
No mechanism of capturing patient feedback or complaint registration system in place.	Although a complaint register is provided in every ward the patients are not given information about the availability of complaint register in wards.
	There is no mechanism to capture the perception towards the hospital services and staff.
	There no system for Complain management or solving the disputes in IPD
Toilets are dirty	The toilets in wards are washed only once in a day.
	The toilets get dirty by afternoon and starts stinking.
	Monitoring of cleaning is not done.
Delayed response by PWD for routine renovations	The response time of PWD regarding the complaint for any renovation is very long.
	Correspondence with PWD is already been done but no action taken.

	For example hospital requires fresh electric wiring Lt No. 11112627 Dt. 26/06/11, Labour room repair Lt No. 13334 Dt. 09/09/11, Repair of window panes/glasses Lt No. 15493 Dt. 21/10/11.
No records are maintained whether the referred out patients are actually reaches the referred facility or not.	There is a chance of malpractice on driver's part where driver may influence the patient's relatives and may refer the patient to any local/pvt nursing home.
	The continuity of care may be affected.
Many times floor bed given in the wards is not issued with bed sheets	Many patients are not given with bed sheets in the wards for floor beds due to less stock of linens with them.
The nurse to patient ratio is very less.	Nurse: Patients ratio is very less from the standard (1:8) but here only 1-2 nurse in day time and one nurse in night time usually in wards.
	During night shift single nurse attending 30-40 patients alone.
	Quality of treatment is getting affected as there is absence of nursing staff in the wards
Channel gates the entrance at the wards requires repair.	The channel gates are jammed and rusted and requires overhauling.
	Levelling of the floors at the entrance of ward is not even causing difficulty to the move the stretcher/trolleys smoothly which might result in falling of patients from stretcher.
Drinking water facility not available in the wards for the patients and relatives.	The container used for storing drinking water is not regularly refilled.
	The container is not cleaned regularly which could lead to decontamination of the water and thereby causing infection.
Basic patient facilities not available in the ward.	Bed side Lockers available but broken.
	One stool/chair for each bed provide for sitting of Patient's attendant is not available
No separate place in wards to keep the dead bodies	After death of the patient the body is kept on the bed only which he had occupied before.
	The body is kept in the in the ward until it is released to the relatives causing inconvenience to other patients.
	No death management plan available in the wards
Illumination not as per guidelines	Illumination is only 51 lux whereas the minimum BIS Standard IS 4347 of 1967 recommended lux is 100-150.

There is no proper maintenance of equipment and furniture in wards.	Out of total 127 fans in patients areas (wards) 46 are not in working condition.
	Out of total 119 tube lights in patient's area (wards) 29 are not in working condition.
	Many beds in the wards are broken, and not in usable condition.
Patients identification system is absent	Uniform for the admitted patients are not provided by the hospital. The chance of patient absconding is very high.
	It is difficult to identify the patient when they are taken for the investigation like X-Ray, USG etc.
Spacing between beds is not as per guidelines.	Space between two beds is not being maintained as per standards (i.e. 3.5 ft. between two beds) due to high patient load. Currently it varies from 1.5 feet to 2 feet
	In many wards the functional beds are more than the sanctioned beds due to heavy patient flow therefore the beds are kept close to accommodate more patients.
The Bed number in the ward is not written or displayed.	All the wards have about 25 – 30 beds. There is no numbering system on the beds but the files at the nursing station are kept in files with bed numbers
	Many times it creates confusion within the staff for identification of patients. It is very difficult to remember the name of the patient every time
Many a times the number of patients admitted is more than the sanctioned bed strength.	A practice of putting floor beds to cope up with the rising number of admission. Since the govt. Hospital cannot refuse care to any patient it puts a huge pressure on hospital resources and infrastructure.
	Floor bed leading to a crowded ward and compromising the space and privacy of all the patients.
	While many beds in one ward sometimes remain vacant other patients have more patients than available patients.
No toilets for physically challenged patients.	Toilets for physically challenged patients are not available.
	Also bed pans are not provided for the patients.
The lift connecting to all the wards is not in good condition and requires repairs.	There are two lift available in the IPD building out of this two one is fully automated and under AMC but remains locked very often due to some technical problems (works only 5-6 days in a month).

