A STUDY ON ADMISSION PROCESS

AND

BED MANAGEMENT

A dissertation submitted in partial fulfillment of the requirements for the award of

Post-Graduate Diploma in Health and Hospital Management

By

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ABSTRACT

A STUDY ON ADMISSION PROCESS AND BED MANAGEMENT

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Introduction- Admission, transfers and discharge of patients are the important processes which signify the beginning and end of an episode during a patient's journey. Being admitted to hospital may be a stressful experience for any individual. It is thus necessary to ensure that the patient's journey through the admission process and subsequent hospital stay, transfers and discharge, are as smooth and trouble free as possible.
However, many healthcare settings today have immense pressure on its limited bed resources due to increasingly growing demand. In order to provide quality care with minimal delays and waiting, it is important to manage the forces of demand and supply by integrated bed management to improve utilization of resources.

The present study aimed to study admissions and transfers and suggest potential measures to reduce delays in admission and transfer process.

Method- The present study is being undertaken in an Oncology Specialty hospital with a sample size of 235 for admission delays, 100 for assessing patient satisfaction and 100 for studying transfers .The Admission process has been examined with the purpose of documenting the existing process and the bottlenecks in the process, determining the waiting time distributions, and developing recommendations for modifying the system to reduce waiting times for patients and overall admission and transfer turnaround time. The delays in the admission process have been identified by direct observation and recording the observations on a time tracking sheet for various steps in the admission process. The gaps in the admission process have also been identified by means of a Patient Satisfaction interactive survey form containing questions to identify gaps in the admission process and to assess patient satisfaction on various aspects of the admission process. The questionnaire has been prepared so that the gaps and delays can be identified from patient's perspective also. The reasons for delay has also been documented in the tracking sheet.

Results- The findings reveal that most of the admissions are planned. Most of the patient arrivals for admission are between 11:30 – 2:30 PM and on an average waiting time for bed availability is one hour six minutes post patient arrival at admission desk with admission slip and it is one of the major reasons for delay in admission process. Maximum rooms are allotted between 1:00- 2:30 PM. Patients were allotted rooms during this time period when system showed vacant bed in 52% cases i.e, Room is allotted before previous patients' discharge process is complete. Physical discharge takes place on an average one hour late post system discharge of patient. This occurs because the billing section shows discharge/vacant bed on system as soon as the patient's medical record (Discharge File)comes for billing irrespective of the bill being cleared by attendant or not. Thus rooms allotted post system discharge of patient are not vacant and the present study shows that around 62% of rooms are not vacant/ready at the time of bed allotment. Thus patients had to

wait first for bed availability and thereafter for bed readiness. The findings have shown that one of the grey areas in admission process is the patient arrival pattern to the admission Desk. Admission Staff calls all the planned appointment admission patients at 12 PM resulting in chaos and crowding at admission desk. However, few of planned admission patients turn up in morning itself as the patients are coming since many years and/or months and know that few beds are available in morning time. The occasional few available beds in the morning are utilized for internal transfers and not for planned and walk in admissions. Also, few of non-appointment patients arrive in the morning as no information is given to them about bed availability and admission turnaround time. Thus it is imperative to define admission TAT in the policy and communicate it to the patient at the time of booking admission. Major delay in admission/patient placement turnaround time was due to delay in beginning room preparation post discharge of previous patient. In order to bring down the admission turnaround time it is imperative to reduce the bed turnaround time. Another major reason for delay in admission process was delay in intimation of bed readiness to admission desk. Casualty Admission Average turnaround time is 3hours .Major reasons for delay are same as for planned and walk in admissions. Another aspect of bed management covered in the study is intra hospital transfers. Two types of transfers are studied - ICU to Ward Transfer and Ward to Ward transfers. Most of the transfers requested between 9:30-10:30 am. 41% of ICU transfers have turnaround time of >5 hours. Average TAT is 4 hours for ICU to Ward transfers. Major reasons for delay were (1)non availability of preferred category beds, (2)Delay in intimation of Room readiness to ICU staff by Ward Secretaries., (3)Delay in room cleaning/preparation post discharge of previous patient(4) Attendant not available at the time of physical shifting. The findings from an interactive survey with patients reveal that 47% of patients rated the admission process as average in terms of patient satisfaction.33% were satisfied and 20 % were not satisfied with the admission process. The study of the two processes- admissions and transfers and time tracking of the various sub processes identified that communication gap is the second major reason for delays in the process the first being non availability of vacant beds. Not much can be done about increasing the number of beds because of space constraints but by maximizing the utilization of limited resources, much of the unnecessary delays can be reduced.

Conclusions – Management of inpatient admissions and transfers is essential to enhance the quality of patient care. In an era when hospitals nationwide are being forced to do more with less resources due to increasingly growing demand, many factors contribute to increased patient waiting for room/bed assignment/allotment

While many of these factors are outside of a hospital's control like increasing number of admissions every year etc., others can be influenced through staff 's and management's focus on patient flow across the hospital.

Simply building bigger hospitals is not the solution and turning patients away is hard to justify when we know that hospitals still have much that they can do to accommodate them .The right answer is improving patient flow.

ACKNOWLEDGEMENT

I take immense pleasure in thanking Dr. A.K Dewan , Medical Director and Dr. Amitabh Sandilium , Medical Superintendent, RGCI , for having permitted me to carry out this project work in their esteemed organization.

I wish to express my deep sense of gratitude to my Mentor and Guide, Dr. Sippy Batra, Manager Quality, RGCI for her guidance, constant support and encouragement, which helped me in successfully completing the project work. I also wish to express my deep sense of gratitude to Mrs. Minakshi Gautam , my Mentor and Guide from International Institute of Health Management Research, Delhi for her timely and able guidance in the conduct of this project work.

This study would have been impossible without the invaluable help from the Admission Staff and Ward Secretaries, who helped me in data collection.

Finally, yet importantly, I would like to express my heartfelt thanks to my family and friends for their help and wishes for the successful completion of this project.

ABBREVIATIONS

1. ED- EMERGENCY DEPARTMENT
2. ICU- INTENSIVE CARE UNIT
3. SICU-SURGICAL INTENSIVE CARE UNIT
4. MICU-MEDICAL INTENSIVE CARE UNIT
5. OR- OPERATING ROOM
6. TAT- TURN AROUND TIME
7. MRD-MEDICAL RECORD DEPARTMENT
8. HIS- HOSPITAL INFORMATION SYSTEM

Part 1
INTERNSHIP REPORT

ORGANIZATION PROFILE:-

Rajiv Gandhi Cancer Institute & Research Centre –

Rajiv Gandhi Cancer Institute & Research Centre is a Unit of Indraprastha Cancer Society which is a non-profit public society managed by a group of socially responsible, selfless, philanthropists. Indraprastha Cancer Society was formed in the year 1994 under the society's registration act, 1860. The main objectives of the Society are:-

- Cancer patient care,
- scientific research on all aspects of Cancer patient care,
- Scientific research to investigate the incidence, prevalence, distribution, cause, and symptoms of Cancer and to promote its cure.

RGCI started functioning on 1st July, 1996 after a soft opening was done by Hon'ble Smt. Sonia Gandhi. It was formally inaugurated by the then President of India, Dr. Shankar Dayal Sharma, in the presence of Smt. Sonia Gandhi and other dignitaries, on 20th August, 1996.

RGCI was initially started as a 152 bedded hospital. Since then it has been growing steadily and has till date never looked back. Presently it is a 241 bedded hospital, with state of the art facility for the diagnosis and treatment of cancer and is recognized as one of the premium Institutes not only in northern India but also in the entire country.

