

**Summer Training at
Max Multi Specialty Hospital, Gurgaon
(April 3 to June 2, 2017)**

- **Study of Knowledge Attitude and Practices of Nurses Regarding Infection Control in Hospital**
- **Hand Hygiene Compliance in Nursing Staff Review of Literature**

**By
Shruti Gangal**

**Under the guidance of
Dr. Geetika Goswami**

**MBA Hospital & Health Management
2016-2018**


**Institute of Health Management Research
The IIHMR University, Jaipur
2017**

CERTIFICATE

This is to certify that **Dr. Shruti Gangal** has undergone summer training at **Max Multispecialty Hospital, Gurgaon** from 3rd April to 2nd June 2017.

The candidate herself completed the project assigned to her during summer training. Her approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health Management.

I wish her success in all her future endeavors.



Col. (Dr.) Ashok Kaushik

Dean (Academic & Student Affair)

The IIHMR University, Jaipur



Ms. Geetika Goswami

Assistant Professor

The IIHMR University, Jaipur

TO WHOMSOEVER IT MAY CONCERN

Date- 2/6/17

This is to certify that Dr Shruti Gangal has successfully completed her two months summer internship at **Max Hospital, Gurgaon**. She has submitted her projects titled ' KAP Study of Nursing staff regarding infection control' , 'Study to determine hand hygiene compliance of nursing staff' & ' Study reasons of patients going LAMA from Emergency Room'.

During her training period she was found hardworking and inquisitive.

We wish her all the best in all her future endeavors.

For Max Hospital, Gurgaon



Dr. Kapil Goyla

Manager- Medical Operations

DECLARATION

I do hereby declare that I am a student of 1st year, MBA in Hospital and Healthcare Management, IIHMR University, Jaipur, Rajasthan session 2016-2018

I would like to state that I have carried out my Internship on the topic "A STUDY ON **KNOWLEDGE ATTITUDE AND PRACTICE (KAP)** OF THE NURSING STAFF REGARDING INFECTION CONTROL AND TO GIVE RECOMMENDATIONS AND SUGGESTION FOR THE SAME ", "TO STUDY THE HAND HYGIENE COMPLIANCE AMONG THE NURSING STAFF", "TO DETERMINE THE REASONS WHY PATIENTS TAKE LEAVE AGAINST MEDICAL ADVICE FROM EMERGENCY DEPARTMENT" at Max Multispecialty Hospital, Gurgaon from April 3rd to June 2nd under the guidance of Dr. Kapil Goyla at Max Multi Speciality Hospital, Gurgaon for the partial fulfilment for the degree of MBA in Hospital and Healthcare Administration.

This project work is my own and has not been submitted to any of the other Institute or University for the purpose of award of any degree or diploma.

Dr. Shruti Gangal

IIHMR University

(2016-2018)

ACKNOWLEDGMENT

A summer training is a golden opportunity to learn and enhance one's skills and knowledge.

I consider myself very lucky and honored to have wonderful people leading me through the completion of this project.

I would like to take this opportunity to express my immense gratitude to Dr.Kapil Goyla, Manager- Medical Operations, Max Hospital Gurgaon for his guidance and constant encouragement and giving me this opportunity to complete my internship from the esteemed hospital.

I also wish to extend a special thanks to my mentor Dr. Mayuri Mehta, Manager- Medical Quality who inspite of being extraordinarily busy with her duties, took time to hear, guide and keep me on the correct path and allowing me to carry out my project work during the training

TABLE OF CONTENTS

1. ABBREVIATION	
2. GENERAL FINDINGS	
3. HOSPITAL AS AN CONCEPT	
4. REVIEW OF LITERATURE	
5. RATIONALE	
6. OBJECTIVES FOR DOING STUDY	
7. RESEARCH METHODOLOGY	
8. DATA ANALYSIS & RESULTS	
9. OBSERVATIONS AND FINDINGS	
10. RECOMMENDATIONS	
11. CONCLUSION	

Abbreviation:

CAUTI – CATHETER ASSOCIATED URINARY TRACT INFECTION

CLABSI - CATHETER LINKED ASSOCIATED BLOOD STREAM INFECTION

COWS – COMPUTER ON WHEELS

CPRS - COMPITERISED PATIENT RECORD SYSTEM

CQI - CONTINUOUS QUALITY INDICATORS

EMO - EMERGENCY MEDICAL OFFICER

GDA - GENERAL DUTY ASSISTANT

HIS - HOSPITAL INFORMATION SYSTEM

HHC - HAND HYGIENE COMPLIANCE

LAMA- LEAVE AGAINST MEDICAL ADVICE

MRD - MEDICAL RECORDS DEPARTMENT

SSI - SURGICAL SITE INFECTION

TL - TEAM LEADER

VAP - VENTILATOR ASSOCITED PNEUMONIA

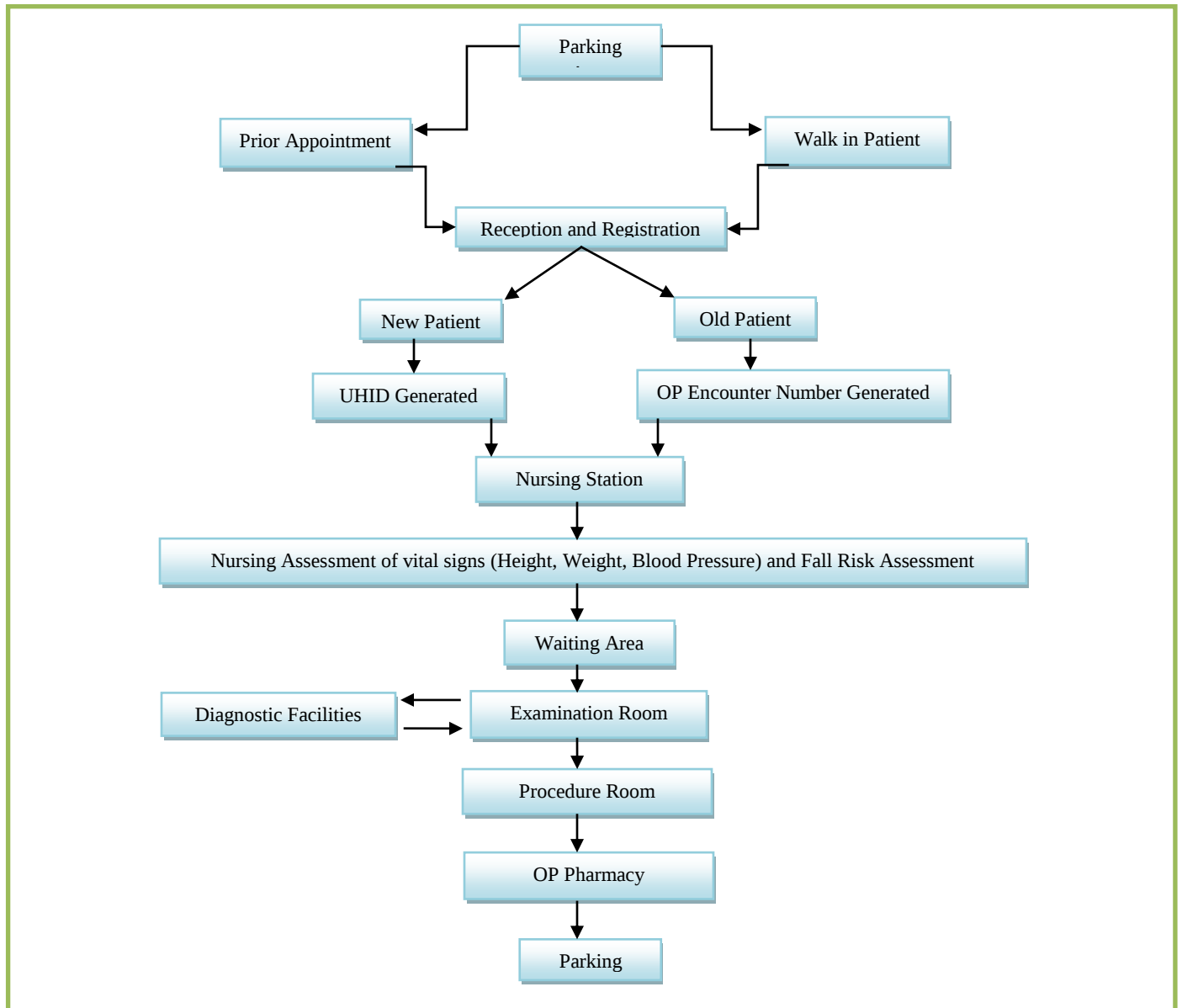
GENERAL OBSERVATIONS AND FINDINGS ABOUT THE HOSPITAL

OUT-PATIENT DEPARTMENT

There are OPDs on all the three floors Max hospital, Gurgaon concerning different specialities. Appointments are centralized and are recorded on the Hospital Information Management System. As soon as appointments are fixed, a text message is sent to the patient confirming the appointment, and a reminder message is sent on the day before the appointment. No walk-in patient is turned away, and the staffs try to accommodate these patients between the appointments already scheduled for the day.

- Nowadays, Max has also tied up with PRACTO for online appointment booking to increase patient convenience and reduce waiting time in the lobby.
- Each OPD waiting area has the capacity to handle 20-30 patients waiting.
- In case of a new patient, registration is done which is valid pan-Max and for life time of the patient and a UHID is created which becomes a unique identification for all his health-related information.

The general process flow that is followed in all the OPDs is as follows:

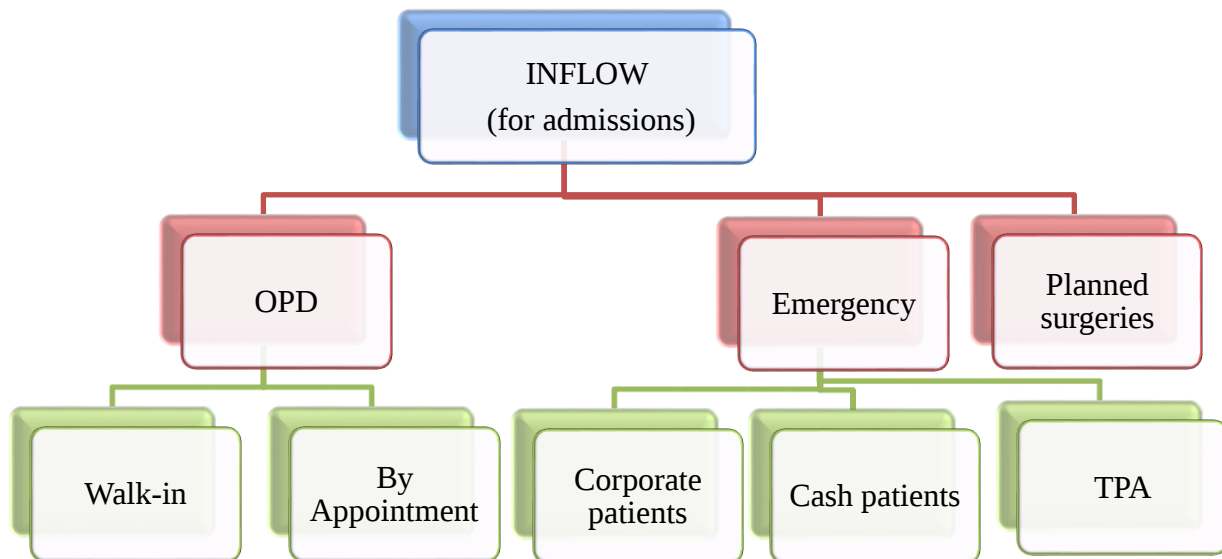


- Huge rush during peak hours such as morning.

ADMISSIONS DESK

If the patient has to be admitted to the hospital, he/she first reports to the admissions desk wherein all the paperwork is completed, do's and don'ts as well as patient's rights and duties are explained to him. An initial token amount is deposited here by the patient which is according to his preference of the room (be it economy, single, twin sharing)

- In case of TPA patients, the admission has to be reported to the insurance company within 24 hours.

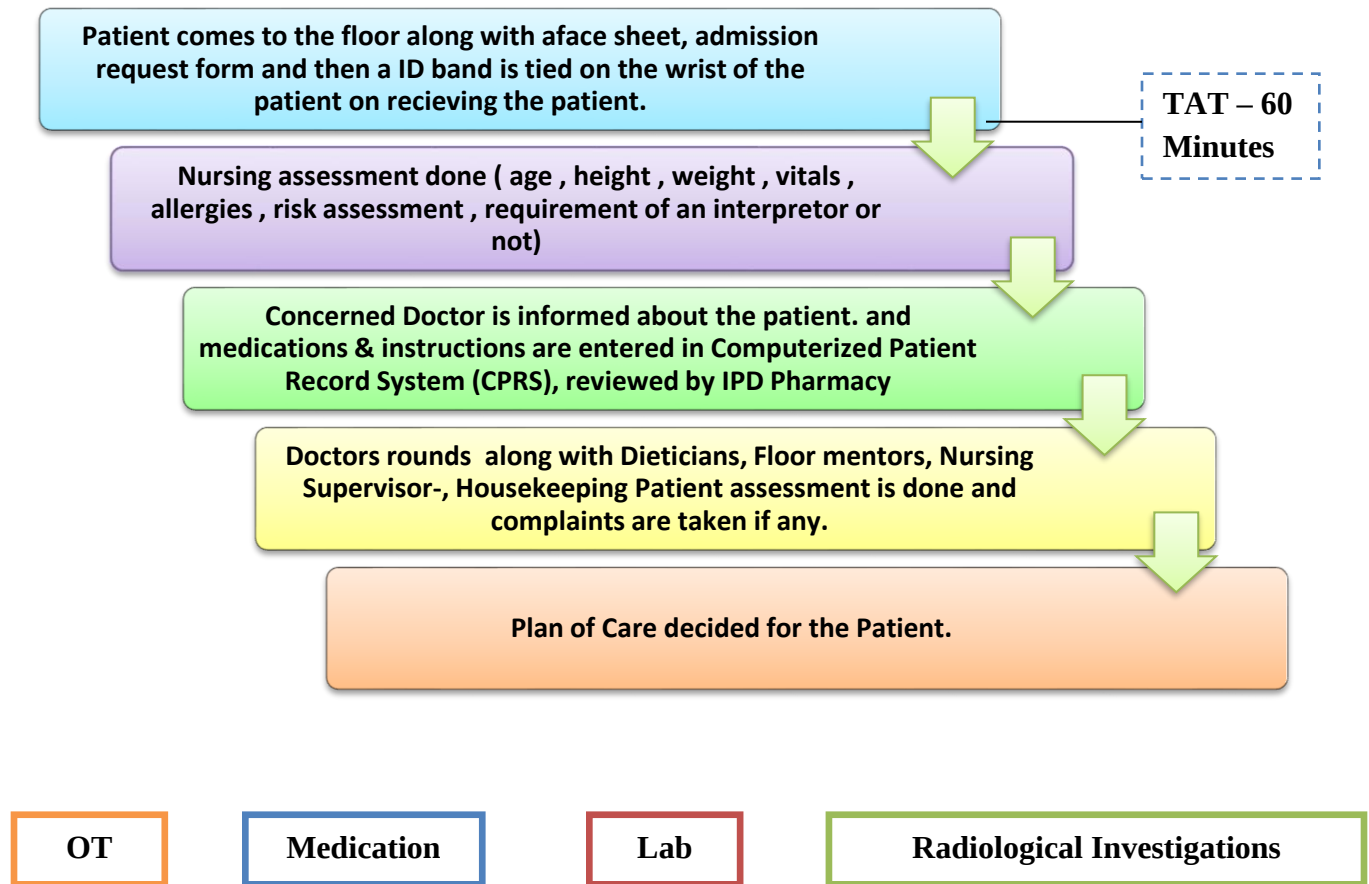


IN-PATIENT DEPARTMENT (IPD)

- IPD is distributed over two floors (2nd-3rd) of Max hospital including a total number of 72 beds.
- Every bedside has:
 - Room equipment checklist – side rails, Oxygen, Suction
 - Important Instructions
 - Nursing call bell
- The rooms available in IPD have the following structure of beds per room:
 - Economy room – 3-4 beds per room.
 - Twin Sharing – 2 beds per room
 - Single Deluxe
- There are 2 nursing stations on the second floor and 1 exclusive nursing station for the gynae ward. There's another nursing station that is located on the third floor.
 - Information Board covering:
 - Designation & Contact numbers of
 - Duty doctor
 - Administration Staff
 - Floor Mentor
 - Support Staff
 - Ward Secretary
 - Bed Manager
 - Nurses' names with shift timing and designation(8-10 nurses per shift)
 - Crash Cart parked next to the nursing station
 - Computer on wheels (COW) - 4
 - Cupboards with forms- down time form, investigation track sheet, blood request form, PAC sheet, informed consent, inventory files and registers
 - Medication rooms – 1 ;Pantry – 1
 - Biomedical Waste Disposal
- Nurse to bed ratio = 5:1 or 6:1