	The second lift is maintained by the PWD, AMC of that lift is between PWD dept and the hospital. If any breakdown occurs the PWD is been informed and PWD dept subsequently inform the agency and the agency people will come and repair which is always a time consuming affair.
	No record for maintenance is being kept.
No separate death exit route.	The dead bodies are taken out by the same route which is used for general patients and other peoples visiting the hospital

1. IPD Area is not clean and not properly maintained.   2.   IPD Toilets are not clean regularly.

Table Description(Annexure):

According to above data shown in the table, maximum scores are different for OPD and IPD area. These scores are depending upon no of subcategories in each area. For OPD and IPD category, compliance score and compliance rate are calculated.

Category 1 i.e. OPD has maximum compliance score 60 which is divided into 6 subcategories for e.g: Adequate space ,patient calling system, OPD rooms avaliable for obstetric and neo-natal consultation, Area of examination with sufficient privacy, Provision of essential and emergency drugs as per operational guidelines for MCH, Cleanliness of OPD area

Each subcategory is given maximum compliance score 10 that means the service is fully compliant to the requirement, if the service is partially compliant to the requirement it is given compliance score 5, and if the service is non compliant to the requirement the score is given 0. For all three types of score, three types of parameters are decided and whichever parameter meets with the available service, the respective score is given to that service.

Finally all scores of the category are totaled and that totaled score makes compliance score of the service delivery and after that compliance rate is calculated by using this score.

Compliance Score Graph (graph 1): A bar graph is made to show compliance score for OPD & IPD

Compliance Rate Graph (graph 2): Bar graph is made to understand the comparison of compliance rate for OPD & IPD

Graph 1: Score Graph of FFH Checklist's Compliance Score
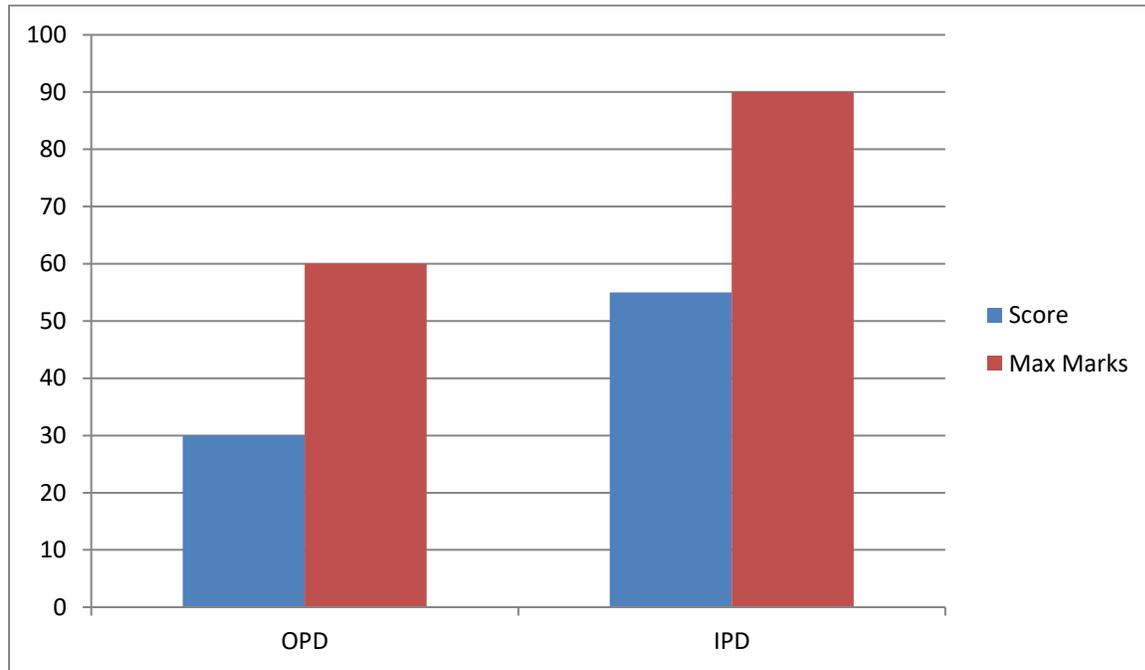
Figure 1 Score Graph