SPECIALTIES AT RGCI:-

- Multispecialty Clinic / Tumor Board
- Surgical Oncology
- Uro and Gynae Oncology
- Radiation Oncology

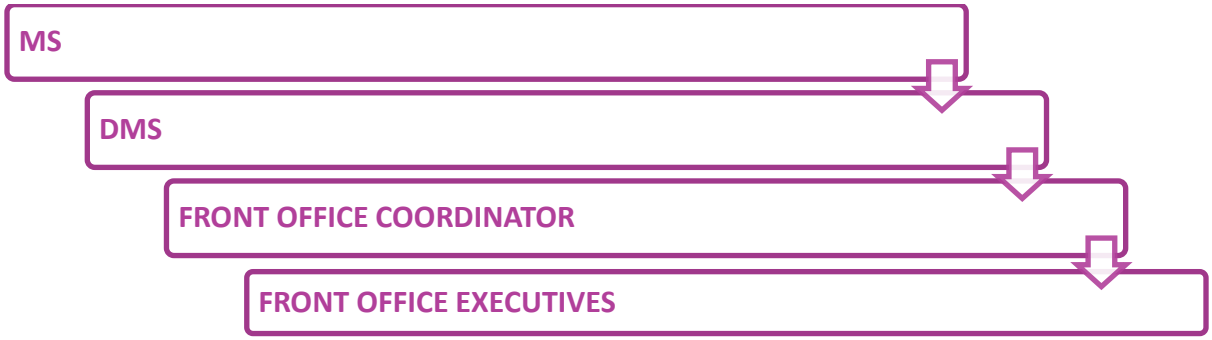
- Medical Oncology
- Pediatric Hematology & Bone Marrow Transplantation
- Neuro-Oncology
- Intensive Care Unit (ICU) –MICU is a 14- bedded unit. SICU is
- Physiotherapy
- Radiology Department
- Diagnostic and Interventional Gastroenterology
- Department of Laboratory services
- Department of Nuclear Medicine.
- Anesthesiology and Pain Management
- MRI Department
- Preventive Oncology
- Telemedicine

PROCESS FLOW IN VARIOUS DEPARTMENTS

During Induction period of Internship various Departments of the hospital were visited and their process flows were studied. The Departments visited along with their process flows are-

FRONT OFFICE:-

The organgram of the front office of RGCI is as follows-



FUNCTIONS

REGISTRATION

- Registration of personal details of all new patients into the system
- Issue of OPD booklet and general information booklet to the patient
- Issue of registration card
- Collection of consultant fees
- Preparation of OPD file of new patients

HELP DESK/APPOINTMENTS

- Answering the queries
- IP referral
- Prior appointment for OPD consultation
- Financial estimate to the patients

- Pre-admission counseling
- Railway/Air Concession Form

ADMISSIONS

- Preparation of admission documents for patients advised admission after ascertaining the bed category desired and deposit of advance
- Dispatch of IP file to the ward concerned
- Updating the admission waiting list
- Issue of attendant and visitor passes
- Receiving transfer notes and updating the system
- Accommodating patients in wards who are shifting from SICU

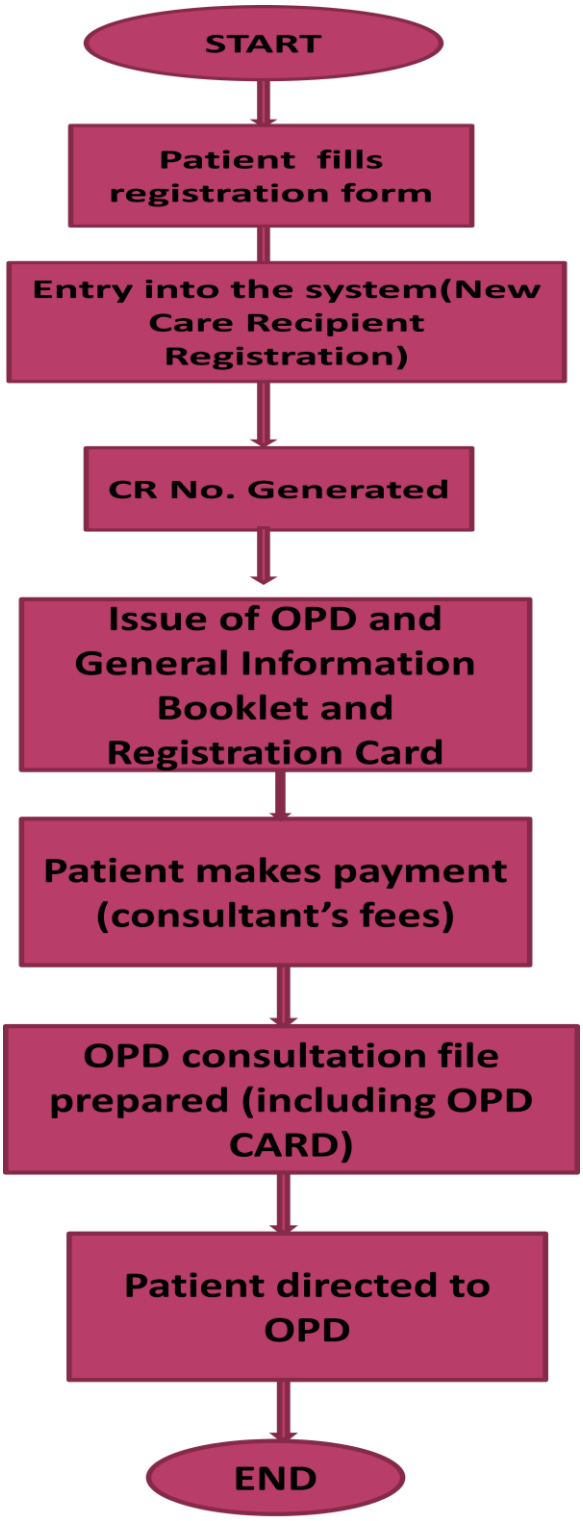
JOB DESCRIPTION

Front Office Executive-

1. Attending to patient/relative queries
2. Appointments
3. Financial estimates
4. Pre admission counseling
5. Managing IP Referrals
6. Generation of CR No. and OPD consultation and IP file ; Preparation of admission documents
7. Billing (consultant fees)
8. Coordination with OPD,IPD AND MRD
9. Issue of passes

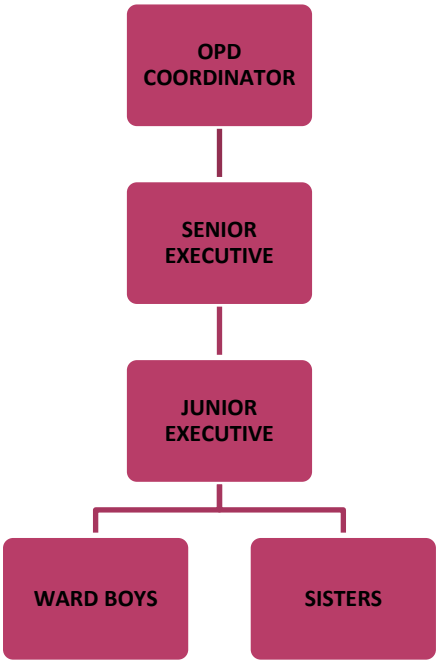
10. Updating the system regarding patient movement/transfer details

PROCESS FLOW FOR NEW PATIENT REGISTRATION



OUT PATIENT DEPARTMENT

ORGANOGRAM



FUNCTIONS

- Scheduling of patients
- Consultation by consultants
- Management of waiting time
- Referral of patients to other units
- Documentation