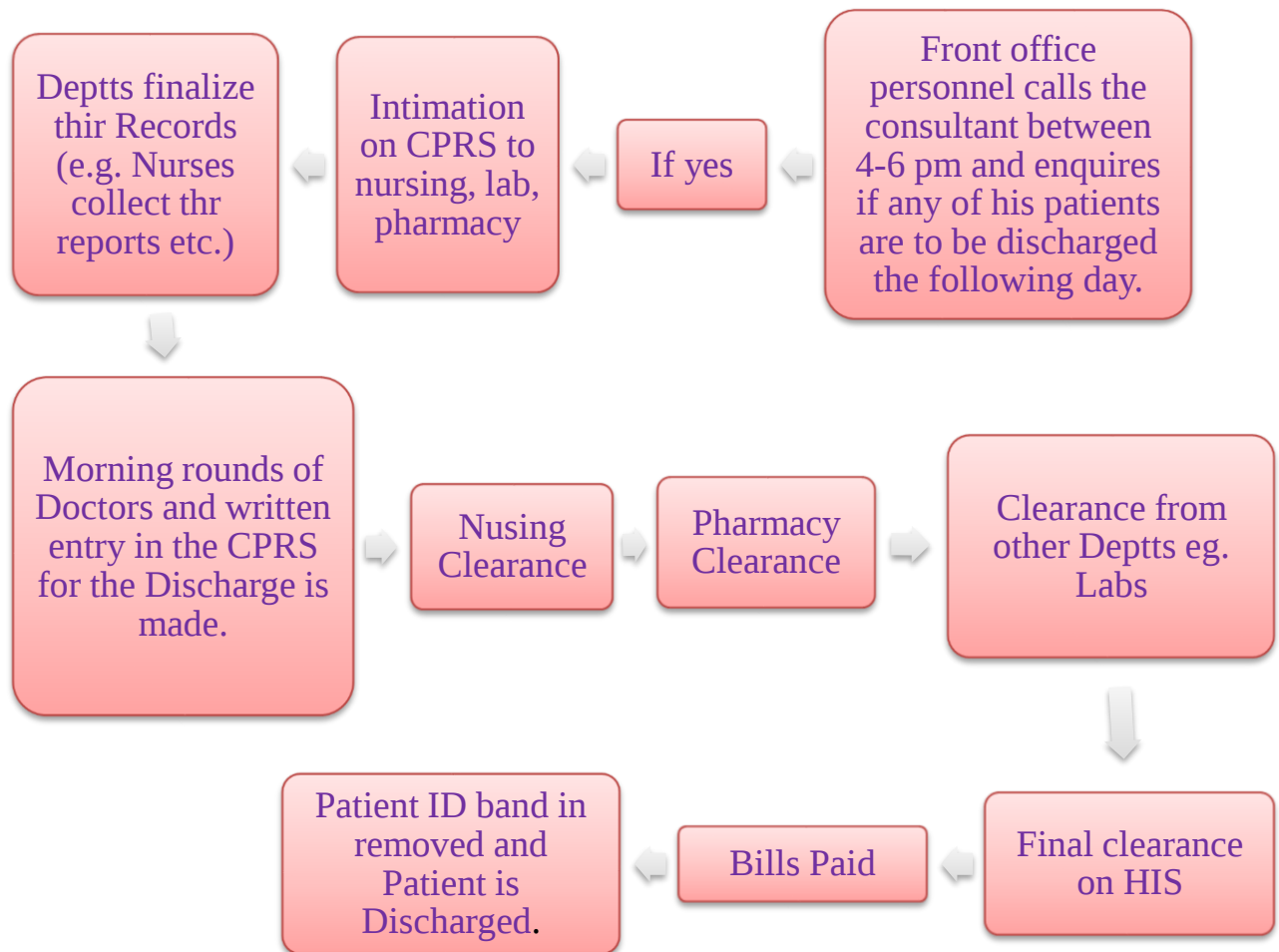
- General Duty Assistants (GDAs) = 2-3 in every shift
- Average Length of Stay (ALOS) for normal surgeries = 2.6 days

Process of admission of new patient to IPD



- **BARRIER NURSING-**
Isolation of the patient in case the blood or urine culture of the patient has been tested positive for any infection so that the infection doesn't spread to others .
- **REVERSE BARRIER NURSING-**
Done in cases where patient is immuno compromised so that infection doesn't travel to him from others.

Process of Discharge of patient from IPD.



EMERGENCY DEPARTMENT

This department provides initial treatment for a broad spectrum of illness and injuries, some of which may be life threatening and require immediate attention. It is located at the ground floor with its own dedicated entrance and operates for 24 hours a day.

Ambulance - 1 ACLS (with CCTV camera for telemedicine, Suction Cardiac Monitor, Defibrillator, Oxygen Pump)

Patients are either transferred to other departments or are discharged within 4 hours. Max Hospital had made a world record for management of MI patient in emergency department from entrance to the balloon time in cath lab, in less than 35 minutes.

Response time:

- EMO response time <1 min
- Consultant response time <60 min

- Code blue response time <3min
- Ambulance response time <10 min

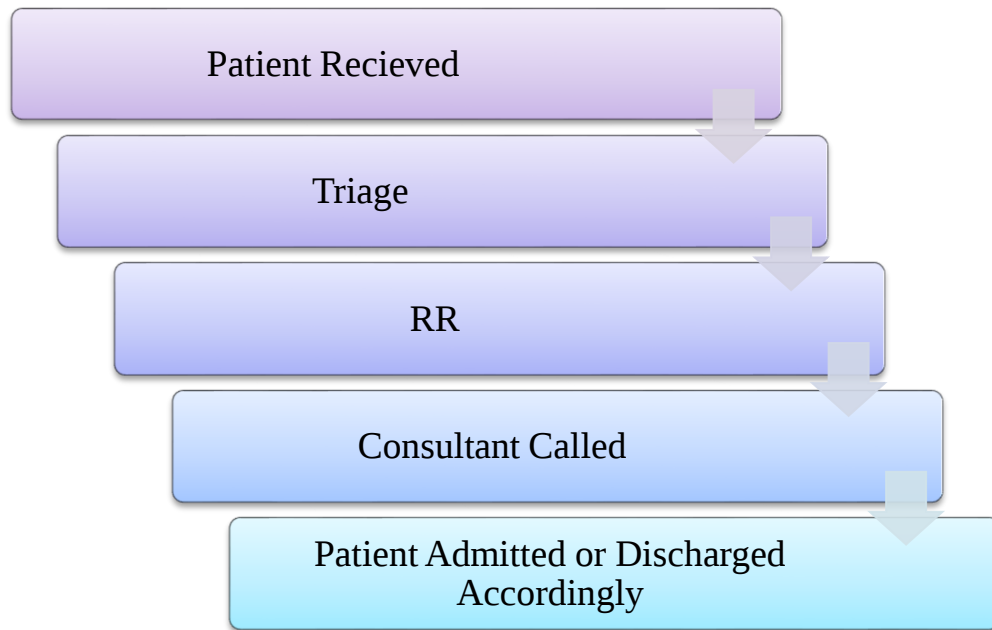
Infrastructure:

- Total 6 bedded triage
- Resuscitation/Major Trauma -2 beds
- Pediatric Trauma – 2 beds
- Minor Trauma/Observation – 2 beds
- Emergency reception is located in the centre of the urgent care area
- Doctors' duty room is located at the right side of the reception
- Store room- is located at the left side of the reception. Medications are filled and stocked for two days is kept in advance for Sunday.
- HIS and CPRS
- COWS(computer on wheels)
- Waiting area for patient's attendants is outside the department.

Staffing:

1. Senior consultant (Emergency medical officer)
2. 2-4 doctors (On-call)
3. Nursing Team leader
4. Nurses: 4 (per shift)
5. Paramedical staff for ambulance
6. 2 GDA per shift
7. Outsourced staff: security personnel.

Process Flow



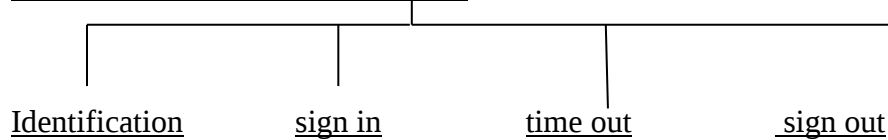
OPERATION THEATRE COMPLEX

Operation theatre complex is located on the first floor. Operation theatre complex has 3 operation theatre assigned to various departments. Cardiac, oncology, bariatric laparoscopic, gynaecology, ENT, Orthopaedic, neurology and general surgeries are performed in these operation theatres.

Organization of staff: The staffs of Operation Theatre are organized into four groups: Anaesthetist and surgeon, nursing staff, technician, supportive staff.

- Average number of cases per day - 10
- Temperature - 21 approx
- Humidity – 50-55
- Light – 2000 lux in the centre of OT table and decreases on moving farther
- Each OT complex has a separate material store and a TSSU_(Theatrical Sterile Supply Unit).
- Staffing ratio- Nurses: patients – 4:1(pre-op) ; 2:1(post-op)
Technicians: patients- 1:1
- OT Utilisation – average is 70%
- Max Hospital has got a GREEN OT certificate which signifies minimal amount of pollution caused by OT gases and acceptable standards of practices are being followed here.
- Sterilisation is done by ETO (12 hrs); autoclave. Fumigation is done twice a day in the morning and evening.
- Bio medical waste disposal is done every 2 hours.
- No. Of pre-op & post-op beds -3

- **Surgical safety check list includes**



- **Quality indicators:** wrong patient, wrong surgeon , wrong surgery , return to OT(within 7 days) , waiting time for OT

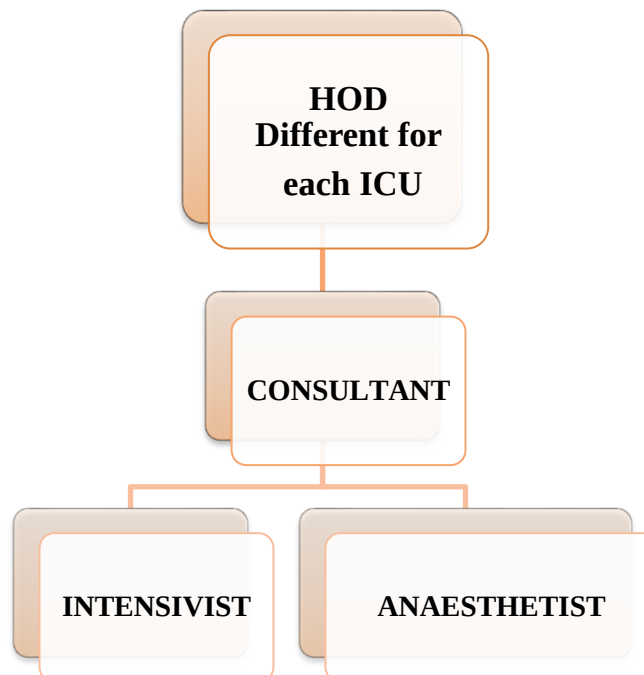
INTENSIVE CARE UNIT (ICU)

Max Hospital, Gurgaon has 1 Intensive Care Unit in the Hospital

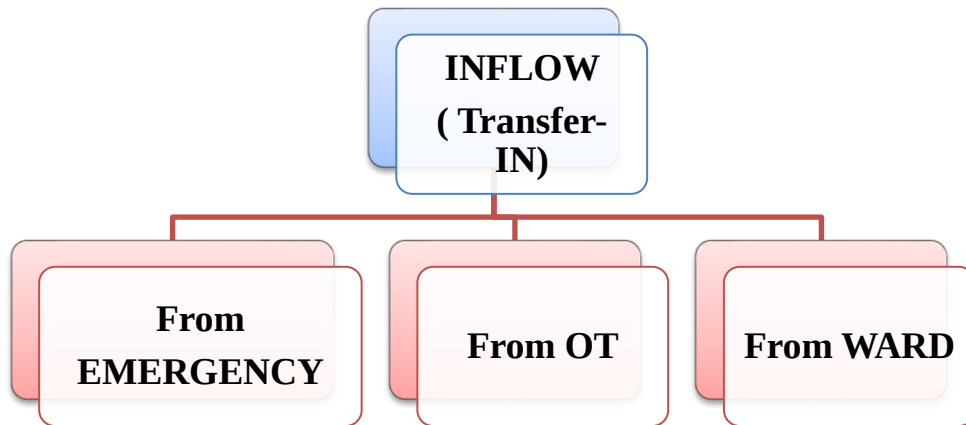
No. of beds – 13 bedded ICU with a regular service of Intensivist

No. of nurses – 8-10 nurses per shift with a nursing TL.

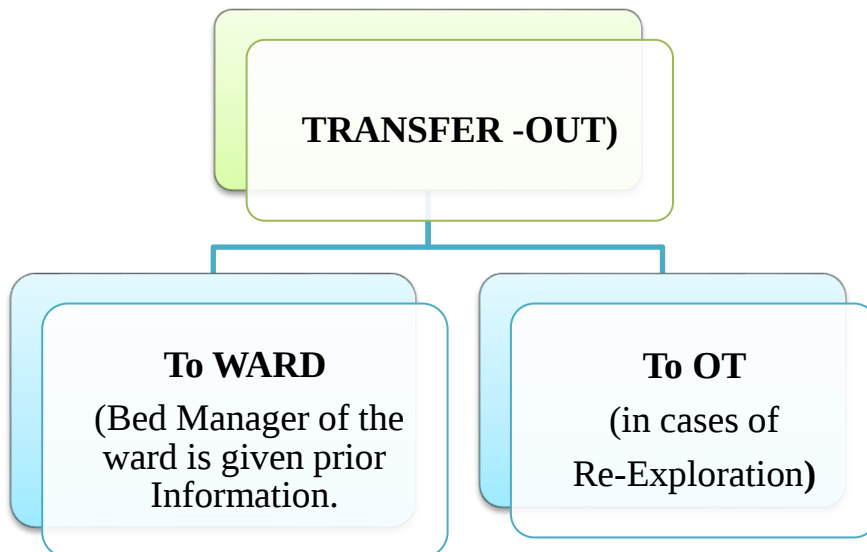
Hierarchy



Patient Flow



Beforehand information is given on call to the ICU for *transfer-in* of the patient.



- Patient: nurse – 1:1(for all patients)
- Patient counselling – done throughout the day ; Relative counselling – done twice a day by the Intensivist .
- Protocol for infected patients –
 - Isolation
 - Visitor's policy- no visitor allowed inside the isolation room
 - Aseptic policy
 - Separate linen disposal in separate bags
 - Separate dressing trolley
 - Separate housekeeping material- dusters, mops etc

- Quality indicators -
 - Patient falls
 - Bed sores
 - Medication error
 - Nosocomial infections

All the Quality indicators are duly noted in “Quality Flash” and it is audited time to time and measures are taken to reduce the number of incidents.

CATH LAB

Catheterization laboratory or cath lab is an examination room with diagnostic imaging equipment used to visualize the arteries of the heart and the chambers of the heart and treat any stenosis or abnormality found.