Graph 2: Compliance Rate Graph of FFH Checklist's Compliance percentage

Compliance Percentage

(Bar chart showing Compliance Percentage for OPD at approximately 50 and IPD at approximately 61, with y-axis scaled from 0 to 70 in increments of 10.)
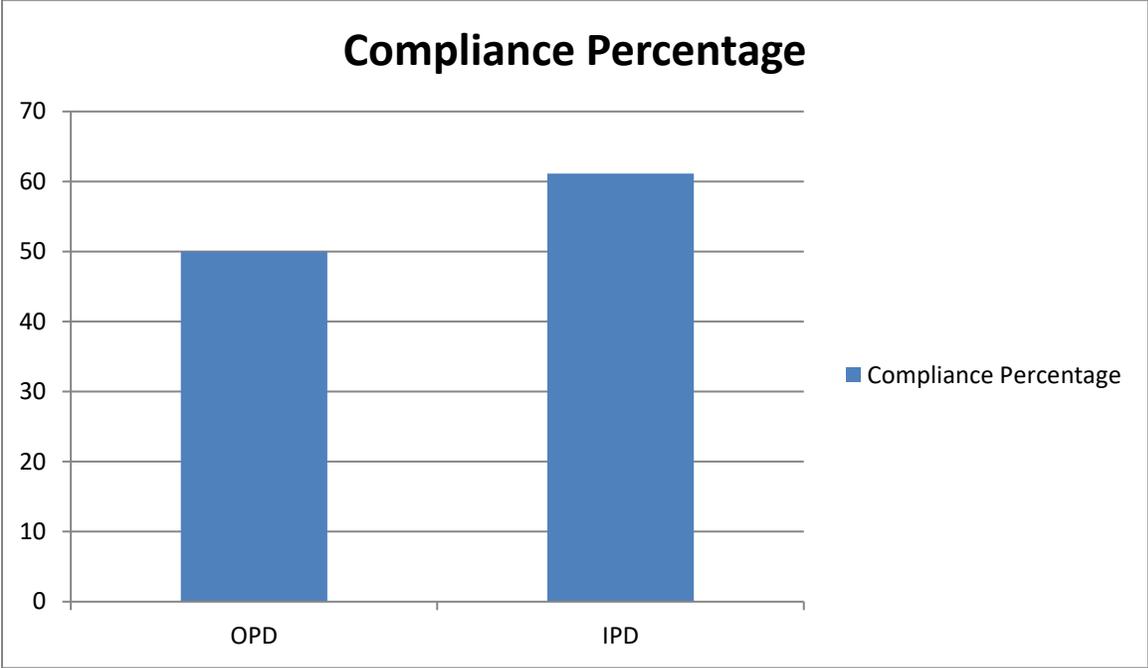
Figure 2 Compliance Rate Graph

Chapter 6: Recommendations

Action Plan suggested OPD:

1. Directional signage should be present in the OPD area both in local language as well as symbolic sign for the illiterate people.

2. Fire exit and caution signage should be displayed in the area . fire safety training should be provided to all hospital staff.

3. Cleaning timing of the OPD / Toilets should be strictly followed, it should be regularly monitored by the in charge and Matron and regularly visited by the mukadam/ contractor. Housekeeping staff number should be maintained.

4. Patient load is high and attendants are present at each OPD , the norms of on patient at a time should be strictly followed by the attendant , should be regularly monitor by the in charge and Matron.