JOB DESCRIPTION

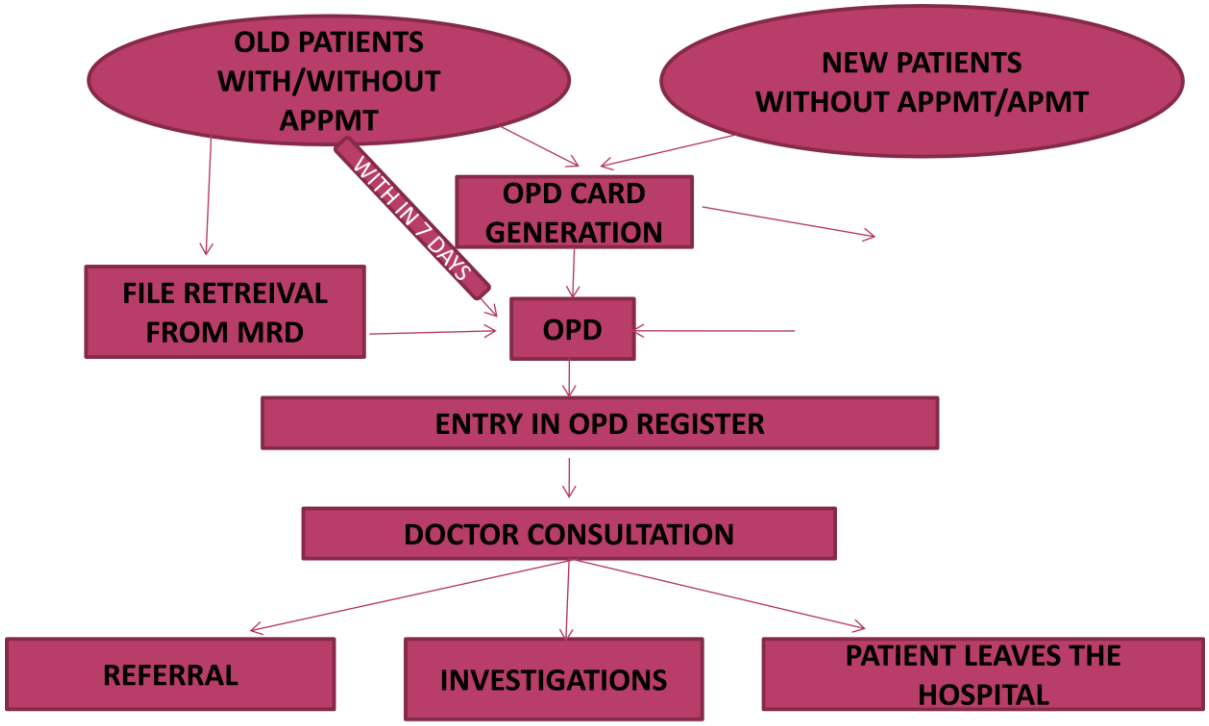
OPD EXECUTIVE

1. Maintaining record of file movement from/to other departments and MRD
2. Maintaining records like appointment register, dispatch register and without appointment register.

3. Patient calling according to appointment / without appointment (FIFO)

4. Sending of Patient file to the respective units appointment wise.

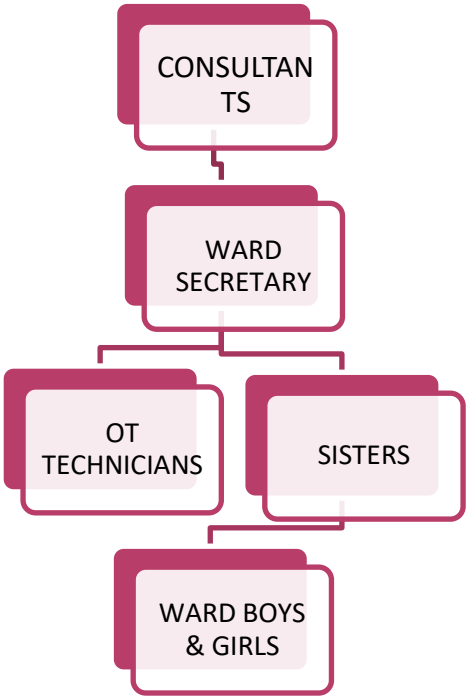
PROCESS FLOW IN O.P.D



MINOR OPERATION THEATRE

Timing – 7:30 A.M. TO 7:30 P.M.

ORGANOGRAM:-



Minor surgical Procedures are performed in Minor OT:-

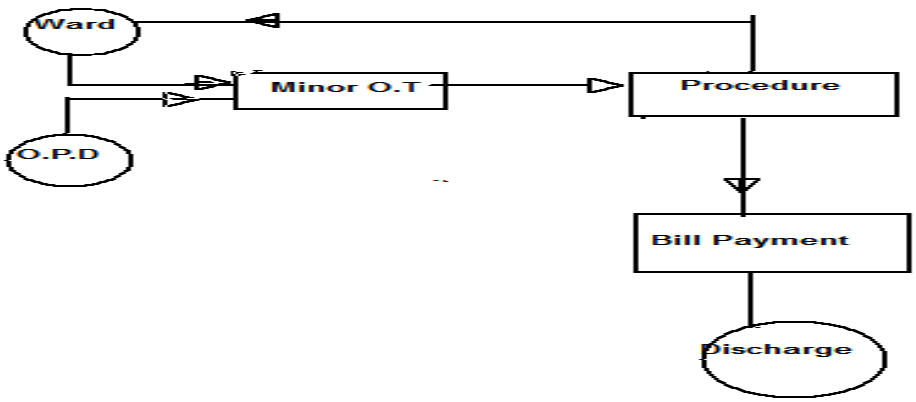
- Bronchoscopy
- Laryngoscopy
- Port insertion/removal
- Biopsy
- FNAC
- Endoscopy

Duties of Nursing supervisor

- Scheduling- patient

- Co-ordination between patient arrival, doctor timing and Operation theatre preparedness.
- File movement – to and from Minor Operation theatre
- Sending patient for billing before discharge.

PATIENT FLOW:-



DAY CARE

Timing- 8:30 A.M to 10:00 P.M.

There are 33 beds in the Day-care

The procedures being done in day-care are -

- Chemotherapy
- Blood transfusion
- Lumbar Puncture
- Bone Marrow Aspiration
- Fluid tapping