Diagnostic procedures performed here are:

- Angiography
- Electrophysiology study
 - Cath study

Other procedures are:

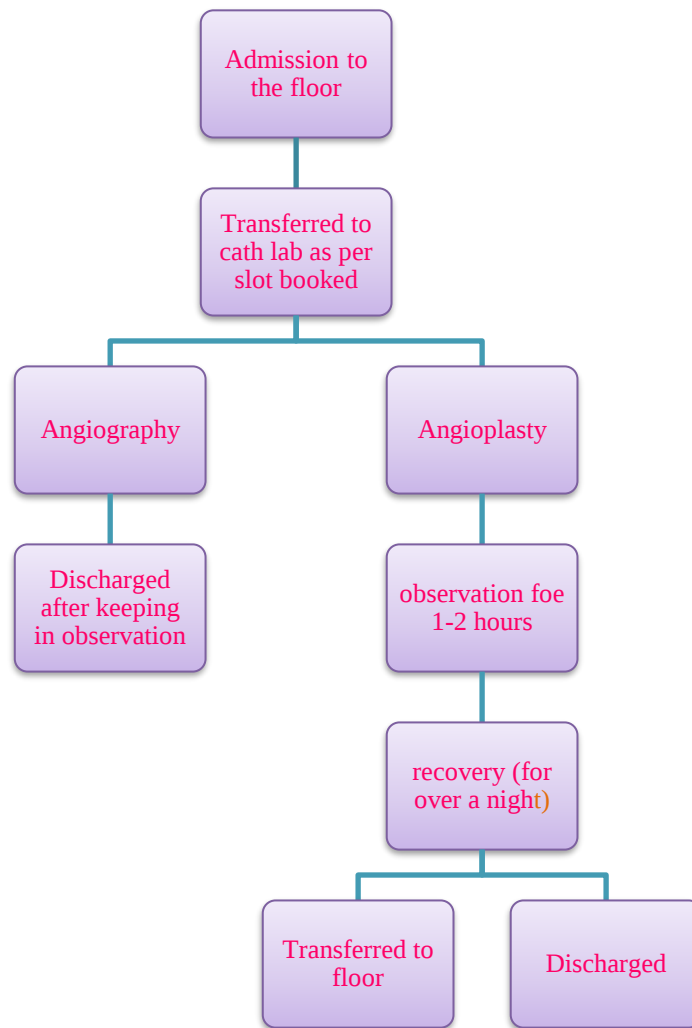
- Percutaneous Transluminal Coronary Angioplasty
- Peripheral Transluminal Angioplasty
- Radio Frequency Ablation
- Permanent Pacemaker Implantation
- Intra Cardiac Defibrillation
- Cardiac Resynchronisation Therapy Defibrillator Device
- Cardiac Resynchronisation Therapy Pacemaker
- Left and right sided pressure studies
- Closure of some [congenital heart defect](#)

Slots are booked for everyday as per the doctors’ and patients’ convenience. About 70% of the slots booked are treated everyday

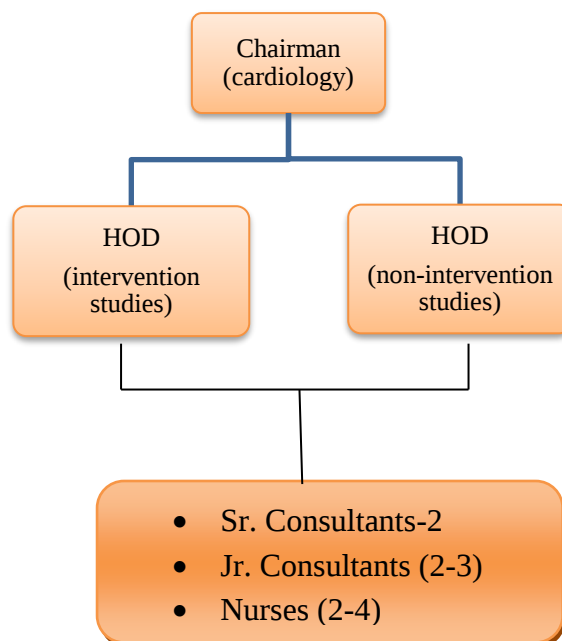
Location: Cath lab is located on the first floor with the vicinity areas as

- Operation theatre
- ICU
- CCU
- Dialysis
- NICU
- PICU

Process Flow of Patient



Staff



RADIOLOGY DEPARTMENT

Situated at the ground floor of the hospital.

The total staffs working in the Radiology Department are 9 per morning and evening shift and 1 in the night shift.

The different shift timings of the radiology department are as follows:

General Shift – 9 am – 5:30 pm

Morning Shift – 8 am – 4:30 pm

Evening Shift – 11:30 am - 8 pm

Night shift – 8 pm – 8:30 am

Procedures done in the department: -

(1) Routine X-Ray studies

- (a) Plain - e.g. chest, spine, etc
- (b) Routine fluoroscopic procedures e.g. Barium studies

(2) Routine ultrasound studies

- (a) Ultrasonography - e.g. Abdomen, Pelvis
- (b) Doppler studies peripheral (B/W & colour) e.g. 2 D echo, vascular studies, etc

3) Mammography

4) Dexascan

5) Special imaging techniques

- (a) CT Scan (Computerized Axial Tomography)
- (b) MRI (Magnetic Resonance Imaging)

Divided into two parts: -

- 1) For Ultrasonography, mammography, Dexascan
- 2) For CT scan, MRI, X-ray, fluoroscopy

Consist of: -

- 1) Reception: -Counter for appointment and billing
- 2) Waiting room with general facilities like toilets, drinking water, air conditioning
- 3) Diagnostic room

- 4) Counseling room
- 5) Changing room
- 6) Film processing room
- 7) Radiologist office
- 8) Report collection room

There are two MRI and one CT scan machine in the department.

Timings for OPD patients: - 8am to 8pm

In between this IPD and Emergency patients are also taken.

Main OPD hours: - 8am to 6pm and after 8pm only IPD and Emergency patients are taken

Report collection: - If the scan is done before 12pm, reports are ready by the evening and can be collected in the same evening. And if done after 12pm, report will be delivered next day.

Patient who comes in the radiology department either walks in or takes the appointment.

Appointment patients are given preference whereas walk in patients have to wait. Emergency, doctor's referred patients or ICU patients scan is done as soon as possible.

Process flow in radiology department (OPD)

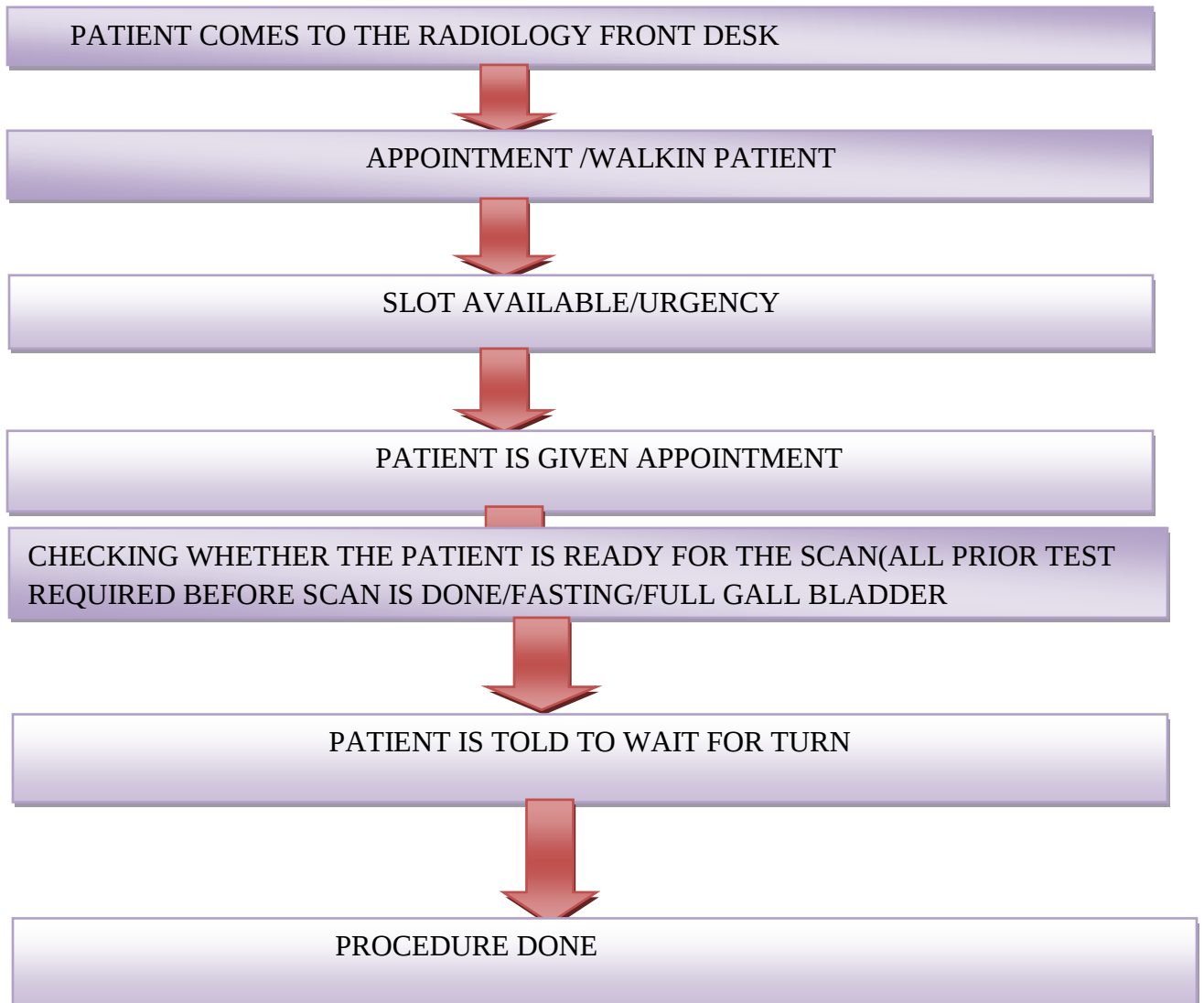


Figure: -Process flow in radiology department for outpatients

Firstly, the patient comes to the radiology front desk after been prescribed by doctor for the scan; patient is either taken prior appointment or walk in patient. The availability of the slot required is then checked for the walk in patient by the front desk. Once the slot is checked, the requirements for the scan i.e. condition of the patient required to undergo the scan is checked. (E.g. proper creatinine level for renal patients). After that the patient is provided the appointment and is told to wait for his turn. Finally, the procedure is performed.

- Emergency patients especially with a critical diagnosis – highlighted in the register and the consultant is immediately informed about the findings.
- Procedures wherein contrast is to be given, for example MRI, consent of the patient is taken prior to the procedure.

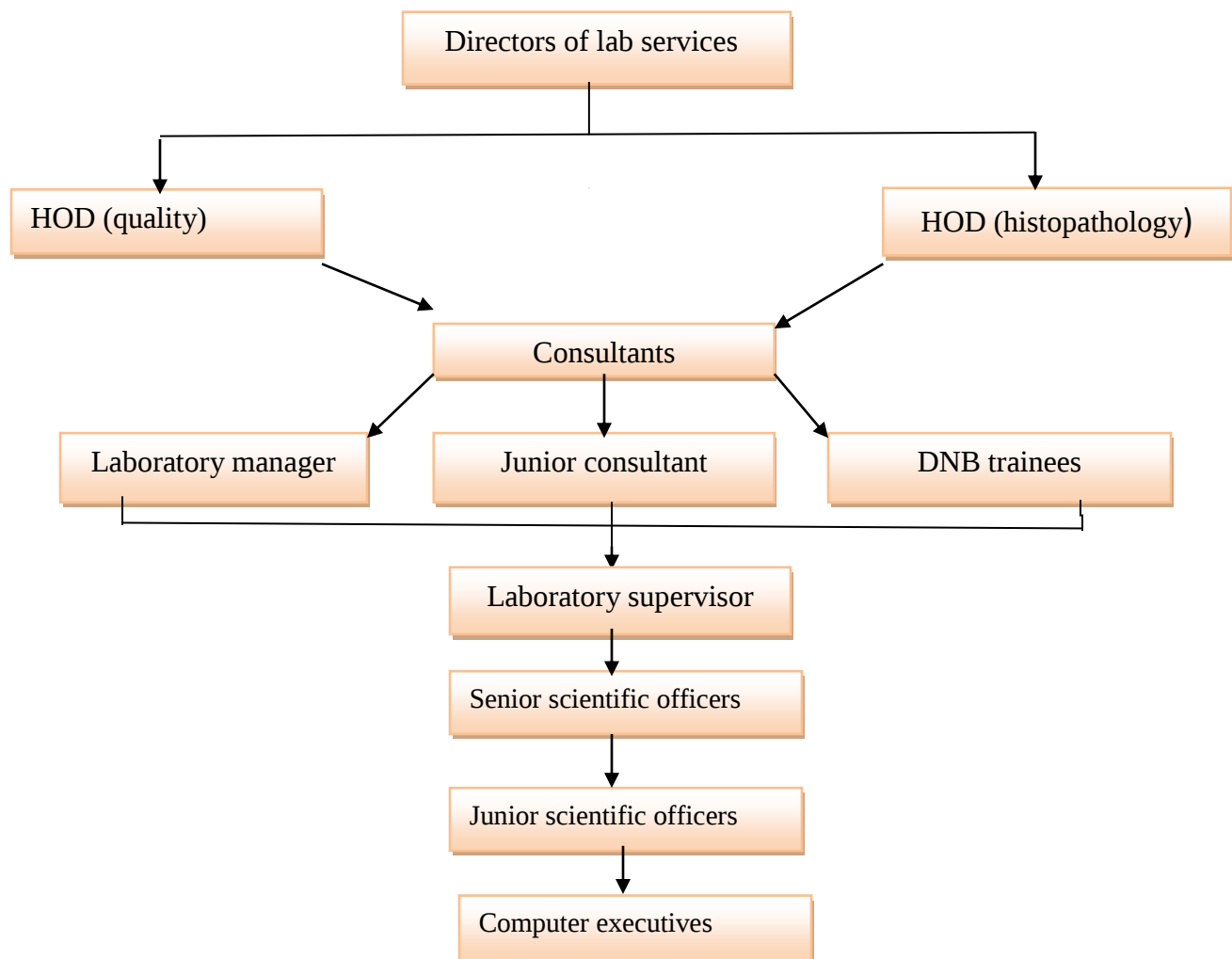
DEPARTMENT OF LAB SERVICES

INTRODUCTION-

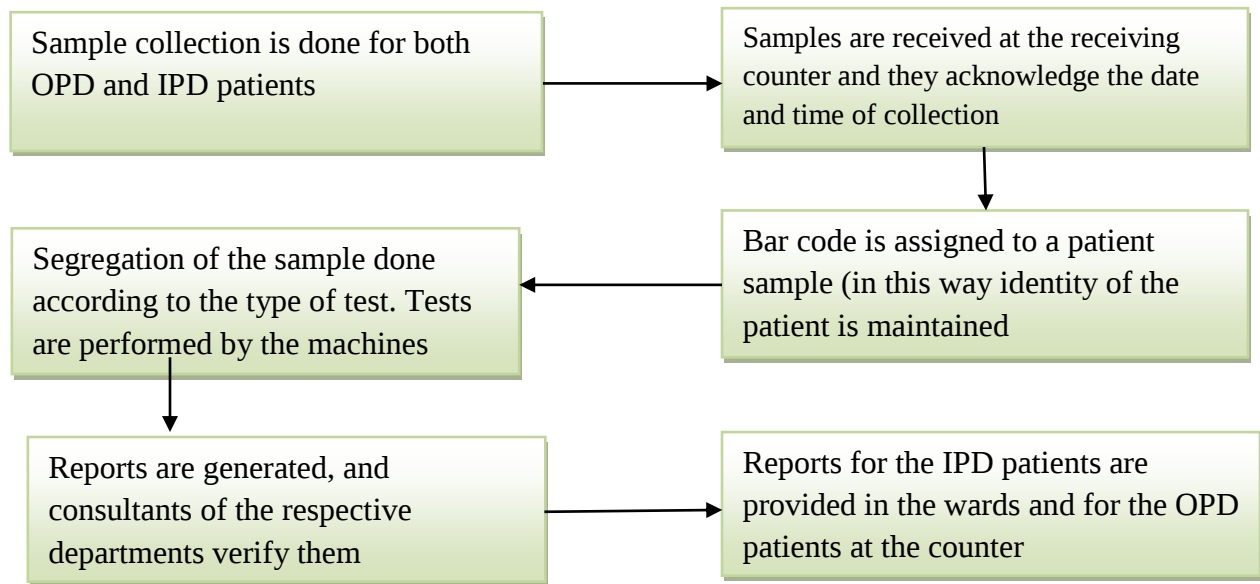
An ISO 9001:200 certified lab, it is open 24 hrs a day. It's a high-tech lab with fully automated instrument which are directly interfaced with ***hospital information system*** and ***laboratory information system***. Facility of stat tests (emergency) and sample collection is available.

HIERARCHY- The Department of Lab Is Broadly Divided In Two Departments

- Lab medicine
- Histopathology



PROCESS FLOW-



LABORATORY INFORMATION SYSTEM- It is connected with hospital information system

- Sample received-red colour
- Samples acknowledged-yellow colour
- Test done-blue colour
- Result verified-green colour
- Billing done-pink colour.

CENTRAL STERILIZATION SERVICE DEPARTMENT (CSSD)

INTRODUCTION-

CSSD is the heart of the hospital infection control and the most important unit of the clinical support services. CSSD role lies in receiving, cleaning, packing, disinfecting, sterilizing, storing and disinfecting instruments as per well-delineated protocols and standardized procedures.

CSSD department in max healthcare, Gurgaon is a centralized department and the location of the department is in the basement

The main aim of the CSSD department is to reduce the level of micro-organisms from 10^6 to 10^{-6} .