5. Printed list of available medicine with respect to the departments should be made by the pharmacy department and should be given to the all OPD. Also it should be regularly updated at least when stock of the OPD pharmacy is indent.

6. OPD Timings should be displayed at the entrance , though it is present at the registration counter but it is not clearly visible to all patients

Action Plan suggested IPD:

1. As chandrapur where district hospital is located is geographically not present in any disaster like earthquake, flood or any geological disaster. But disaster life fire can occur so for the purpose we can give training to the staff about disaster management, mock drills will be conducted. Suggestions on fire safety measures can be taken from the district fire officer/control board.

2. Sanitary in charge, RMO and Civil surgeon must come on round and should check the cleanliness in the whole hospital

3. There should be SOP's for the updating of the emergency kit in each ward. Psychiatric ward required emergency medicine very exceptionally. The expiry should be checked on the regular basis. And should be displayed and stock nearer to the expiry should return to the store monthly. Dark board is required for the same.

4. Discharge summary is usually filled by the Medical officer, instruction should be given to the doctors about the complete feeling of the forms. Internal quality auditor should monitor the process on regular basis.

5. There should be strict policy for entering in the ward, security guard should appoint at the entrance of the inpatient department and strict the duties and responsibility should be given to the security guard. Visitor's Chart can be displayed at the entrance of each ward.

6. RMO /CS with the help of some clinical expertise from each specialization can plan and do clinical audit for standard prescription practices at least once in 3/6 months.

Chapter 7: Conclusion:

The topic selected to study "**GAP ANALYSIS REPORT OF OPD & IPD AND ASSESMENT OF COMPLIANCE TO FFH STANDARDS FOR OPD & IPD OF DISTRICT HOSPITAL CHANDRAPUR**" revealed and find out the gaps which need to be full filled for the quality improvement of the district hospital, chandrapur. By achieving the quality care services District Hospital is able get ISO 9001:2008 certification. Gaps of all the departments are mainly process gaps, some of those gaps are infrastructure, equipment and manpower gaps. Study also revealed that what specific and general action to be taken for full filling those gaps. What kind of trainings is required and will be given to the staff including nurses, housekeepers, ward boys and medical officers. Special consideration on gaps of the department is given and action plan is prepared and need to be monitored by internal experts which include Matron, Resident Medical Officer, Civil surgeon and Nursing In Charge.

Chapter 8: References:

1. Gap Analysis report for Pondichery Institute of Medical Sciences.

2. Dr John Ovretveit, Dr Abdul Al Serouri- Evaluation of Quality Management System in District Hospitals; 2005

3. Quality Improvement ISO Experience in EAG State – Report by National Health System Resource Center (New Delhi)

4. Jaap van den Heuvel, Lida Koning, Ad J.J.C. Bogers, Marc Berg, Monique E.M. van Dijen- An ISO 9001 quality management system in a hospital: Bureaucracy or just benefits?, International Journal of Health Care Quality Assurance. 2005; 18(4-5): 361-369

5. Alphen aan den Rijn- The Effectiveness of ISO 9001 and Six Sigma in Healthcare. 2006

6. IPHS manual for 201-300 bedded hospital.

Annexure:

	Outpatient Department	Area	Adequate space & sitting arrangements for waiting patients with the provision of drinking water, fans/coolers		
			Well ventilated space with adequate number of chair, trolley, fans, TV, facilites for drinking water and neat & clean toilet	10	
			Partial fullfilment of requirement	5	5
			Grossly inadequate conditions	0	
			Patient calling system		
			Electronic Token system with display and public announcement system	10	
			Manual Token system with electronic display	5	
			No patient calling system	0	0
			OPD rooms avaliable for obstetric and neo-natal consultation		
			Separate OPD rooms for obstetric and neo-natal consultation are available	10	10
			Obstetrics & Neo natal consultations are being given in a common room	5	
			No OPD Room facility for Obstetrics & Neo natal consultation	0	
			Area of examination with sufficient privacy		
			Sufficient area for examination & separate cabins are provided	10	
			Sufficient area for examination & screens are provided	5	5
			No provision for examination & privacy of patients is made	0	
			Provision of essential and emergency drugs as per operational guidelines for MCH		
			Provision and availability fo Essential and Emergency drugs for Emergency and routine treament of Pregnancy related conditions and Paediatric ailement are available as per MCH guidelines	10	
			Few of Essential drugs are not available. However, a large number of essential drugs are available including Oxygen supply on 24x7 basis	5	5
			There are frequent stock-outs of Essential drugs and Emergency drugs.	0	
			Cleanliness of OPD area		
			OPD area is cleaned 3 times a day and as anad when required. A checklist is maintained by the housekeeping staff	10	
			OPD is cleaned only twice a day. No checklist is maintained	5	5
			OPD is very unclean and untidy	0	
			Sub Total	**60**	**30**
5	In patient department	**Space between Beds**			
			minimum 3.5 feet space between two beds and 5 feet between two rows.	10	
			minimum 3 feet space between two beds and 4 feet between two rows.	5	
			less than 3 feet space between two beds and less than 4 feet between two rows.	0	0
			Hot water supply to labor room/OT/Wards		
			24x7 runnig hot water facility is available in labour room, OT, and wards through Geyser or solar water heating system.	10	
			LPG gas cylinder and stove is available for boiling water.	5	5

		no arrangement for hot water supply to labor room, wards and OT.	**0**	
		Handing over system of duties by outgoing nursing staff to incoming nursing staff		
		written handling over system of duties by outgoing nursing staff to incoming staff.	**10**	
		verbal handling over system of duties by outgoing nursing staff to incoming staff.	**5**	**5**
		No handling over system of duties by outgoing nursing staff to incoming staff.	**0**	
		Adequate ventilation and lighting system		
		Adequate lighting (150-300 Lux as per BIS standard) & ventilation (windows and exhaust fans) are available	**10**	
		Inadequate lighting (100-150 Lux) & ventilation (with broken windows and no exhaust fans)	**5**	**5**
		Grossly inadequate lighting (less than 100 Lux) & poor ventilation (broken windows)	**0**	
		Avalibility of supportive infrastructure like beds with bed sheets and pillows, IV stand, side screen, side lockers, bed pan, emergency trolley		
		Availability of supportive infrastructure like beds with bed sheets and pillows, IV stand, side screen, side lockers, bed pan, emergency trolley	**10**	
		Upto two requirements of supportive infrastructure are not available	**5**	**5**
		More than 2 requirements are not met	**0**	
		Avalibility of toilet, bathing space		
		Separate Male and Female toilets and bathroom in all the wards	**10**	**10**
		Common toilet and bathroom for all the wards	**5**	
		No toilet and bathroom facility in the wards	**0**	
		Provision of essential and emergency drugs as per operational guidelines for MCH		
		Provision and availability of all Essential and Emergency drugs are available as per MCH guidelines	**10**	
		Few of Essential drugs are not available.	**5**	**5**
		There are frequent stock-outs of Essential drugs and Emergency drugs.	**0**	
		Avaliability of adequate doctor and nursing staff		
		Availability of at least one trained nurse on 24x7 basis in each ward. Admitted patients have been seen by at least twice daily by doctor, Support staff is available on 24x7 basis to help admitted patients	**10**	**10**
		One of the above-mentioned condition is not met	**5**	
		More than one above-mentioned requirements are not met	**0**	
		Record keeping of indoor patients – quality of clinical notes, and medical record storage system		
		Clinical notes are recorded. Patient's consent is taken prior to any procedure. Patients are handed over discharge sheets at time of getting discharge from the facility. TPR & BP chart is maintained. There is a written handing-over / taking over procedure	**10**	**10**
		Upto two above-mentioned requirements are not met	**5**	
		More than two requirement are not met	**0**	
		Sub Total	**90**	**55**