- PICC line dressing
- Rest post CT guided FNAC

BED ASSIGNMENT TO NURSES:-

NURSE : BED RATIO IN DAY CARE = 1:4

EXISITING SYSTEM FOR BED ASSIGNMENT-

8:30 AM -5 PM:-

ONE NURSE EACH FOR -

PAED, 2166-2169,2170-2173,PICC LINE ROOM,2162-2165,2151
1-3 HELP

11:30AM – 8 PM:-

ONE NURSE EACH FOR –

PROCEDURE ROOM, PAEDS,2153,ALL SINGLE ROOMS

2 PM-10:30 PM:-

ONE NURSE EACH FOR-2158, 2166-2173,ALL SINGLE ROOMS

7:30PM-7:30 AM:-2 NURSES

JOB DESCRIPTION:-

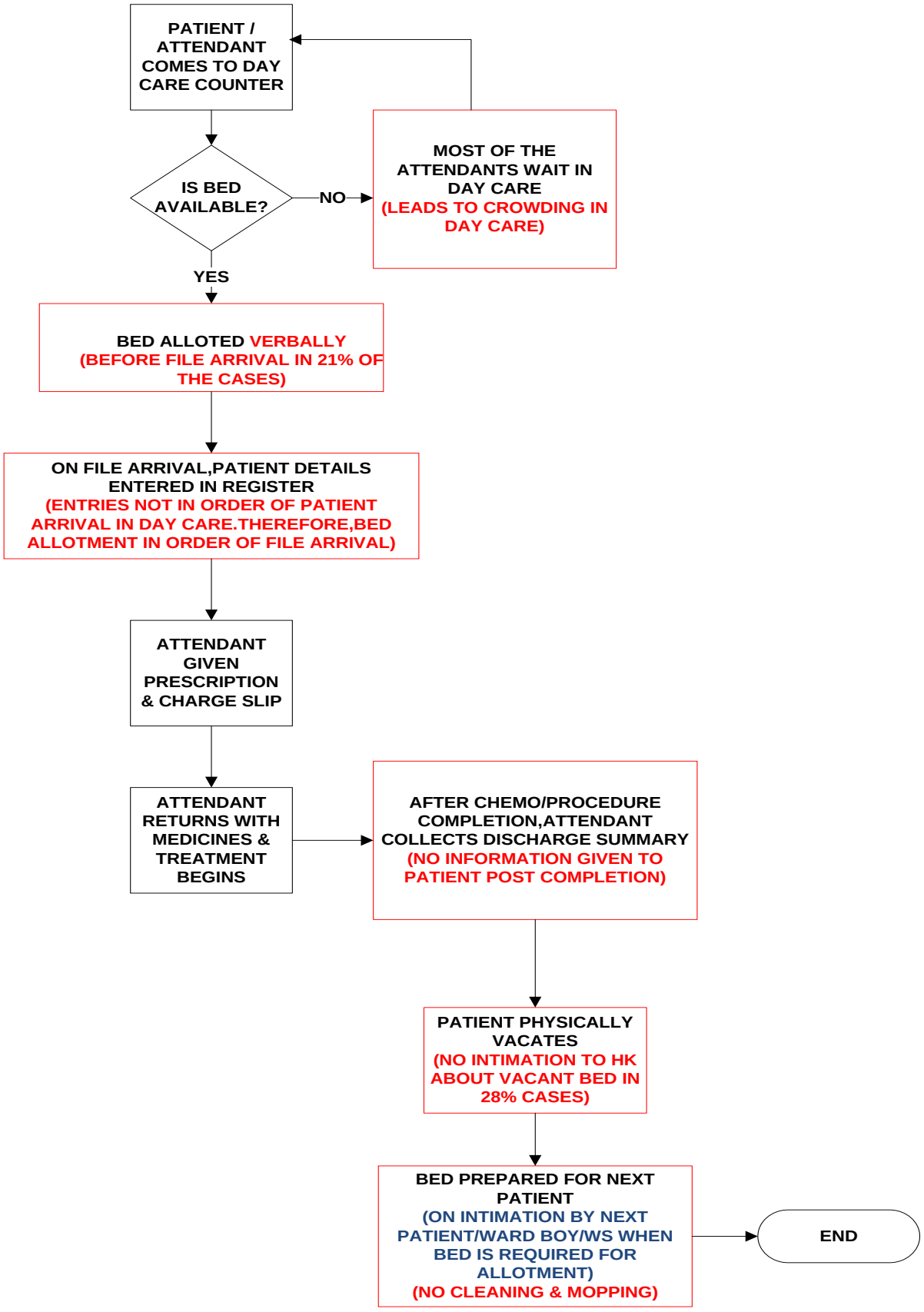
SENIOR MEDICAL OFFICER:

- Protocol preparation
- Patient management
- Checking for any discrepancy in patient files

SISTER IN CHARGE

- Maintaining daily records in registers
- Inventory management
- Prescription Writing from file

PROCESS FLOW IN DAY CARE:-


PATIENT / ATTENDANT COMES TO DAY CARE COUNTER
IS BED AVAILABLE?
NO
MOST OF THE ATTENDANTS WAIT IN DAY CARE (LEADS TO CROWDING IN DAY CARE)
YES
BED ALLOTED VERBALLY (BEFORE FILE ARRIVAL IN 21% OF THE CASES)
ON FILE ARRIVAL,PATIENT DETAILS ENTERED IN REGISTER (ENTRIES NOT IN ORDER OF PATIENT ARRIVAL IN DAY CARE.THEREFORE,BED ALLOTMENT IN ORDER OF FILE ARRIVAL)
ATTENDANT GIVEN PRESCRIPTION & CHARGE SLIP
ATTENDANT RETURNS WITH MEDICINES & TREATMENT BEGINS
AFTER CHEMO/PROCEDURE COMPLETION,ATTENDANT COLLECTS DISCHARGE SUMMARY (NO INFORMATION GIVEN TO PATIENT POST COMPLETION)
PATIENT PHYSICALLY VACATES (NO INTIMATION TO HK ABOUT VACANT BED IN 28% CASES)
BED PREPARED FOR NEXT PATIENT (ON INTIMATION BY NEXT PATIENT/WARD BOY/WS WHEN BED IS REQUIRED FOR ALLOTMENT) (NO CLEANING & MOPPING)
END

MEDICAL RECORD DEPARTMENT

Medical Record Department is located in the basement of the old building.

The organogram of the MRD department is as follows:-

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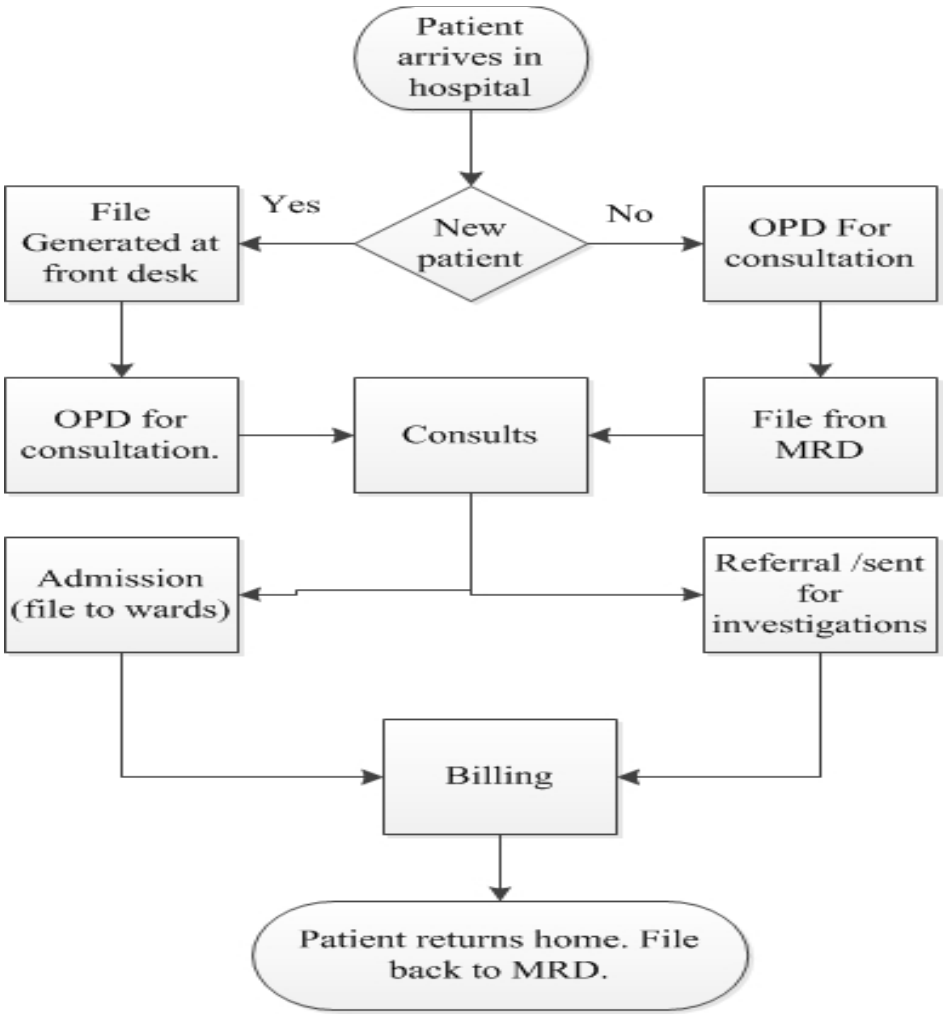
Functions of the Medical Records Department are-