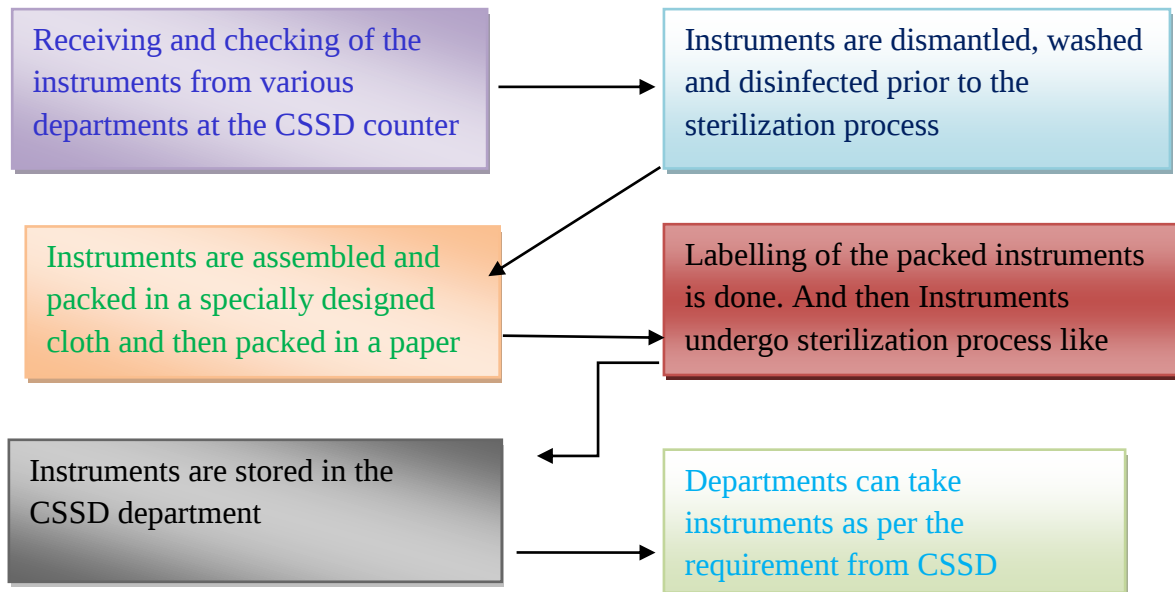
ZONES PRESENT-

- Decontamination
- Clean
- Sterile

Colour coding for the following zones -

- Decontamination area - red colour
- Clean area - blue colour
- Sterile area - green colour

PROCESS FLOW



- At the time of receiving the instrument at the CSSD department, the instruments are counted, checked for any damage, segregated according to the method of sterilization required for the instrument.
- Instruments used for the washing of the instruments are fully automated and according to the European standards.
- For packing of the instruments medical grade paper and cloths are used which are specifically designed for the purpose (they have a zig -zag pattern)
- Once sterilized and packed instrument can be used within 6 months.

EQUIPMENT LIST-

- Washer
- Autoclave
- Plasma sterilizer
- ETO sterilizers
- Dryer
 - Air-guns
 - Water-guns-
 - Ultrasonic cleaners-

QUALITY INDICATORS

Various quality indicators used in CSSD are-

- **Batch monitoring strip**- a yellow coloured strip which is attached to every lot which on exposure to right temperature and pressure turns black

FOOD & BEVERAGES

- Food & Beverage department is responsible for the supply of food to the in-patients and sometimes their attendants (if required) and also for arranging food during various meetings and conferences in the hospital.
- The department has been outsourced to BHS (Bloom Hospitality Services) pvt, ltd., however, the management and supervisory staff is in-house.
- Staff- 30 (outsourced) ; 2 (Max in house)

Hierarchy



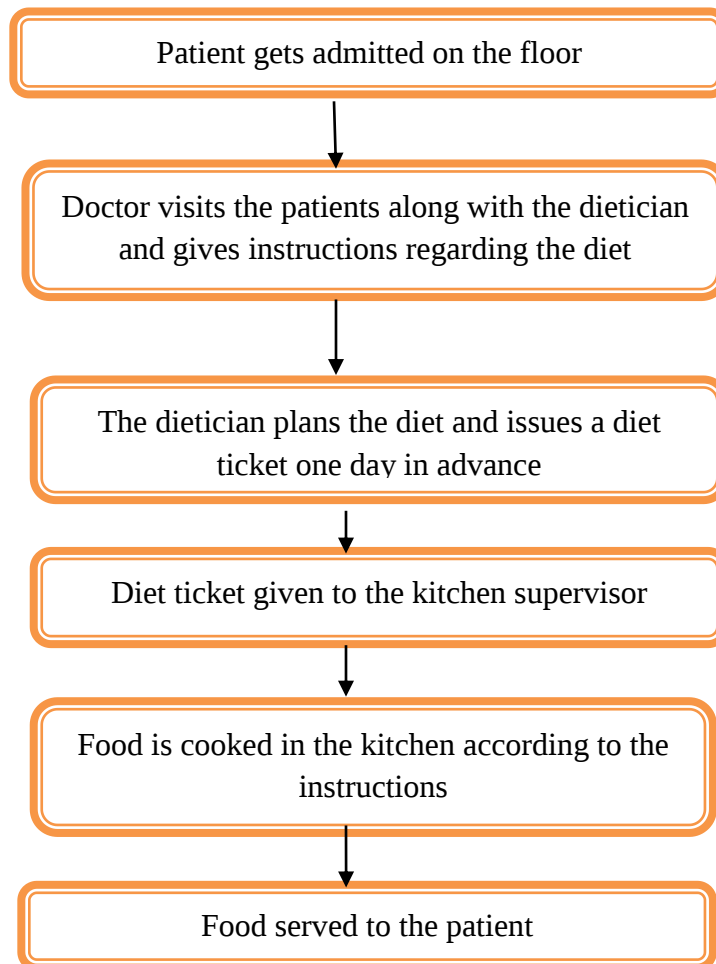
Time table for the diet of the patient

7-8AM	Breakfast
10:30-11:30AM	Soup/Beverages
1-2PM	Lunch
4-5PM	Evening tea
6-7PM	Soup
8-9PM	Dinner

- Dinner of the same day, breakfast and lunch of the next day are decided prior in the evening and diet tickets are issued by the dietician and given to the chef.
- Apart from these if patients want to have something extra, those can be provided to the patient after consulting dietician, but for an extra charges.

- Different cuisines offered are:
 - Continental
 - Afghani – for middle east patients
 - No onion and garlic – for middle east patients
 - Indian

Process flow



DIETETICS

- The department plans diet for all IPD patients in accordance with the primary consultant's opinion on the same.
- Staff- 13 in total.
- Dietician: patient – 1:50
- Assessment of each patient to be done within 24 hours of admission and thereafter every day after initial assessment.
- For proper nutrition, all commercial supplements for each disease are available.

PHARMACY

Max pharmacy is self-owned with Central Pharmacy situated at corporate office, Okhla. There are pharmacy stores 1 for each In-patient and Out-patient in the hospital.

STORING OF DRUGS

Medicines are arranged according Client patient record system via generic name in alphabetic order in racks, shelves, cupboards and drawers. Oral, parenteral and topical items are stored separately. Near expiry (expiry within 3 months) is stored in separate designated area to expedite the consumptions.

DRUG DISTRIBUTION

Patient shows up at the pharmacy with doctor's prescription and is then given token no. for their order and is asked to wait for their turn.

They are then called as per their no. in the queue.

ISSUE:

1. Token is not always given on time.
2. The pharmacists not always guide the patients as where to wait which creates a lot of commotion in high rush hours.

IP PHARMACY

In CPRS, Medication orders posted by the clinicians is verified by pharmacist on PUTTY System labelled with (patient info, SSN no., drug name,) then the medications are dispatched after Billing via HIS (Hospital information system) and finally handover to GDA to dispense medicines. The Stat orders required immediately are dispensed within 30 minutes. The normal order is dispensed within 1 hour and routine order is delivered by 1 round per day.

NARCOTICS DRUGS

They are in kept in double lock and key system. Documentation of narcotic drugs is appropriately maintained.

Narcotics drugs under statutory regulation being used in Max hospitals includes: injection and transdermal patch of Fentanyl and injection and tab. of Morphine.

LOOK ALIKE AND SOUND ALIKE DRUGS

Look alike and sound alike medications have high medication error due to similarities in nomenclature and packaging.

In the main pharmacy stores, (SALA Medications) are stored separately in 2 adjacent racks with blue coloured sound alike and pink coloured look alike medications warning stickers to avoid confusion while dispensing.

Medication Recall: If a drug is found to be defective, it is reported to the Okhla office where the records for that particular series of drugs dispensed is checked and verified for medication recall.

Licences acquired by Max hospital pharmacy -

- 1) Pharmacist License
- 2) Narcotics License

CALL CENTRE

Call centre of Max hospital operate 24*7. It is centralized patient contact centre for Gurgaon

Call centre deals with:

- Doctor's appointment
- Health check ups
- Radiology and diagnostic appointments
- Patient's information
- Doctor's information
- Employee's information
- Speciality information
- Other department information
- It handles internal emergency e.g. Blue code

SECURITY DEPARTMENT

The security department is an eye and ear of every organization acting as a liaison between management and staff. The control room of Security Department is located on B1.

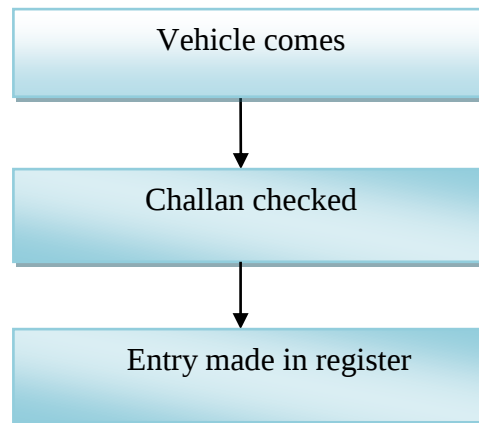
Functions of Security Department: -

1. Security management: -

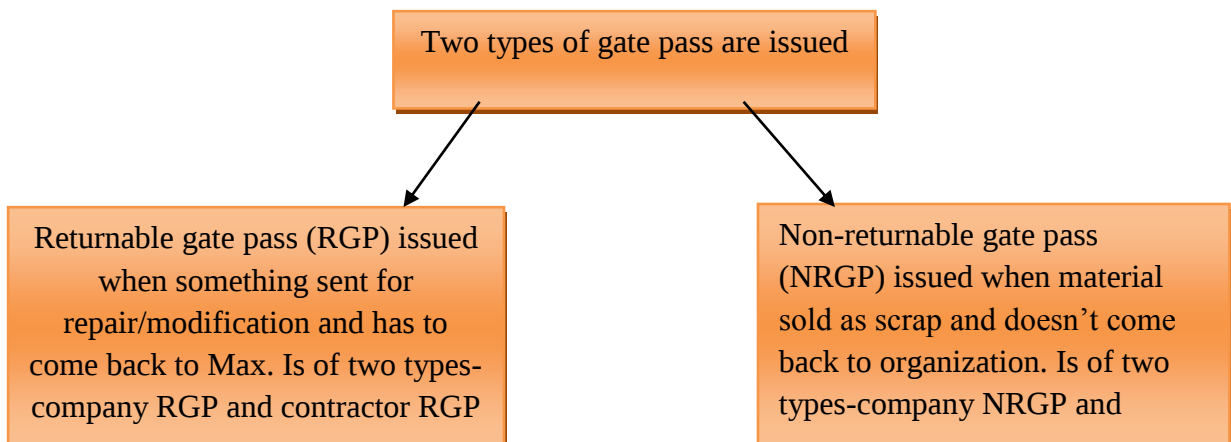
- Selection of people (guards and supervisors)
- Deploying of security staff to different floors and departments
- Checking of people entering hospital
- Turnout and grooming of security staff
- Training of security staff
- MLC handling
- Dispute handling

2. Material management:-It includes management of both incoming and outgoing materials.

- a. Flow for incoming materials: -The incoming materials are received either from a company or a contractor to Max. The process flow is as under: -



- b. Flow for outgoing materials



3. Disaster management: -

There are six emergency codes: -

1. Red- Fire
2. Black- Bomb threat
3. Blue-Cardiac arrest
4. Yellow- External disaster like earthquake
5. Violet-Violent patient
6. Pink- Missing patient

The SOP's and disaster management plans are prepared by the Security Department. Fire management system includes smoke detectors, sprinklers fitted on ceiling and fire shafts in all corridors.

Walkie talkies are an important source of communication.

Other disasters include floods, water logging, terrorist attacks.

4. Valet management: -

- Helps to optimally utilize the parking space.
- Within a few minutes, vehicle is handed over to customer when asked for in porch.

HUMAN RESOURCE DEPARTMENT

Human resource management (HRM or simply HR) is a function in designed to maximize employee performance in service of their employer's strategic objectives. HR is primarily concerned with how people are managed within organizations, focusing on policies and systems.

Following are the policies undertaken by the Human Resource Management Department: -

- Human Resource Planning Policy.
- Job Profile Format.
- Recruitment policy.
- Training and development policy.
- Induction and Orientation policy.
- Performance appraisal Policy.
- Complaint & Grievances Redressal Policy.
- Disciplinary Policy.
- Medical Discount Policy.
- Annual Medical Check-up Policy.
- Clinical credentialing and privileging Policy.
- Nursing Credentialing and Privileging Policy.

INTERNATIONAL PATIENT SERVICES (IPS) DEPARTMENT

It takes a lot to be a world-class health care services provider. This department, situated in the Admin Block at the third floor and is exclusively dedicated for the services of international patients.

Contact Procedure:

- Patient sends a query and/or reports
- IPS Team consults the relevant consultant and provides diagnosis, proposed treatment and estimated cost and duration of stay in India and in hospital.
- If required, a telephonic/skype conversation is also arranged between the patient and the concerned doctor.
- Visa Invitation request is sent to the embassy once the patient confirms his plan.
- Patient confirms the flight ticket and accordingly arrangement for his pickup, appointment with the concerned doctor and his accommodation is made.
- Patient is received at the Airport and brought to the Hospital/Guest House/Hotel.

The countries from where patients come to seek treatment most commonly are Iraq, African countries (Nigeria, Sudan, Somalia, Ethiopia, Kenya and many more), Oman, Uzbekistan, Afghanistan, Nepal, and Bangladesh to name a few.

The hospital provides:

- Various Regional Translators such as Arabic, Persian, Iraqi, Bangladeshi and Russian (In house interpreter).
- Assistance in ground transportation such as finding a shuttle, hiring a car or choosing any other mode of transportation within the city.

Relationship Managers, who closely work with Diplomatic Missions and numerous Expat bodies to ensure that international patients have a comfortable and memorable stay in India.

PROJECTS UNDERTAKEN

TITLE 1: STUDY OF KNOWLEDGE ATTITUDE AND PRACTICES OF NURSES REGARDING INFECTION CONTROL IN HOSPITAL

World Health Organization (WHO) defined Hospital as, an integral part of the social and medical organization, the function of which is to provide for the population complete health care, both curative and preventive, and whose outpatient services reach out to the family and its home environment. The hospital is also a centre for training of health workers and for bio-social research. Simply, hospital is an institution providing medical and surgical treatment and nursing care for sick or injured people. The modern concept of hospital visualizes it, as one of a comprehensive system of preventive and curative medicine and as an institution devoted not only to inpatient treatment, but also to ambulatory and domiciliary use.

While health care has become more effective it has also become more complex, with greater use of new technologies, medicines and treatments. Health services treat older and sicker patients who often present with significant co-morbidities requiring more and more difficult decisions as to health care priorities. Increasing economic pressure on health systems often leads to overloaded health care environments.

Evaluation of healthcare provision is essential in the ongoing assessment and consequent quality improvement of medical services. Traditionally, assessments have ignored the reports of patients in preference to technical and physiological reports of outcome. More recently, however, healthcare systems have sought to achieve a balance in services that offer not only clinically effective and evidence based care, but which are also judged by patients as acceptable and beneficial.

Nowadays safety is considered as foundation of high quality health care. Patient safety is a new healthcare discipline that emphasizes the reporting, analysis, and prevention of medical error that often leads to adverse healthcare events. The frequency and magnitude of avoidable adverse patient events was not well known until the 1990s, when multiple countries reported staggering numbers of patients harmed and killed by medical errors. Improving patient safety is one of the most urgent issues facing healthcare today.

Patients in intensive care units (ICUs) have a higher risk of acquiring Health care associated infections (HAIs) as compared to those in non-critical care areas. ICU-acquired infection rate is five to ten times higher than hospital-acquired infection rates in general ward patients. Considerable increased mortality, morbidity and major costs are associated with ICU-acquired infections. This results from the acute severity of illness of Intensive Care Unit patients, prolonged hospital stay, immune-suppression, increased use of antimicrobials and frequent exposure to therapeutic procedures like endotracheal intubation with mechanical ventilation, nasotracheal intubation, intravenous lines, central venous lines and urinary catheterization. The most common Health Care Associated Infections (HCAIs) in Intensive Care Unit patients are respiratory tract infections (RTIs), urinary tract infections (UTIs) and bloodstream infections (BSIs) and are most often associated with the use of invasive devices. The Intensive Care unit are an area of considerable antibiotic use in which antibiotic-resistant organisms are prevalent. Their prevalence and rates of resistance can vary enormously depending on geographic location as well as location among ICU types. For proper management of ICU-infections, it is important to have updated knowledge about prevalence of the causative agents and their antimicrobial susceptibility patterns in institution-specific Intensive Care Unit and updating with the latest technology for the management of nosocomial infections. The study aims to review the knowledge among the staff at max hospital about the nosocomial infection and policies followed to encounter them and measures that can be taken to attain minimum level of Health care associated Infections.

REVIEW OF LITERATURE

Nosocomial infections are also divided into two classes, endemic or epidemic. Most are endemic, meaning that they are at the level of usual occurrence within the setting. Epidemic infections occur when there is an unusual increase in infection above baseline for a specific infection or organism. Nosocomial infections are most frequently infections of the urinary tract, surgical wounds, and the lower respiratory tract. A World Health Organization prevalence study and other studies have shown that these infections most commonly occur in intensive care units and in acute surgical and orthopedic wards. Infection rates are also higher in patients with increased susceptibility due to old age, underlying disease, or chemotherapy. Patients are exposed to a variety of microorganisms during a hospital stay, but contact between a patient and an organism does not necessarily guarantee infection. Other factors influence the nature and frequency of infections. Organisms vary in resistance to antimicrobials and in intrinsic virulence. Bacteria, viruses, fungi, and parasites can all cause nosocomial infections. There are multiple ways of

acquiring such an organism. The organisms can be transferred from one patient to another (cross-infection). They can be part of a patient's own flora (endogenous infection). They can be transferred from an inanimate object or from a substance recently contaminated by another human source (environmental transfer). The organisms that cause nosocomial infections are often drug-resistant. The regular use of antimicrobials for treatment therapy or prophylaxis promotes the development of resistance. Through antimicrobial-driven selection and the exchange of genetic resistance elements, multi-drug resistant strains of bacteria emerge.

RATIONALE

This report is indented to determine the KAP of Nursing staff regarding Infection Control. Reducing the infection can lead to increase in early discharge of patient, decreased length of stay, less troublesome for patient and his family, more convenient for the patient, less cost for the patient and also significantly enhancing the hospital's image. Establishing a standard protocol procedure for controlling the nosocomial infections and help in promoting efficiency amongst the employees also helps in establishing a significant position of the hospital amongst competitors.

OBJECTIVES

1. To determine the knowledge of hand hygiene of nursing staff
2. To assess the knowledge regarding the infection control practices
3. To correlate between area and infection control practice.
4. To check the awareness regarding the infection control practices.
5. To give recommendations for further improvement in infection control knowledge, attitude and practice.

RESEARCH METHODOLOGY

- **Type of study:** Observational and descriptive study
 - **Study population :** Nursing staff in all the departments of the hospital.
 - **Study area** – All patient care units at Max Hospital, Gurgaon

- **Duration of Study** – 2 weeks
- **Type of Data** – Quantitative & Qualitative
- **Tool used** – Survey form (attached below)
- **Inclusion criteria-**
 - Nurses practising in patient care units at Max Hospital, Gurgaon.
 - Standard Protocols Followed by Nurses and assigned Infection Control Nurses at Max Hospital, Gurgaon
- **Data collection** - Quantitative Data
- **Data entry-** Manually
- **Data Analysis-** Using bar charts, pie charts.
- **Sample size**– 55
- **Technique** – Data collected via survey (attached below)

INFECTION CONTROL NURSING SURVEY

Q1. I currently work in:

- a) ICU*
- b) CCU*
- c) PICU*
- d) NICU*
- e) Ward*

Q2. When was the last time you and your co working staff were trained in hospital infection prevention?

- a) 10 days back*
- b) 15 days back*
- c) 20 days back*
- d) 30 days back*

Q3. Does your facility provide regular in-service training for appropriate healthcare personnel on techniques and procedures, maintenance?

- a) Yes*
- b) No*

Q4. How effective do you think the last drill has proven to be in terms of training?

- a) Not effective*
- b) Moderately effective*
- c) Very effective*

Q5. Do you always adhere to Hand Hygiene protocols while carrying out different procedures in critical care?

- a) Yes, Always*
- b) Depends on the situation*
- c) Not Always*

Q6. Are you taking proper precautions in barrier (gloves, masks etc) & sharp disposal?

- a) Yes*
- b) Sometimes*
- c) No*

Q7. The control and prevention of CAUTI/VAP/CLABSI is a priority at my facility. How much do you agree with this statement?

- a) Strongly agree*
- b) Agree*
- c) Neither agree nor disagree*
- d) Disagree*
- e) Strongly disagree*

Q8. Are any quality improvement (QI) programs for Infection Control in place at your facility (please check all that apply)?

- a) Alerts or reminders for removing unnecessary tubings (catheters/central lines/ ventilators)*
- b) Procedures or algorithms for appropriate management*
- c) Stop orders*
- d) CAUTI/VAP/CLABSI bundle*
- e) None*

Q9. *Is the bio medical waste in our critical care unit being disposed in the correct color-coded bin?*

- a) *Yes, always*
- b) *Sometimes*
- c) *No*

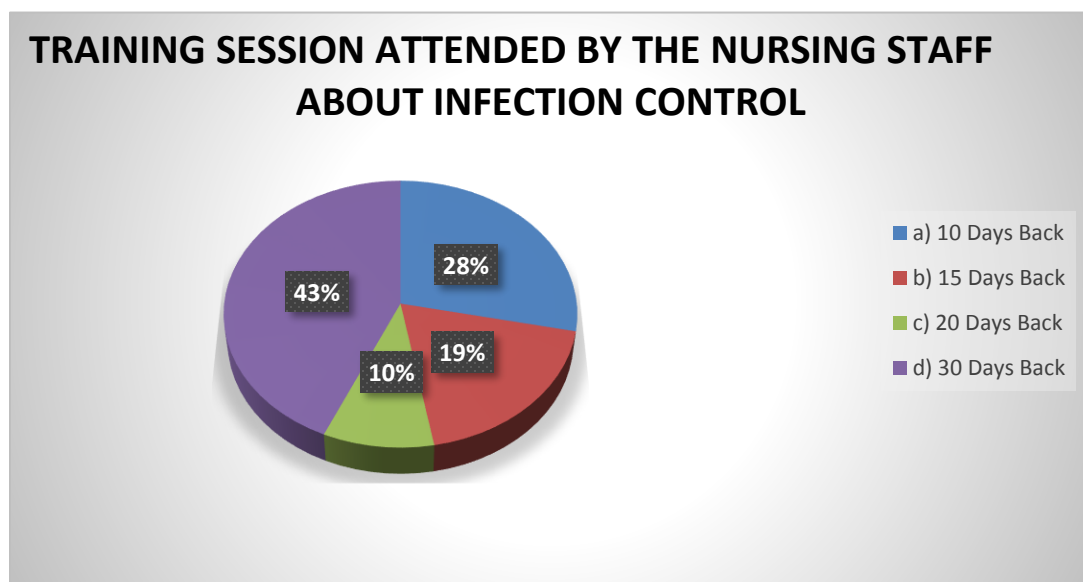
Q10. *Who do you think is primarily responsible for a patient in critical care acquiring infections associated to hospital stay?*

- a) *Doctors*
- b) *Nurses*
- c) *House Keeping Staff*
- d) *GDA's*
- e) *All*

DISCUSSION AND RESULTS

DATA ANALYSIS

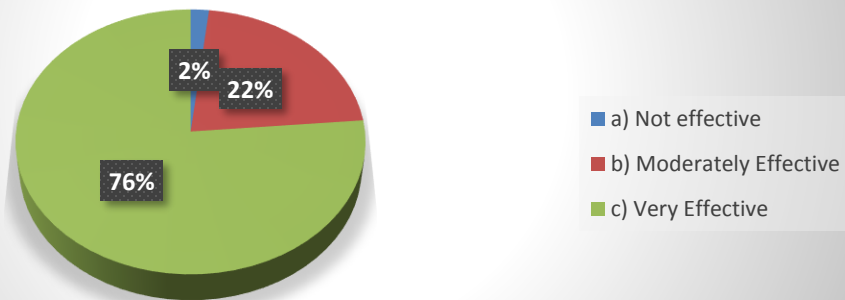
OBJECTIVE 1 : To assess the knowledge regarding the Infection Control Practices



PERCENTAGE OF THE PEOPLE WHO BELIEVE THEY'RE BEING GIVEN REGULAR TRAINING



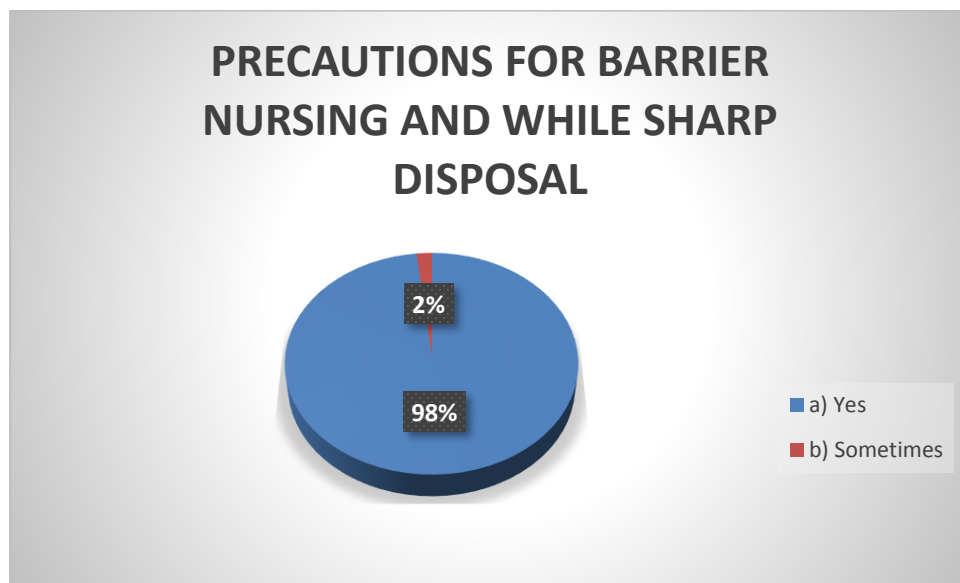
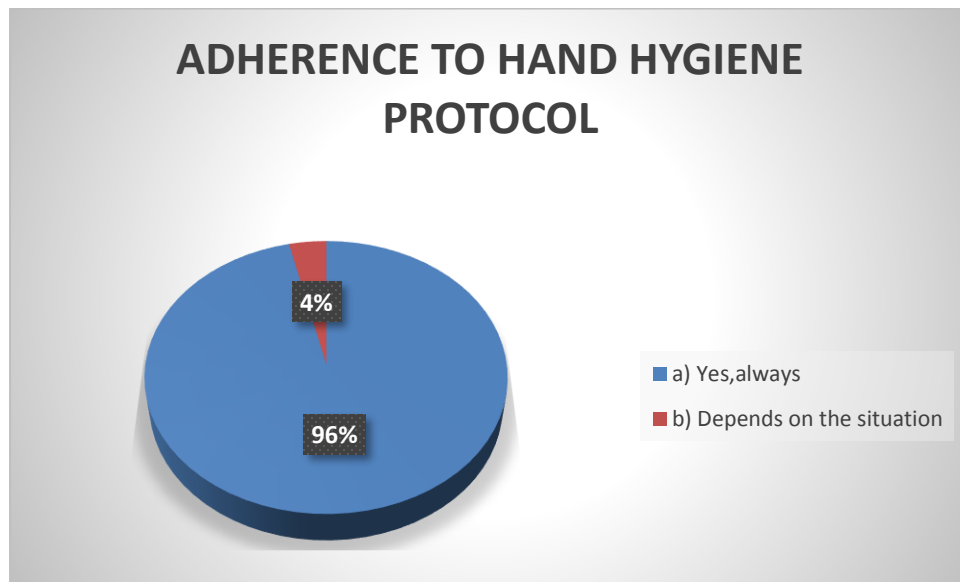
PERCENTAGE OF PEOPLE WHO BELIEVE IN THE EFFECTIVENESS OF TRAINING



INFERENCE: According to the above three Pie-Charts there are 43% population that has taken the training session 30 days back, and only 10 % people have taken it 20 days back. 98% people say that the hospital provides regular in house training while 76% of the sample staff believes that the training provided to them is effective.

This shows the awareness among the staff about the knowledge of infection control.

OBJECTIVE 2: To determine the hand hygiene compliance of nursing staff

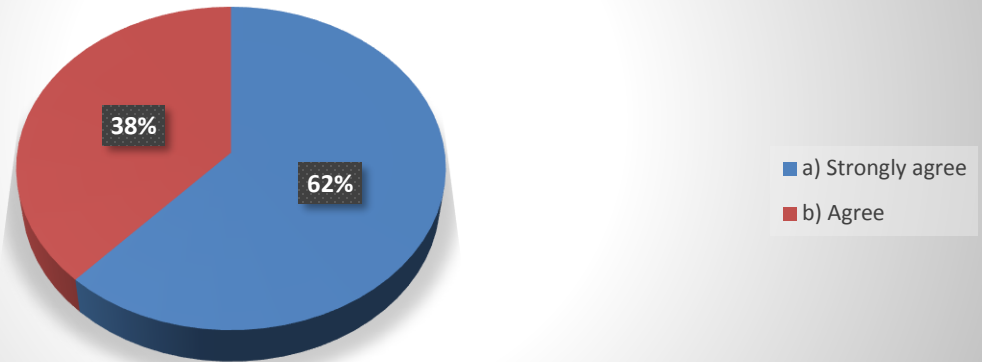


INFERENCE: According to the above pie charts, 96% of the sample population follow the hand hygiene protocols in critical care of the patient while 98% of them take proper barrier precaution while sharp disposal.

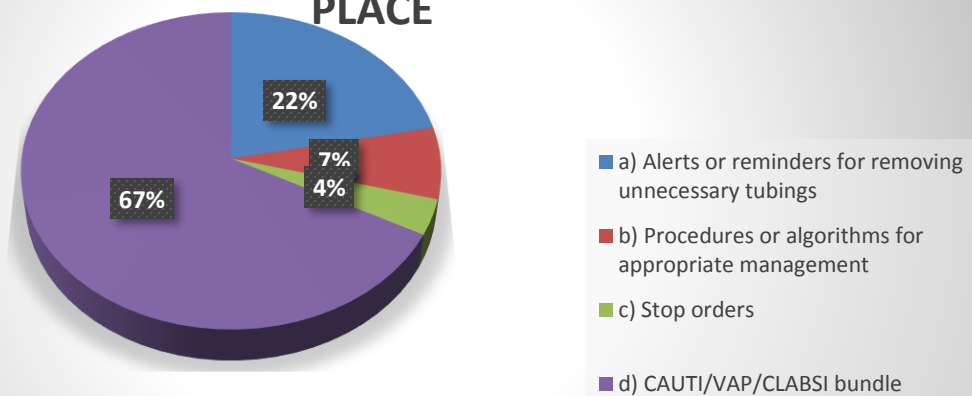
This shows the compliance of nursing staff towards hand hygiene and knowledge of barrier precaution.

OBJECTIVE 3: To assess the knowledge regarding the infection control practices

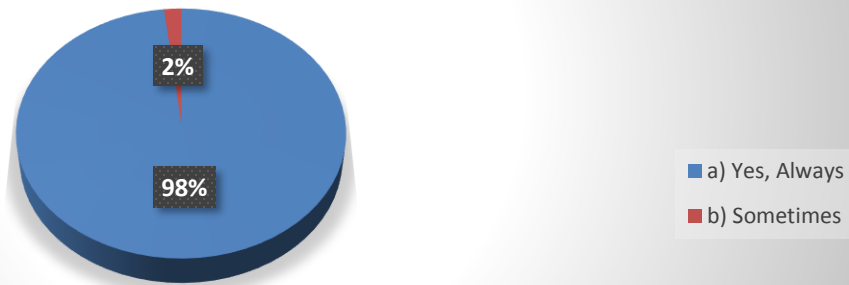
The control and prevention of CAUTI/CLABSI and VAP is a priority at my facility.