- Storage and retrieval of medical records for patient care and other authorized use
- Completion of medical records after an inpatient has been discharged or died
- Coding diseases of patients discharged or having died
- Compiling statistics of various data & services
- Providing case summary of Medico-Legal cases to police authorities & patients on written request
- Providing medical information to insurance agency on prescribed form of insurance company on written request by deceased nominee/insurance authorities
- Reporting notifiable diseases to DHS on monthly basis
- Death Registration
- Issue of medical certificates

PROCESS FLOW IN MRD:-



Record Retrieval-

- Prior appointment list comes to MRD a day before
- Without appointment – Request received from OPD (File retrieval time =30-40 minutes for non appointment)
- Records arranged according to CR No. in ascending order

Retention Period-

- One Year for OPD patients
- Five Years for IPD patients
- Medico-Legal cases- Forever

Job Descriptions-

- Manager Medical Records-

    1. Monthly/Annual statistics
    2. Reports to Government agencies
    3. Death Registration

- Supervisor-

    1. Coding of diseases according to ICD 10
    2. Issue of medical certificate
    3. Filling up prescribed form of insurance company on written request by deceased nominee/insurance authorities

Food and Beverage Department (F&B)

Kitchen is located on the ground floor of the old building. It caters to the indoor patients, doctor dining hall and the staff dining hall. In addition the food and beverages which are available in the pantry are outsourced from a local bakery.

The functions of the F&B department are as follows-

- Patient Meal Service
- Attendant Room Service
- 24 hours services for the visitors' and staff at Coffee shop.
- Staff Meals
- Organizing In-house Functions, CMEs, Parties, Meetings**.**

The various processes taking place in the Food and Beverages department (F&B department) and the staff responsible for their checks are-

Process	**Responsibility**	**Check**	**Procedure**
Vegetable Receiving	Unit Manager, Manager (F & B)	Store Keeper / Chef / Supervisor	Quantity & Quality Check / Check Up For Short Supply And Non Supply

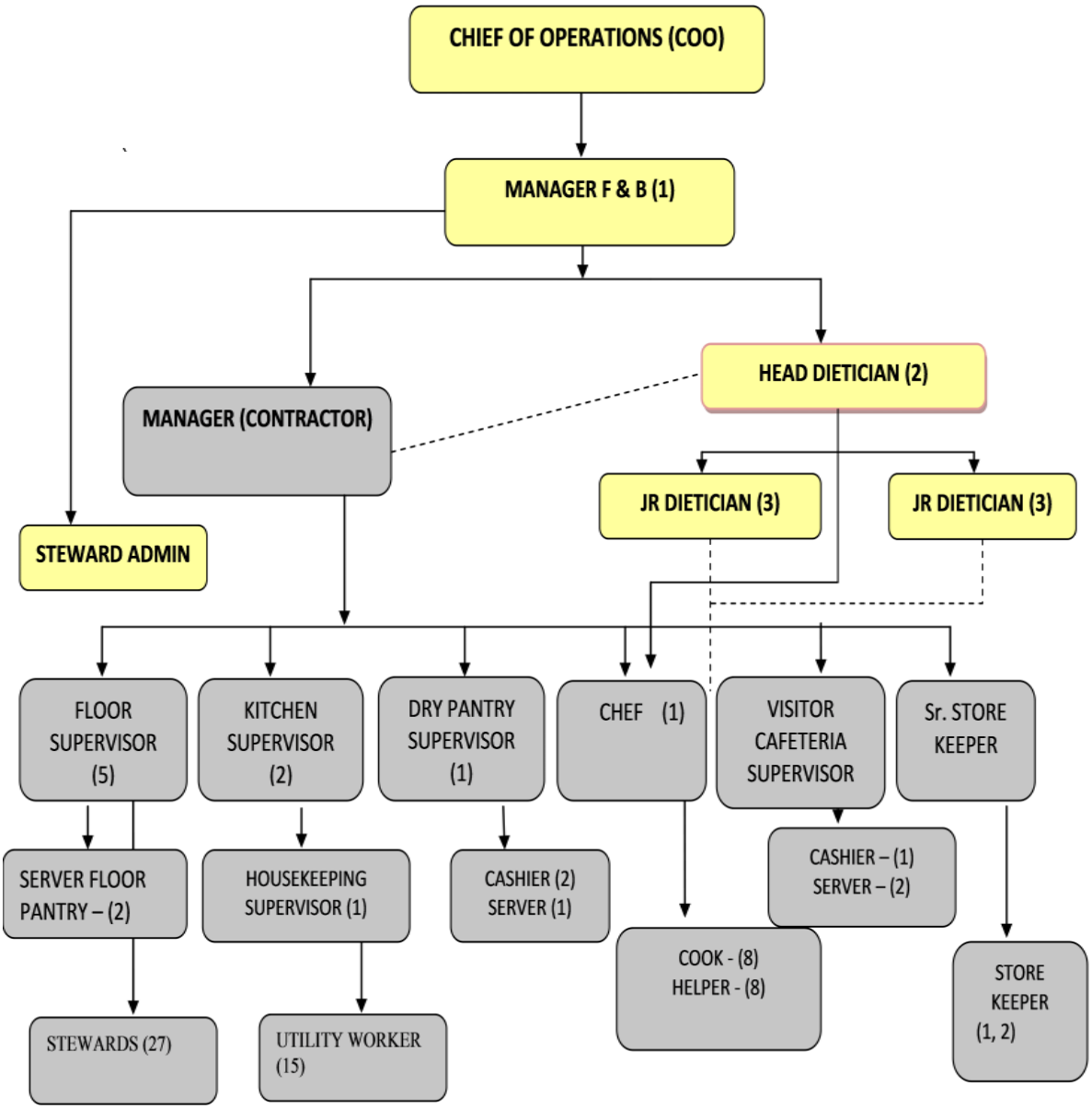
Grocery Receiving	Unit Manager, Manager (F & B)	Store Keeper / Chef	Quantity & Quality Check / Check Up For Short Supply And Non Supply
Dairy Products Receiving	Unit Manager, Manager (F & B)	Store Keeper / Chef	Quantity & Quality Check / Check Up For Short Supply And Non Supply
Vegetable Washing / Sanitation	Unit Manager, Manager (F & B)	Chef / Supervisor	Chlorotip Solution 2 Tablets In 30 Liters Of Water (50 Ppm) Wash And Allow 5-7 Minutes Contact Time
Kitchen Cleaning & Hygiene	Unit Manager, Manager (F & B)	Chef / Supervisor	Wizard Floor Washing Chemical
Staff Hygiene	Unit Manager, Manager (F & B)	Chef / Supervisor	Checking Before Starting Of Every Shift
Cooking	Unit Manager, Manager (F & B)	Chef / Supervisor	According To Time, Temperature And Menu, Using Prescribe Quality Of Ingredients
Food Tasting (Cafeteria / Visitors)	Floor Supervisor /Unit Manager, Manager (F & B)	Chef / Supervisor	Taste, Appearance, Consistency, Temperature Check
Nutritional Assessment & Re-Assessment For All The Patient	Dietician	Dietician	For All The Patients
Morning Round At All Floors	Dietician	Dietician	All The Floors Including ICU, POP & BMT
ISO , NABH And Medical Record For Staff	Dietician / Manager F & B	–	Keeping All The Medical Reports Of All The Stewards And Maintain ISO Record
Staff Briefing And Training	Dietician / Unit Manager / Manager F & B	–	Kitchen Staff , Supervisor And Stewards
Diet Counseling On References And IPD	Dietician	–	–
Patient Billing	Dietician / Manager F & B	–	–
Diets Billing Deduction	Dietician	–	Diets Billing Deduction For CGHS, ESIC And Home Diet Patient