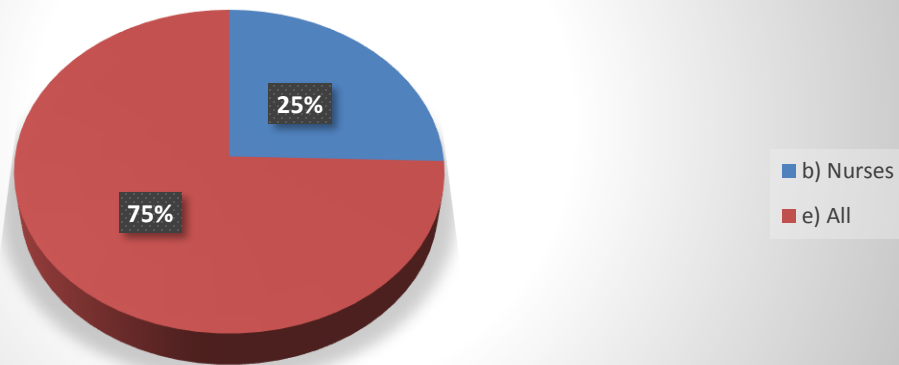
AWARENESS ABOUT THE QI PROGRAMS IN THE PLACE



USAGE OF COLOUR CODED BINS FOR BIOMEDICAL WASTE DISPOSAL



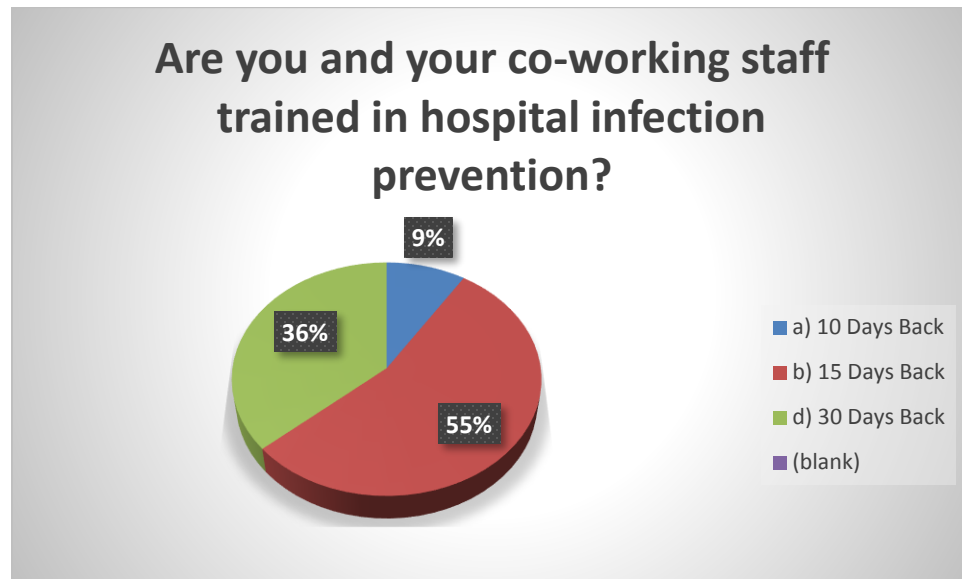
Knowledge of primary responsibility for a patient in critical care acquiring HAI



INFERENCE: According to the above charts, 62% of the sample population strongly agrees with the statement - The control and prevention of CAUTI/CLABSI and VAP is a priority at my facility, 67% says there are CAUTI/CLABSI/VAP bundle in place as QIs present, 98% population says that the bio medical waste is disposed in correctly kept colour coded bin and 25% population believes that the primary responsibility of prevention of a HAI is of nurses.

OBJECTIVE 4: To correlate between area and department

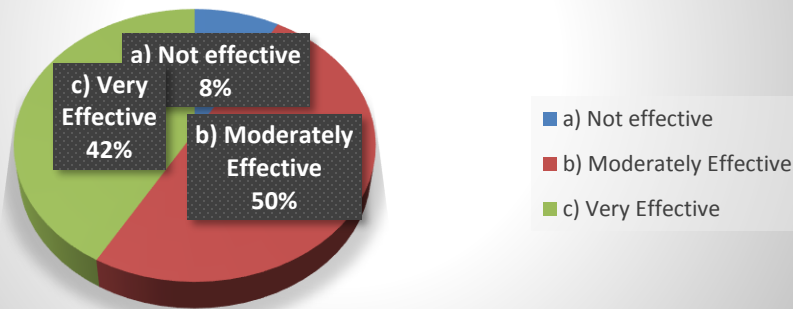
Area of Correlation: ICU



According to this chart, among the nurses working in the ICU, 55% of them have received the training 15 days back while the others 30 days (36%) and 10 days (9%) back respectively.

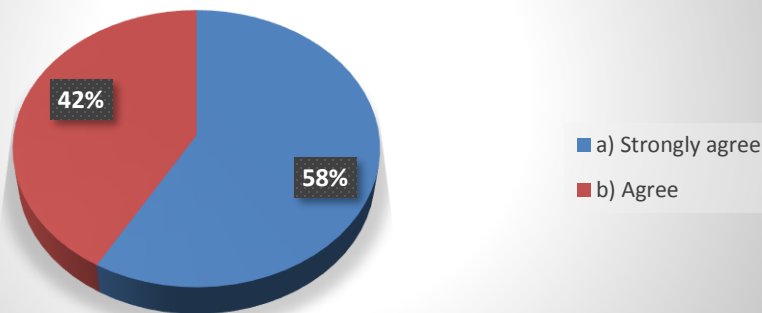


How effective do you think the last drill has proven to be in terms of training?



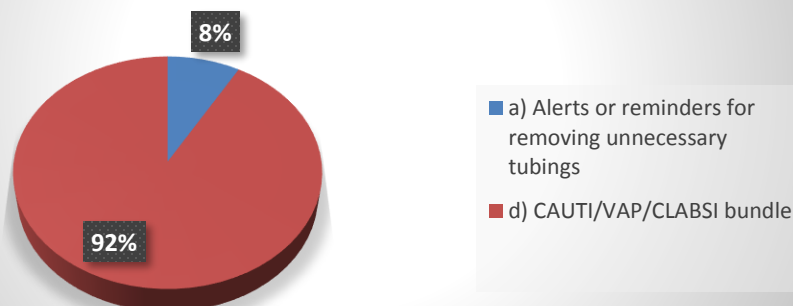
According to this chart, the nurses in ICU believe that the training given to them has been moderately effective for 50% people while not effective for 8% nurses.

The control of CAUTI/CLABSI/VAP is a priority at my facility



According to this chart, control of CLABSI/CAUTI/VAP is a priority for all the nurses where 58% of them strongly agree with the statement.

Are there any QI in place at your facility?



According to this chart, 92% of the nurses working in the ICU say that there is a bundle for CAUTI/VAP/CLABSI in place while the other 8% say that there are Alerts or reminders for removing unnecessary tubings.

OBSERVATIONS AND FINDINGS

1. The organization has a well-designed, comprehensive and documented infection control programme aimed at reducing/eliminating risks to patients and their attendants, visitors and the health care providers.
2. The infection control task force is responsible for surveillance activities in identified areas of the hospital.
3. Proper facilities and adequate resources are provided to support the infection control programme.
4. Statutory provisions with regard to Bio Medical Wastes (BMW) are complied with.
5. The infection control programme is supported by the organization's management and includes training of staffs and employee health.

SUGGESTIONS AND RECOMENDATIONS

1. Hand washing should be monitored regularly, and continuous encouragement should be done.
2. Patient and his attendant should be educated, and the importance of Hand Hygiene Practices should be explained to them.
3. Infection control nurses should not adhere 100% on CAUTI bundles, SSI bundles.
4. There should be increase in knowledge regarding HCAI and routes of transmission, barrier nursing and hand washing techniques, hospital waste management, and importance of infection control team.
5. Peer-to-peer learning will help in reducing the health care associated.
6. Consider Utilizing copper surfaces on bed rails, tables, IV poles and nurse call buttons.

[Copper surfaces could [reduce infections by as much as 60 percent](#), as seen in a study from researchers from the Medical University of South Carolina and published last year in *Infection Control and Hospital Epidemiology*.

7. Conducting research on the potential involvement of patients and their families in HCAI reporting and control.
8. There is only 1 infection control nurse. Employing more nurses for infection control team will minimize the work load of IC nurse, so that work is made effective.
9. Training and educating newly recruited staffs will minimize infections in and around hospital.
10. Infection Control Nurses should be participating in the development & operation of Regional & National Infection Control Initiative.

CONCLUSION

The study revealed that the nurses working in the hospital know well about infection control practices but some of them still need to undergo the training so as to implement it in a better way. The nursing TLs can make sure that all the nurses are being regularly trained and taking care of the patient in the best possible way.

TITLE 2: HAND HYGIENE COMPLIANCE IN NURSING STAFF

REVIEW OF LITERATURE

Hand Hygiene is considered the most important and effective universal precautions for infection control in health care setting.

HAI's Impact and Burden

- Length of stay (LOS)
- Morbidity and mortality
- Financial burden
- Personal costs to patient/family

Proper hand hygiene compliance is associated with the reduction in HAIs and forms the core of patient safety.

PURPOSE OF HAND HYGIENE

- Promote a culture of safety
- Reduce HAIs such as
 - Catheter-associated urinary tract infections (CAUTI)
 - Central line-associated blood stream infections (CLABSI)
 - Ventilator Associated Pneumonia (VAP)
- Reduce transmission/acquisition of Multi Drug Resistant Organisms (MDRO)
- Reduce risk of outbreaks

WHY SHOULD WE KEEP OUR HANDS CLEAN?

- Any health-care worker, caregiver or person involved in patient care needs to be concerned about hand hygiene.
- ✓ Protect the patient against harmful

germs carried on your hands or present on his/her own skin

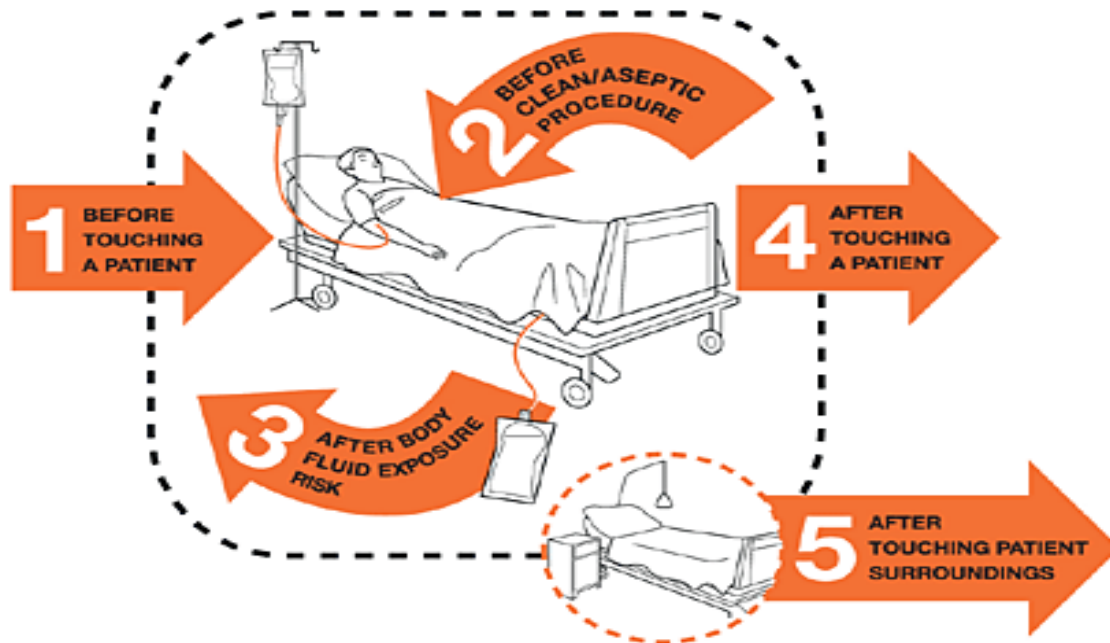
- ✓ Protect the patient against harmful germs carried on your hands or present on his/her own skin

GOLDEN RULES FOR HAND HYGIENE

- Hand hygiene must be performed exactly where you are delivering health care to patients (at the point-of-care)
- During health care delivery, there are 5 moments (indications) when it is essential that you perform hand hygiene ("My 5 Moments for Hand Hygiene" approach)
- To clean your hands, you should prefer hand rubbing with an alcohol based formulation, if available. Why? Because it makes hand hygiene possible right at the point-of-care, it is faster, more effective, and better tolerated.
- You should wash your hands with soap and water when visibly soiled and after contact with a patient/patient environment with *C. difficile*.
- You must perform hand hygiene using the appropriate technique and time duration.

WHY OBSERVE HAND HYGIENE PRACTICES

- Hand hygiene must be performed exactly where you are delivering health care to patients (at the point-of-care)
- During health care delivery, there are 5 moments (indications) when it is essential that you perform hand hygiene ("My 5 Moments for Hand Hygiene" approach)
- To clean your hands, you should prefer hand rubbing with an alcohol based formulation, if available. Why? Because it makes hand hygiene possible right at the point-of-care, it is faster, more effective, and better tolerated.
- You should wash your hands with soap and water when visibly soiled and after contact with a patient/patient environment with *C. difficile*.
- You must perform hand hygiene using the appropriate technique and time duration.



RATIONALE:

This report is indented to determine the compliance of Nursing staff regarding Hand Hygiene Protocols, practicing which can lead to significant decrease in rate of hospital associated infections. Establishing a standard protocol procedure for controlling the nosocomial infections and help in promoting efficiency amongst the employees and helps in establishing a significant position of the hospital amongst competitors.

OBJECTIVES:

1. To observe and analyze the various moments of hand hygiene being followed in different departments at Max Hospital, Gurgaon.
2. To search for areas of problem and find reasons for the same.
3. To give recommendations for further improvement of the practice.

RESEARCH METHODOLOGY

- **Type of study:** Observational study
 - **Study population:** Nursing staff in all the departments of the hospital.
 - **Study area** – All patient care units at Max Hospital, Gurgaon
 - **Duration of Study** – 2 weeks
 - **Type of Data** – Quantitative & Qualitative
 - **Inclusion criteria-**
 - Nurses practising in patient care units at Max Hospital, Gurgaon.
 - Standard Protocols of HHC according to WHO's 'five moments to clean hands' Followed by Nurses at Max Hospital, Gurgaon
- **Data collection** - Quantitative Data (3 weeks)
- **Data entry-** Manually
- **Data Analysis-** Using bar charts, pie charts.
- **Sample size**– 150

Hand Hygiene Observation Checklist:

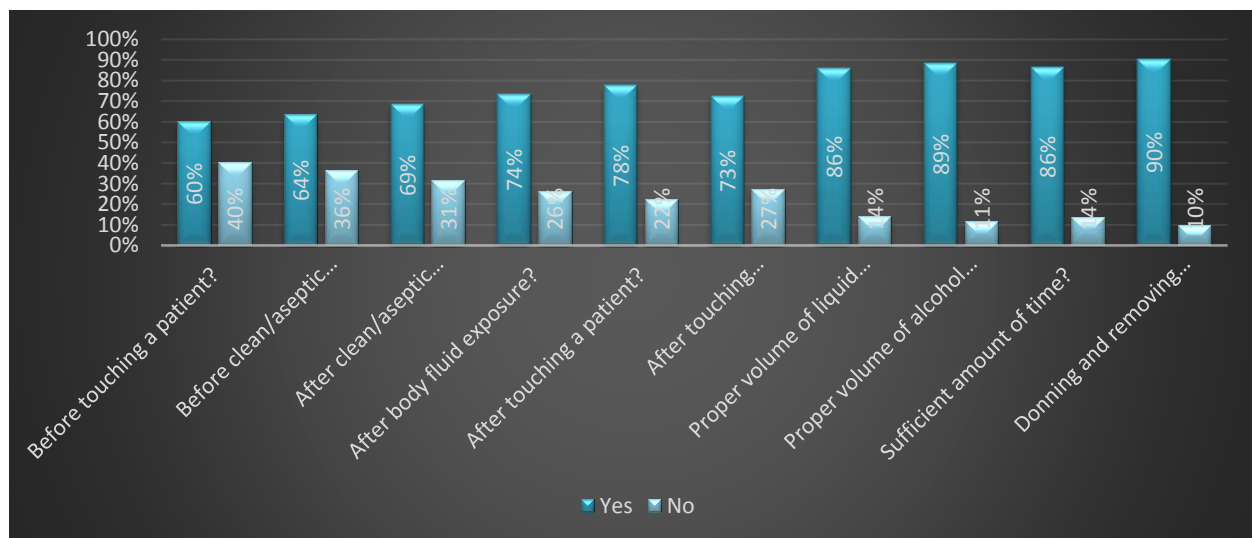
1. Are the staff members cleaning their hands before touching a patient?
2. Are they washing their hands before clean/aseptic procedure?
3. Are they cleaning their hands after clean/aseptic procedure?
4. Are they cleaning their hands after body fluid exposure?
5. After touching a patient?

6. After touching patient surroundings?
7. Are they using proper volume of liquid soap?
8. Proper volume of alcohol based handrub?
9. Are they cleaning their hands for proper amount of time?
10. Donning and removing gloves correctly so as not to contaminate hands.