Departmental Billing	Manager F & B / Dietician	Dietician / Manager F & B	All The Departmental Billing
Menu Planning	Dietician / Manager F & B / Unit Manager	–	Menu Planning For Staff , Patients, Doctors
Meeting And Parties	Unit Manager, Manager (F & B)	–	Arrangement For Meeting And Parties
Food Tasting (Patients)	Dietician, Manager (F & B)	Chef / Supervisor	Taste, Appearance, Consistency, Temperature Check
Services	Unit Manager, Manager (F & B)	Steward /Supervisor	Time, Tray / Area / Station Lay-Out, Presentation, Menu Check According To Service

Following checklists are being used for service quality control:

- Refrigerator & cold room temperature checklist
- Staff grooming checklist
- Staff food testing checklist
- Kitchen Cleaning Checklist
- Store Brand checklist
- Trolleys Temperature checklist
- Room Service control checklist
- Patient service time checklist
- Food Sampling Record
- Fruits and Vegetables receiving checklist
- Pest Control in Kitchen

The organizational layout of the F&B department is as follows-



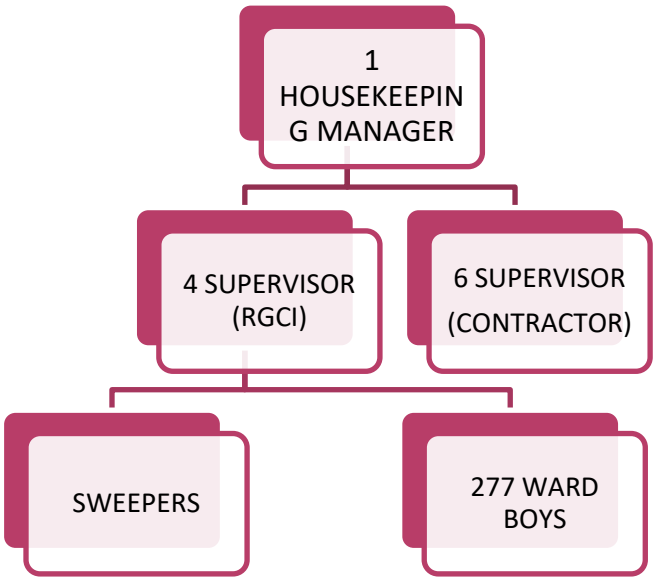
Roles of Dieticians-

- Diet Prescription and Diet Counseling .
- Diet Service – Liquid Diet Service
- Solid Diet Service - Normal , Soft
- Nutritional Assessment within 24hrs of admission and reassessment for all the patients
- Nutritionally risk group is identified and special nutritional plan is prepared.

- Reassessment is done for patients on special diets only as and when the diet is changed.
- Care of Patients – Therapeutic Diets, foods appropriate for patients condition.
- Patient and family education during the time of discharge for in patients, diet chart is provided to patients.
- Diet counseling is given to Patients as and when it is required.

HOUSEKEEPING DEPARTMENT

ORGANOGRAM



FUNCTIONS

- Mopping & Cleaning
- Fumigation & Fogging
- Pest control
- Linen Management
- Waste management

- Newspaper distribution

  Infection control

JOB DESCRPITION

HOUSEKEEPING MANAGER:

1. Preparation of monthly duty roaster and recording it.
2. Training of staff
3. Daily physical verification
4. Purchasing
5. Inventory management
6. Contractor bill verification
7. Maintaining records like spraying schedule record, BMW record, stock register, complaint register, midnight bed occupancy sheet.
8. Vendor selection
9. Involved in purchase , infection control and condemnation committee

PART II

DISSERTATION REPORT

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

‘’All improvement takes place project by project

…..and in no other way’’

-Dr. Joseph Juran

The core business of hospitals is delivering care. Efficient, effective patient flow is the engine that drives optimal care delivery and supports achievement of strategic goals, such as financial performance, high quality care, patient satisfaction and operational excellence.
This assures quality services, positive outcomes and best use of health care resources.

Because Service Delivery is the heart of the health care operating cycle, present day managers try to understand how efficiently care and services can be delivered to the patients. They try to understand the patient flow and bed management processes involved and evaluate their effectiveness over time. *The patient admission, transfers and discharge have been identified by many researchers as areas of service delivery that need to undergo significant changes so that every single patient receives the best possible care with minimal waiting time, every single time* (NHS Modernization Agency 2004). Admission, transfers and discharge of patients are the important processes which signify the beginning and end of an episode during a patient’s journey. Being admitted to hospital may be a stressful experience for any individual.
It is thus necessary to ensure that the patient’s journey through the admission process and subsequent hospital stay, transfers and discharge, are as smooth and trouble free as possible.
However, many healthcare settings today have immense pressure on its limited bed resources due to increasingly growing demand. In order to provide quality care with minimal delays and waiting, it is important to manage the forces of demand and supply by integrated bed management to improve utilization of resources. *Bed management is defined as the management of all admissions, stays, transfers, and discharges by a hospital within a framework that integrates and coordinates all processes related to these activities.* . Inappropriate bed management negates any gains achieved in programs that improve

efficiency in the continuum of care. An efficient organization manages both the continuum of care and bed resources.

The Admission Department in the study hospital is one of the highly congested service area with an average of 1370 planned and walk in admissions per month and an average of 70 casualty admissions per month (Statistics from M.R.D).It faces a great deal of pressure due to >85 % bed occupancy as per the Hospital Information System Reports but the actual occupancy level is >100 %.This discrepancy occurs because some of the rooms are blocked for maintenance or renovation and thus not occupied by patients. Although the number of beds on the records is 241 but few additional beds have also been adjusted in the wards. This full occupancy results in extended waiting time for admission and also delays in transfers from ICU to wards and even ward to ward. The Delays in the admission process may result in difficulties of scheduling services and decrease in patient satisfaction. This study examines the wide-spread problem of extended admission waiting times (ranging from one to as long as eight hours) and overcrowding at the admission desk during peak hours (12-2 pm).It also examines the reason(s) for delays during transfers from ICU to wards and from one ward to another.

1.2 PROBLEM STATEMENT:-

The study hospital has already registered more than one lakh, twenty five thousand patients coming from India and abroad. This number is continuously on a rise. A large number of patients from Nepal, Bangladesh, Sri lanka, and other neighboring countries are also utilizing the facilities of the Institute. As per the records of M.R.D, the number of admissions per year is exponentially increasing since 2006-07 till date with full bed occupancy.

Common concerns in the study hospital linked with inefficient bed management include:

1. Planned admission patients on waiting lists waiting undue times before admission
2. Postponed planned and Walk in admissions
3. Long waiting for patients in the emergency department before admission to wards
4. Intensive care beds blocked because patients cannot be transferred to wards especially in SICU.
5. Planned admission patients cancelled on the scheduled day of admission because a bed was not available.