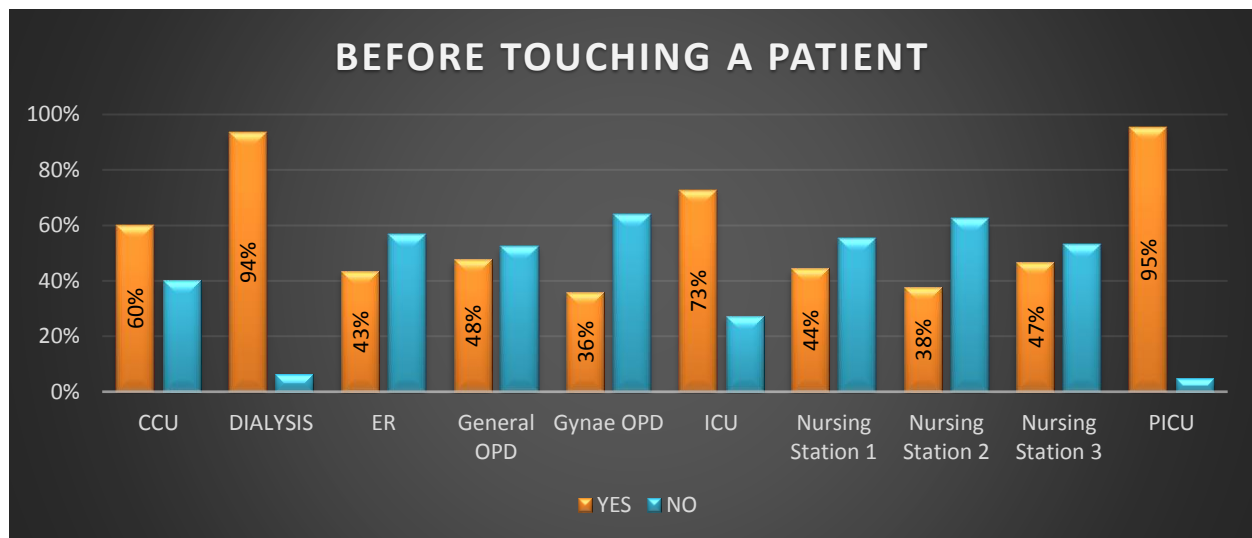
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
			Before touching a patient?	Before clean/aseptic procedure?	After clean/aseptic procedure?	After body fluid exposure risk?	After touching a patient?	After touching patient surroundings?	Using the proper volume of liquid soap?	Proper volume of alcohol based handrub?	Sufficient amount of time?	Donning and removing gloves correctly so as not to contaminate hands?				
1	Department	Nurses														
2	ICU	N1														
3	ICU	N2														
4	ICU	N3														
5	ICU	N4														
6	ICU	N5														
7	ICU	N6														
8	ICU	N7														
9	ICU	N8														
10	ICU	N9														
11	ICU	N10														
12	ER	N1														
13	ER	N2														
14	ER	N3														
15	ER	N4														
16	CCU	N1														
17	CCU	N2														
18	CCU	N3														

DISCUSSION AND RESULTS

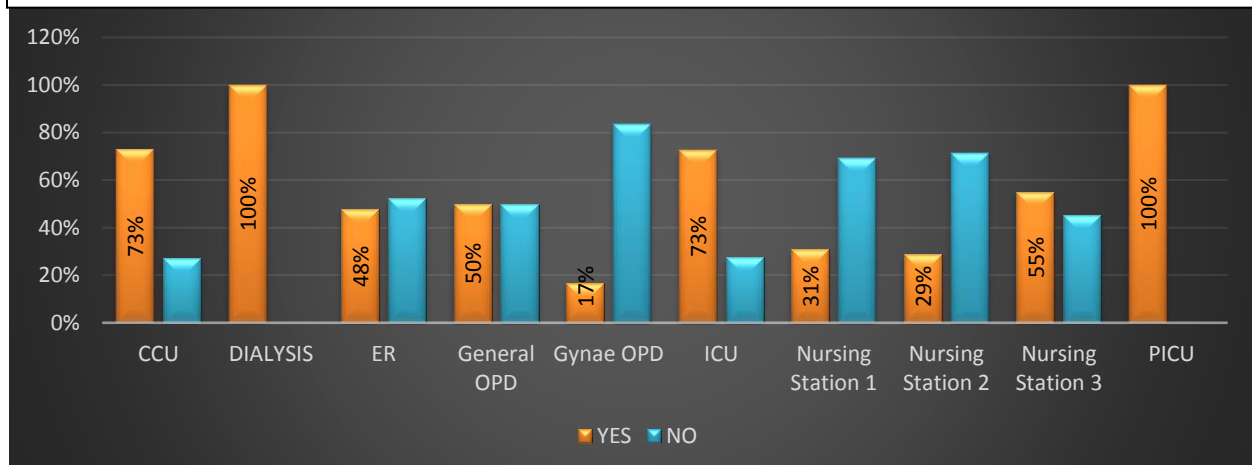
DATA ANALYSIS



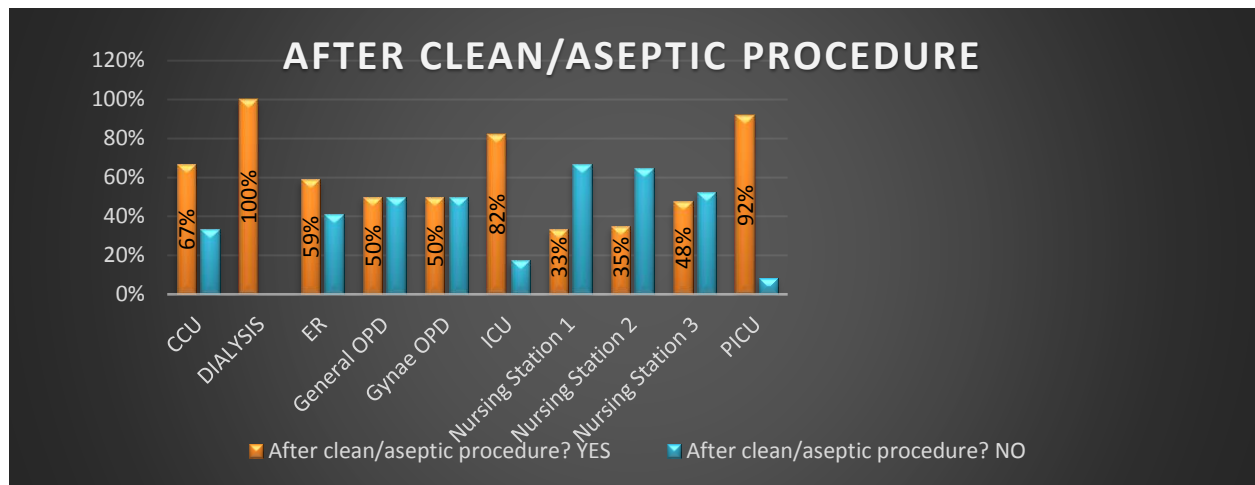
INFERENCE: According to this graph, Almost 60% of the nurses clean their hands before touching the patient, 64% before clean/aseptic procedure, 69% after clean/aseptic procedure, 74% after body fluid exposure, 78% after touching a patient, 73% after touching patient surroundings, 86% are using proper amount of soap, 89% are using proper amount of hand rub, 86% are taking proper time to clean their hands and 90% of the nurses are donning and removing their gloves properly.



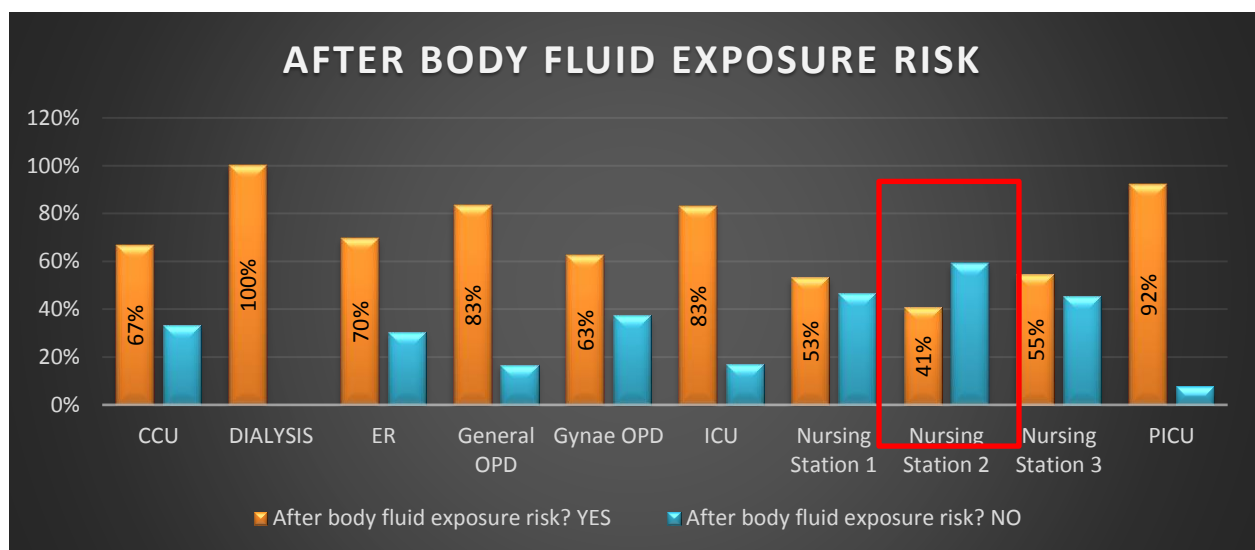
INFERENCE: According to this graph, Dialysis and PICU shows the maximum hand hygiene compliance with a respective 94% and 95% while ER and Gynae OPD shows the least with a respective 43% and 36%.



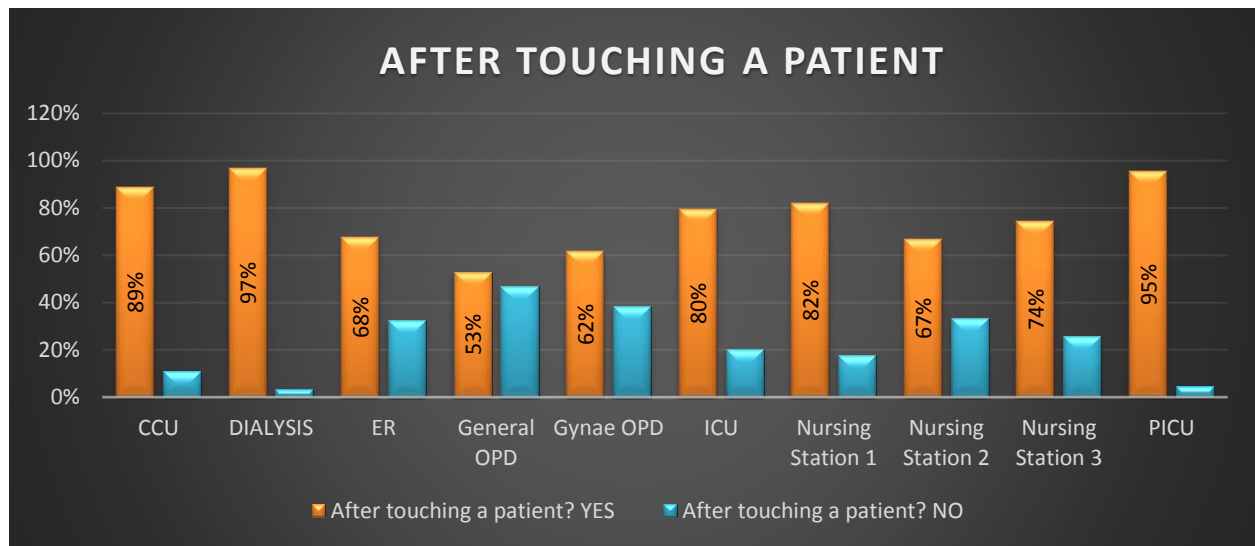
INFERENCE: According to this graph, Gynae OPD shows the least hand washing practice before a clean/aseptic procedure, while dialysis and ICU shows the maximum with a whopping 100%



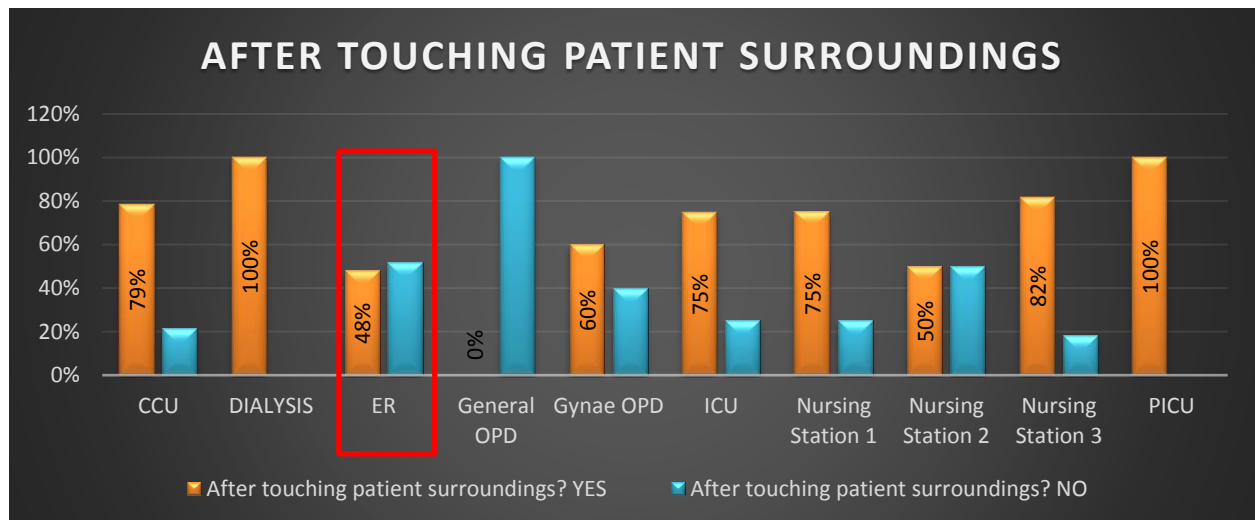
INFERENCE: According to this graph the three nursing stations show less compliance to hand washing after clean/aseptic procedure.



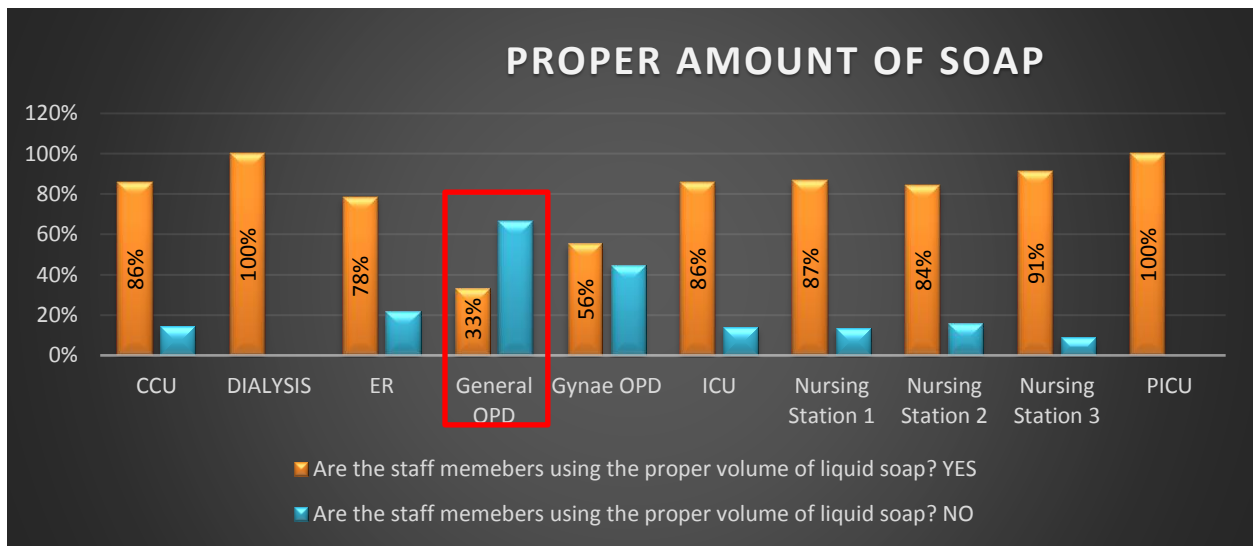
INFERENCE: According to this graph nursing station 2 shows low compliance to hand washing 'after body fluid exposure'



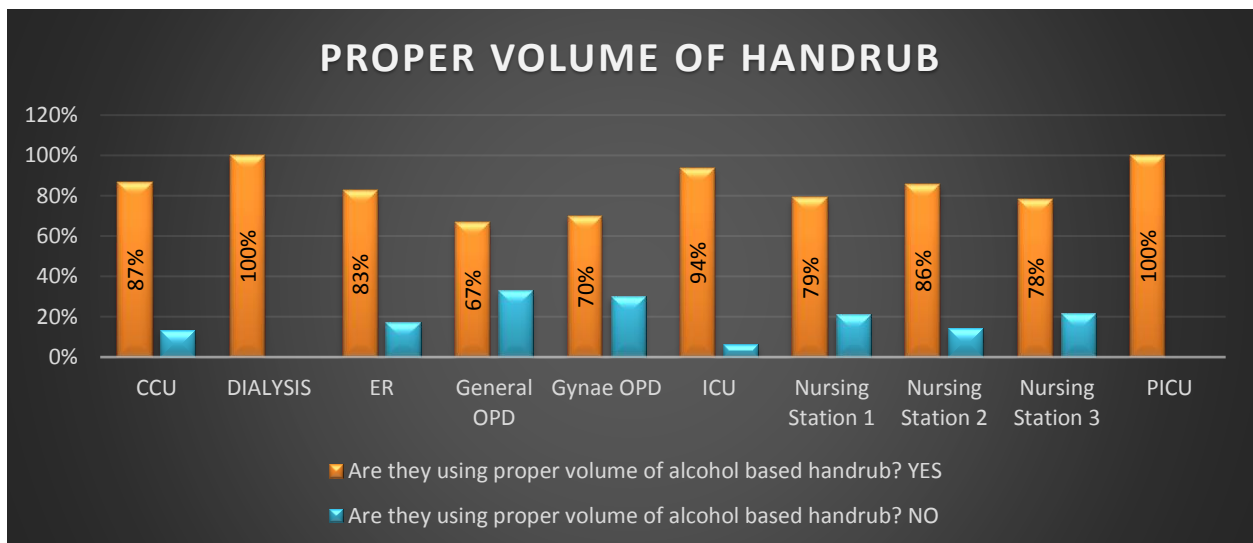
INFERENCE: According to this graph all the department show a pretty decent hand washing compliance 'After touching a patient'.