As a result of the imbalance between the demand and supply in cancer care, the patient load for admission is increasing day by day. The resources on the other hand, are almost static. These has resulted in a big rush and consequently increased waiting times for bed availability.

IMPORTANT DEFINITIONS:-

1. Planned admission: Admitting a patient who has been given a next date of admission at the time of previous discharge/OPD visit. This is usually part of a planned sequence of clinical care (chemotherapy/radiotherapy/surgery) determined mainly on clinical criteria.
2. Walk in admission-OPD patients who are advised admission by doctor on the same day without a prior appointment for admission.
3. Emergency admission-Patients admitted from casualty.

1.3 REVIEW OF LITERATURE:

The *Admitting Department is one of the most highly congested hospital services, and faces a great deal of pressure, compared with other components of the health care system*. *Delays in admission process may result in difficulties of scheduling services at specialty units and decrease in patient satisfaction*. The study suggests that an appointment system can spread the arrivals for admission and thus avoid unacceptable levels of patients at certain times of the day. (Georgievskiy I et al)

Bed management and admission process can be improved by reducing unnecessary cancellations for medical reasons or because patients do not turn up by practicing the use of pre-admission assessments, and improving booking systems. (Select Committee publication, UK Parliament.2001)

Deferred planned admissions can be reduced by 19 % by integrated bed management (The NDHP-2 Experience, Commonwealth Department of Health and Aged Care)

The study suggested implementation of a strategy that patients should call in advance of their appointment time (or the night before for next day appointments) to avoid any unnecessary waiting.(Ozburn D J)

Emergency patients should be given a bed within two hours if admitted through an accident and emergency department.(Select Committee publication,UK Parliament.2001)

A case study revealed that nursing charts and the patient length of stay was primary contributors to waste in the ward. The study has shown that the Admission process time can be reduced to 68% by reducing room preparation time using a communication check sheet (Healthcare Performance Partners, 2010).

A report described practical approaches to reduce ED crowding as implemented in three hospitals. The major identified cause of ED crowding was the unavailability of inpatient beds and

patients had to wait for 48 hours before they were shifted to wards. This led to a high turnover rate for both nurses and physicians in the ED. (Wilson M J et al,2005)

A Study has also shown that patients were discharged around 2 P.M and hence patients would not leave until 3 or 4 P.M. The teams failed to move the discharge time to 11 AM, but succeeded in reducing the average bed turnaround time by implementation of Housekeeping communication system that tracked when a bed was vacated by patient and had to be cleaned. This allowed ED patients to get in a room more quickly despite delayed discharges. Average bed turnaround time was reduced from 150 minutes to 47 minutes, a 69 percent decrease which in turn reduced time for inpatient bed assignment to bed placement from 157 minutes to 55 minutes (Wilson M J et al,2005)

Another study has shown to reduce average total ED throughput time from 7.0 hours to approximately 5.25 hours. Average time from arrival to bed placement decreased from 219 minutes to 94 minutes (a decrease of 57 percent) by created new standardized procedures, and then educating the affected staff about alterations to their role(Wilson M J, Khoa Nguyen,2004).

Delayed notification of clean and ready beds to the admission staff leads to delays in OR throughputs and ED holds, and affects the movement of patients (Pellicone A,Martocci M,2006)

The key driver of trolley waits (the time from the decision to admit to leaving A&E) is lack of beds resulting from very high occupancy. A&E trolley waits are largely attributable to the lack of a "buffer" of empty inpatient beds(Proudlove N C et al,2003)

Another study revealed that10% of emergency visits were admitted and elective surgery admissions that were admitted the day before strongly affected emergency admissions (B Ortiga,2010)

Literature findings confirm that a lack of "ready and available admitting beds" contributes forcibly to emergency department overcrowding (Howell E et al, 2008)

The majority of emergency department waiting is a result of waiting for an available inpatient bed (Report of the Physician Hospital Care Committee, 2006)

The Literature shows that ED average waiting time in a hospital was up to 6.6 hours. 90% of Category I to III patients (resuscitation, emergent, urgent) waited up to 8.67 hours and 90% Category IV and V patients (non urgent, less urgent) waited up to 4.32 hours.
The study reveals that level I, II and III patients had to wait in ED for the consulting doctor and to get discharged or admitted to hospital. Large part of waiting occurs waiting for diagnostic tests and waiting for an inpatient bed (Report of the Physician Hospital Care Committee,2006)

Few studies highlighted the reasons for longer stay of patients in ED who are advised admission. 67% of admissions were delayed from ED. The mean length of stay of delayed patients was 256 minutes. Study identified reasons for delay like multiple consultations with further investigations (48%) ,67% were delayed mainly due to late advised admission. Other reasons for delay were Late arrival of investigations reports(10.3%),File making process43.5%,Patients personal &economical constraints16.3% and Waiting for vacant beds (13%) (Tashkandy M A,2008)

A study suggested use of a simple visual communication system between housekeeping and nurses that allowed staff to easily track beds that were available or that needed cleaning. This system reduced bed turnover time 76 percent, from an average time of two hours and 40 minutes to average time of 40 minutes (David Hnatow,2008)

The review focuses on national and international studies on access block and overcrowding in ED. These Studies reveal reasons for access block like rise in average bed occupancy to 85%- 90% and increased demand for hospital admissions. Few recommendations that have

been suggested for improvement are developing transit lounges; redesigning ED facilities and improved communication systems to improve patient flow. (Forero R, Hillman K)

The findings of a time and motion study of patients presenting at the Emergency Department (ED) suggested that there was no delay in waiting time to enter triage but waiting of one hour was there for first assessment The reason for increased Length of stay was identified as lack of enough beds in wards. (Azzopardi M et al,2011)

The literature review shows that very few studies critically examine the admission process in hospitals especially for planned & walk in admissions. Extensive research exists on Emergency Department overcrowding but very few studies examine the admission process from Emergency and reasons for delay in Emergency admissions. Thus, the present research work adds on to the existing work for other researchers to build upon.

Another Study revealed that delay in the patient transfer from ICU to ward, delays bed assignment when the surgery was finished. This delay affects the rotation of patients in ICU after the surgery and, finally, in operating theatres. (B Ortiga,2010)

Large reductions in ICU stay affecting many patients lower the risk of delays in Operating Room. (Dexteret F et al2005)

Another study suggests that communication is the critical factor for a 'smooth transfer from ward nurses perspective. Another reason for ICU retaining patients longer than necessary is hospital bed block (Sandra Bunn,2007)

Delays in shifting patient from cardiac intensive care to a high dependency unit is due to non availabilityof beds (Gallivan S et al)

A study reviewed literature that focused on patient handoffs during transfer process .The reasons for delay in transfer identified by the study were -the need for investigation or, ongoing support not provided in the referring ward ,problems with ancillary staff availability

and poor communication between the ICU and destination was identified as a contributing factor to the delay. (Mei-Sing Ong et al,2011)

The study stated common causes of "waste time" in transfers. *Delays caused by administrative requirements-physician orders, logging the transfer into the electronic information system or log book, bed not requested or call lag time, Delays caused by bed control--unavailable beds in wards. Delays caused by unavailable resources--nurses not available, receiving unit not able to take the patient (bed cleaning),Delays caused by disruptions--transfer starts but disruptions occur (nurse gets interrupted or distracted, lack of supplies or equipment needed),Delays caused by breakdowns in communication--nurse to nurse, unit to bed-control, nurse to physician or unit secretary, multiple hand-offs are disparate(*Hendrich A L, Nelson L ,2005).