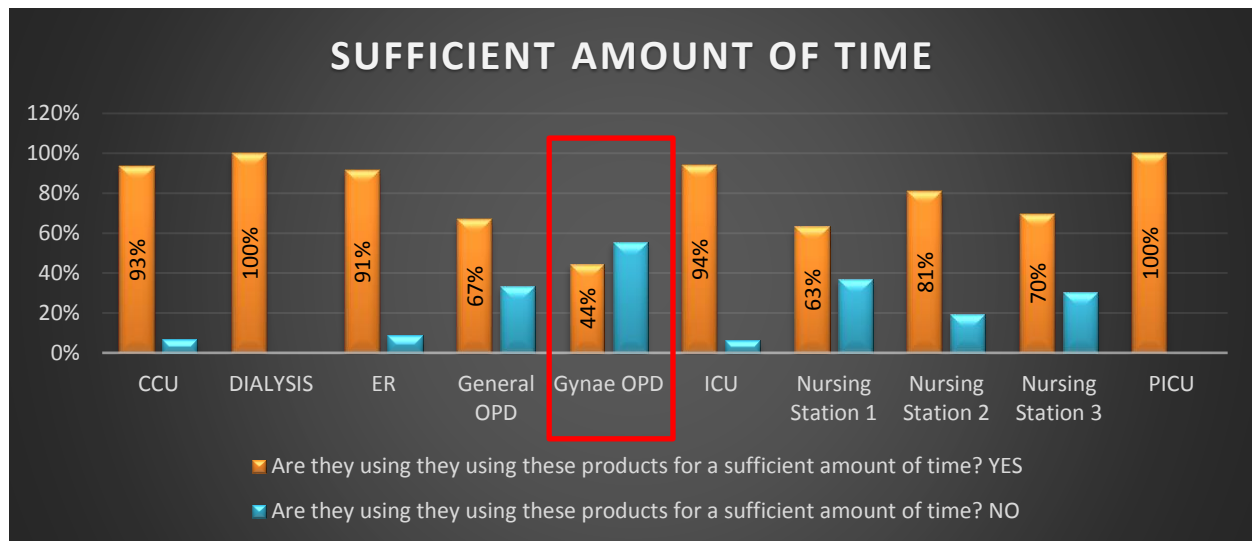
INFERENCE: According to this graph, ER shows a low compliance to hand washing 'After touching patient surroundings'



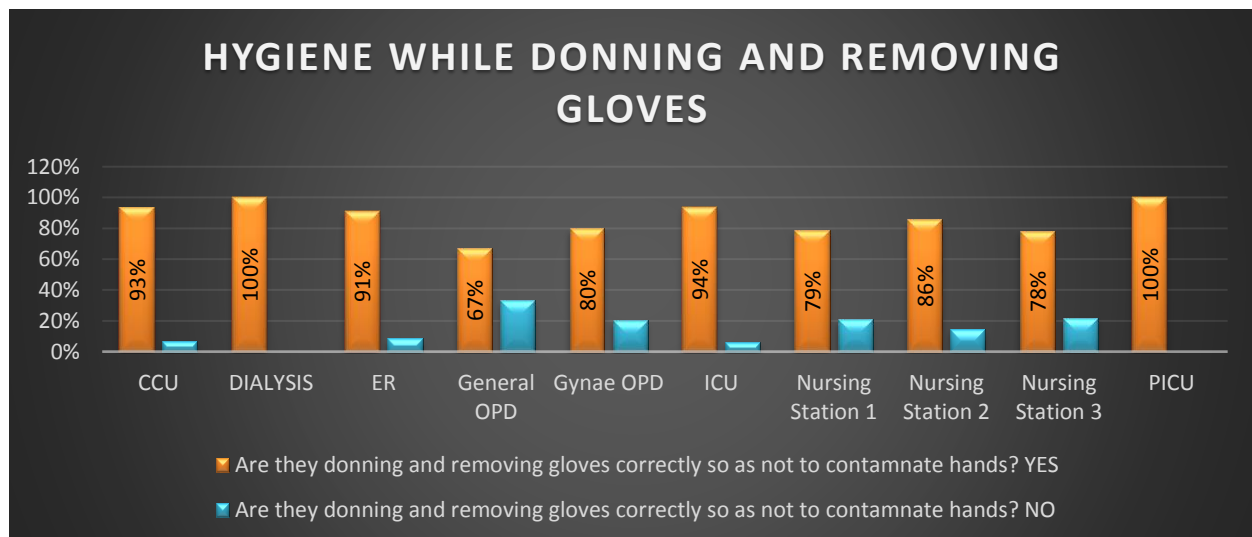
INFERENCE: According to this graph, general OPD shows a low compliance to 'Using proper volume of liquid soap'



INFERENCE: According to this graph Almost all the department are using proper amounts of hand rub.



INFERENCE: According to this graph gynae OPD is not using the hand washing/cleaning products for sufficient amount of time.



INFERENCE: According to this graph all the department are donning and removing their gloves correctly so as to avoid contamination.

OBSERVATIONS AND FINDINGS:

1. The organization periodically monitors the compliance in a well-documented fashion.
2. The most compliant personnel are named by the nursing TLs and are awarded for future motivation and for others.
3. The last hand hygiene drive was conducted in the quality month of November, 2016.
4. This Hand Hygiene Day i.e. on May 5th 2017, a quiz was organized by the hospital to check the awareness of the nursing staff and to encourage them.
5. Mostly all the nurses are aware of the pros and cons of Hand Hygiene.

6. Overall hand hygiene compliance was observed to be 60% where the expected level is 75%.
7. Gynae OPD and ER miss out the moments probably because of their busy OPD hours.
8. Many a times it happens that it also depends on the urgency or other condition in which the patient has arrived in the hospital.
9. The alcohol based hand rubs are installed everywhere in the hospital but are not used very frequently.
10. General OPD nurses don't feel the need to wash their hands as they are only recording vitals of the patient before sending them in for consultation.

SUGGESTIONS/RECOMMENDATIONS:

1. A track of all the nurses following all the moments of hand hygiene or not can be kept, probably the TLs could help with that.
2. Patient and his attendant should be educated and the importance of Hand Hygiene Practises should be explained to them.
3. Mock drills can be planned to give a real life experience to the HCWs.
4. Peer to peer learning will also help in increasing compliance of hand hygiene.
5. It should be made a policy of the hospital for more adherence.

CONCLUSION

The nursing and other Health Care Staff should be made more aware about the importance of maintaining hand hygiene while taking care of a patient and to keep in mind all the moments of hand hygiene.

Regular in house training and drives will help motivate the HCWs to be more compliant.

TITLE 3: STUDY OF PATIENTS TAKING LEAVE AGAINST MEDICAL ADVICE (LAMA) FROM ER

REVIEW OF LITERATURE

Patients who leave the hospital against medical advice, referred to as “discharges against medical advice” (DAMA) or LAMA, are both a concern and a challenge for individuals in the health care field. Patient non-compliance has the potential to result in harm to the individual’s health. Professional liability is also a concern for physicians caring for these patients.

The patient so asking for discharge like that needs to be first seen by the physician available and then leave with a documented fashion.

Since it is voluntarily leaving the hospital against the physician’s advice, which might indicate a problem in the hospital or the quality of care in it.

Those patients going LAMA are at a great risk in the following ways:

1. Due to incomplete treatment, they tend to pose the biggest threat of readmission in to the hospital.
2. It also risks the image of the hospital in terms of public image, efficiency of HCWs etc.
3. Increases competition with other hospitals

RATIONALE

This study aimed to evaluate the frequency and reasons of LAMA in the emergency department (ER).

OBJECTIVES:

1. To determine the cause leading to patients taking LAMA in specific period of time
2. To give recommendations for the same for improvisations

RESEARCH METHODOLOGY

- **Type of study:** Cross sectional, descriptive study
 - **Study population:** Patients in the ER department of the hospital.
 - **Study area** – Emergency department at Max Hospital, Gurgaon
 - **Duration of Study** – 6 weeks
 - **Type of Data** – Quantitative & Qualitative
 - **Data collection** - secondary and Quantitative (3 weeks)
 - **Data entry-** Manually through a feedback form (attached below)

- **Data Analysis**- Using histograms
- **Sample size**– 65

PATIENT FEEDBACK

Q1. How did you find the infrastructure of the hospital?

- a. Excellent
- b. Good
- c. Fair
- d. Others (Please specify)

Q2. How was the reason of admission to ER/ Ill health communicated to you?

- a. Explained in simple language
- b. Explained but not understood
- c. Not explained

Q3. How do you like the cost of treatment quoted by the hospital?

- a. Expensive
- b. Affordable
- c. Cheap

Q4. Were you intimated about the cost of treatment? If yes how did you find it?

- a. Very helpful
- b. Satisfactorily helpful
- c. Not Helpful

Q5. During your stay at the hospital, how did you find the behavior of the Doctor/s?

- a. Good
- b. Average
- c. Others (Please specify)

Q6. How did you find the behavior of the nursing and other staff?

- a. Good
- b. Average
- c. Others (Please specify)

Q7. Time taken by the consultant to visit you after your arrival was?

- a. Attended by doctor within first 10 minutes
- b. Attended by doctor within 15 minutes
- c. Within 30 minutes
- d. More than 30 minutes

Q8. How was your overall experience about the services offered to you by Max Hospitals, Gurgaon?

- a. Good
- b. Average
- c. Others (Please specify)

Q9. Was your medical condition relieved by the emergency treatment given to you?

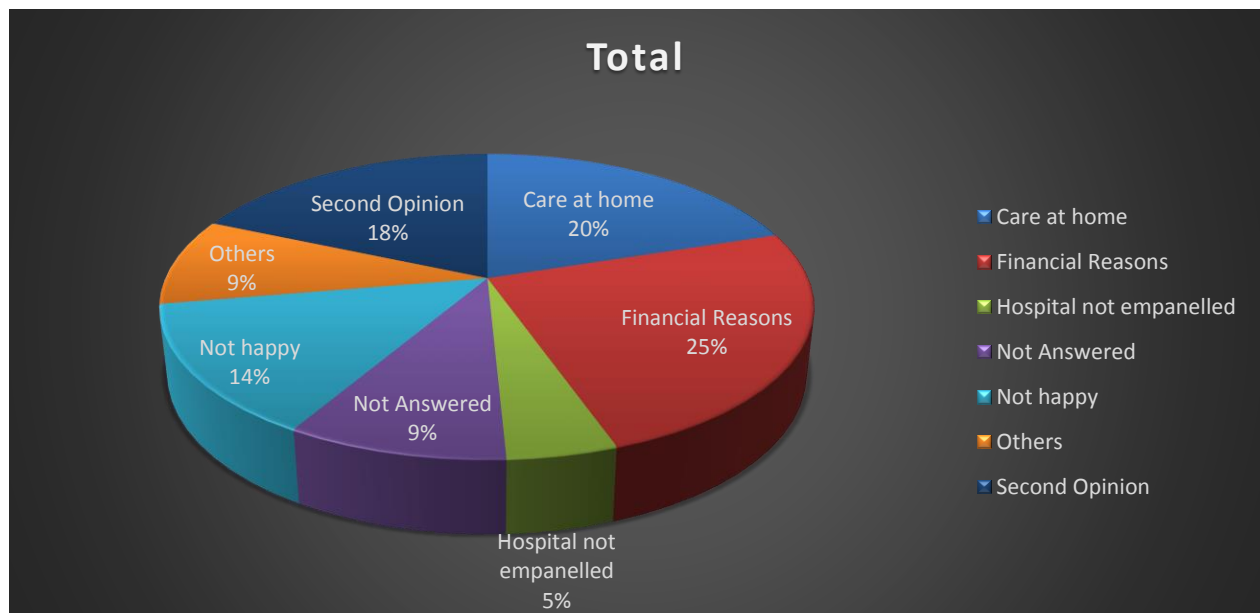
- a. Yes
- b. Slightly resolved
- c. No

Q10. If there is any other reason that prompts you to discontinue the treatment with us, kindly specify.

_____.

DISCUSSION AND RESULTS

DATA ANALYSIS



INFERENCE

According to this graph the three major reasons that predominate the decision of the patient/attenders to take LAMA are:

1. Care at home – 20%
2. Financial reasons – 25%
3. Second opinion – 18%

OBSERVATIONS AND FINDINGS

1. The patients come to the Emergency Department with a medical condition of a very urgent nature, they may want to take time to make a decision to get admitted or not once the condition is relieved.
2. Taking a second opinion is also for the patient's satisfaction in the times now.
3. Many a times and also as observed in the sample, aged patients like to go back to their homes ASAP, probably having high anxiety in the hospital.
4. Patients are not financially sound to afford the treatment in the hospital.
5. The patients sometimes are very un-cooperating and do not listen to the doctor's advice.

SUGGESTIONS AND RECOMMENDATIONS

1. Increasing patient awareness of the potential side effects of DAMA
2. Creating the necessary culture for the same
3. Improving hospital facilities
4. More careful supervision of medical staff performance.
5. Special packages can be devised to help the underprivileged for providing quality treatment.

CONCLUSION

Based on the results of the present study, most cases of LAMA were patient related.

Increasing the knowledge of the patients regarding probable consequences, designing outpatient management programs for these patients and improving the quality of medical services can help decrease LAMA cases.

TITLE 4- CARDIOLOGY FILES AUDIT

RATIONALE

This study was done randomly for 50 cardiology patient files in the medical records department.

This was done to determine the doctor's notes' compliance, and improvise the practice in case the compliance is found to be low.

Cardiology file audit checklist:

	PT1	PT2	PT3	PT4	PT5
SHGN NO.					
CONSULTANT NOTES					
CARDIAC SR NOTES					
ANAESTHETIST					
PROCEDURES MENTIONED					
ALOS					
CONSENT FORM					
HIGH RISK CONSENT					
OT NOTES					
PT ON VENTILATOR					
ICU ADMISSION					
ICU READMISSION					
EXTENDED STAY					
OUTCOME					

FINDINGS

AUDIT CHECKLIST	Count of 10	Complete Compliance	Count of 5	Partial Compliance
CONSULTANT NOTES	19	38%	20	40%
CARDIAC SR NOTES	33	66%	14	28%
ANAESTHETIST	20	40%	5	10%

PROCEDURES MENTIONED	0	0%	0	0%
ALOS	0	0%	0	0%
CONSENT FORM	26	52%	20	40%
HIGH RISK CONSENT	16	32%	9	18%
OT NOTES	4	8%	0	0%
PT ON VENTILATOR	0	0%	0	0%
ICU ADMISSION	0	0%	0	0%
ICU READMISSION	0	0%	0	0%
EXTENDED STAY	0	0%	0	0%
OUTCOME	0	0%	0	0%

INFERENCE

From the table above, we infer that there is 38% complete compliance in Cardiac Consultant's notes while 66% in case of Cardiac SR's notes.

40% complete compliance in case of Anesthetic's notes. 52% compliance in consent's forms and 32% in high risk consent forms.

RECOMMENDATIONS AND SUGGESTIONS

- 1) Full/Complete compliance will lead to better record maintenance in the hospital.
- 2) Doctor's need to be talked about the importance of complete and regular notes and forms.
- 3) Nurses should also be counselled and told about the need and importance of the consent forms and high risk consent forms to be filled completely.
- 4) All the risks related to the undergoing procedure should be explained verbally and well documented in the form.
- 5) OT notes should also be written duly the same time when the procedure is being done.

CONCLUSION

For a good medical record maintenance, all the people in the hospital need to do their part of the documentation on time. Therefore, the notes and forms should be completed in time and kept for future references.