Effects of transfers ,Reasons for transfers and patient hand over during transfers have been extensively studied in literature but an in depth study on ICU to ward transfers and Inter ward transfers with reasons for delay has not been well studied This research work is thus necessary to bridge the existing gap in literature.

Lot of research has been done on patient satisfaction. A study revealed that the higher the perceived courtesy of the hospital staff, the higher the patient satisfaction and the higher the perceived length of waiting time, the lower the patient satisfaction .Courtesy and waiting time have been found to be unrelated to patient satisfaction.(Mekoth N,2011)

A Study revealed that patients are least satisfied when waiting times are longer than expected, relatively satisfied when waiting times are perceived as equal to expectations and highly satisfied when waiting times are shorter than expected. Findings from this study showed that the patients who waited more than one hour expressed dissatisfaction with services rendered in OPD(Umar I.et al)

One study in ED revealed that if waiting time is high, the level of patient discomfort is also high.(Camacho F et al,2006)

Another Study revealed that Patient flow improvements in hospitals have a positive impact on patient satisfaction like increasing the speed of admission, cleanliness of patient rooms and improving patient transport processes. (Kirby A, Anderson S)

Much of the research on patient satisfaction has been conducted in Emergency Departments and OPD. Very few studies focus on Admission Process and Patient satisfaction. Therefore to contribute towards knowledge in this area, one of the objectives of the present study is to assess patient satisfaction with the admission process.

Measurement and monitoring of patient flow through the system can help identify the gaps and delays in the admission and transfer process and considerably reduce patient waiting time and increase patient satisfaction. With this research framework the objectives of the present study are as follows-

1.4 OBJECTIVES

GENERAL OBJECTIVE-

To streamline the admission process and in-patient transfers

SPECIFIC OBJECTIVES-

1. To study the existing process flow for Planned, Walk-in and Emergency Admissions.
2. To identify the gaps and reasons for delays in the admission process and suggest remedial measures for improvement.
3. To identify the reasons for delays during transfers from ICU to wards and also ward to ward.
4. To assess patient satisfaction regarding different aspects of admission process.

CHAPTER 2

DATA AND METHODS

STUDY DESIGN-

The study was Prospective and Descriptive in nature.

STUDY PERIOD-

11th January '12 TO 15th March'12

11th January'12 - Observing the process flow for planned and walk in admissions

12th January'12- Observing the process flow for Casualty admissions and Preparation of time tracking sheet

13th January'12 -13th February'12- Data collection & compilation for planned and walk in admissions

14th February'12-20th February'12- Data collection & compilation for Ward to Ward Transfers

21st February-29th February- Data collection & compilation for ICU to Ward Transfers

1st March'12-8th March'12 –Data collection & compilation for casualty admissions

9thMarch'12-15th March'12 – Data Analysis

16th March'12- Presentation on study findings and recommendations in the organization

17th March '12 onwards- Preparation of Internship and Dissertation Report

STUDY POPULATION

For Admission process-The sample in the present study consists of patients coming for planned, walk in and emergency admissions.

For Transfers-The sample consists of patients to be transferred from ICU to Wards and Ward to Ward.

SAMPLE SIZE-The present study is being undertaken in an Oncology Specialty hospital with a sample size of 235 for admission delays, 100 for assessing patient satisfaction and 100 for studying transfers (ICU to ward transfer- 69, ward to ward transfer-31)

CALCULATION OF THE SAMPLE SIZE-

Sample size for Planned and Walk in admissions is taken as 15% of the average number of admissions per month. Average number of admissions/month has been calculated by taking one year data from MRD records divided by 12 and is equal to 1370 per month. All Emergency admissions occurring during the study period of Emergency Department were tracked except for night admissions. In case of transfers, all the transfers occurring during the study period of transfer process have been tracked.

SAMPLING TECHNIQUE-

Convenience sampling

TYPE OF DATA-

Primary data has been collected on a tracking sheet and also an interactive survey has been conducted with inpatients to study admission process from patient's perspective also.
Secondary data has been reviewed from M.R.D Records and HIS (PARAS)

DATA COLLECTION TOOLS-

- Direct Observation
- Pre Formed Time Tracking Sheet
- Interactive Survey(Questionnaire)

PROCEDURE-

- The Admission process has been examined with the purpose of documenting the existing process and the bottlenecks in the process, determining the waiting time distributions, and developing recommendations for modifying the system to reduce waiting times for patients and overall admission and transfer turnaround time.
- The delays in the admission process have been identified by direct observation and recording the observations on a time tracking sheet for various steps in the admission process. The gaps in the admission process have also been identified by means of a Patient Satisfaction interactive survey form containing two sections (A and B) prepared both in English and Hindi. Section A has five questions to identify gaps in the admission process. Section B has six questions to assess patient satisfaction on

various aspects of the admission process. The questionnaire has been prepared so that the gaps and delays can be identified from patient's perspective also.

The last question is an open ended question to understand any concerns that patients and/or relatives may have regarding the progress of their admission so that these can be addressed and necessary action may be taken.

The reasons for delay have also been documented in the tracking sheet.

VARIABLES IN THE STUDY:-

The time of occurrence of each of the following steps has been recorded in the tracking sheet:-

For Planned and Walk in Admission:-

1. Time when patient comes to admission desk with admission slip

2. Time patient is given financial estimate and sent for making advance payment/credit endorsement for admission

3. Time patient returns after making payment

4. Time when room is allotted

5. Time when pass is handed over to patient/attendant

6. Time patient checks in the room

7. If room is not ready for check in post room allotment, time previous patient vacated the room

8. Time when room cleaning starts post physical discharge of previous patient

9. Time when patient checks in the room.

For Casualty Admission:-

1. Time of patient arrival to casualty

2. Time CMO calls specialty doctor post initial assessment

3. Time Specialty doctor arrives

4. Time attendant comes to admission desk with admission slip

5. Time of room allotment

6. Time patient is physically shifted from casualty

For ICU to Ward Transfers:-

1. Time transfer is requested
2. Time of room allotment
3. Time patient is physically shifted from ICU
4. Time of patient arrival to the allotted room
5. If room/bed is not vacant/ready to receive ICU patient, then time when room is physically vacated
6. Time Room cleaning is started
7. Time when bed is ready for ICU patient

For Ward to Ward Transfers:-

1. Time transfer is requested
2. Time of room allotment
3. Time patient is physically shifted
4. Time of patient arrival to the allotted room

The reasons for delay have also been documented in the tracking sheet.

DATA ANALYSIS:-

The admission and transfer process has been studied using time tracking of various steps to identify where delays occur. Data has been analyzed on MS EXCEL. The Data so collected was fed into Microsoft Excel 2007, and the analysis was done using Excel 2007. The various formulas used for the calculations and analysis were as follows-

1. **Turnaround time for admission** = [(Time when patient actually checks in the room) - (Time when patient comes to admission desk with admission slip)].

2. **Advance payment turnaround time** = [(Time patient returns after making payment) – (Time patient is sent for making advance payment for admission)].
3. **Waiting time for room allotment/bed availability** = [(Time when room is allotted) – (Time when patient comes to admission desk with admission slip)].
4. **Time taken to begin room preparation post discharge of previous patient** =[(Time previous patient vacated the room-Time cleaning started)]
5. **Bed turnaround time**- [(Time when patient vacated the room) –(Time when bed/room is occupied by next patient)]
6. **Time taken for pass handover post room allotment** =[(Time pass is given to the patient/attendant) - (Time of room allotment)]
7. **Casualty admission turnaround time**=[(Time patient checks in the allotted room) – (Time patient comes to admission desk with admission slip)]
8. **Casualty bed turnaround time**=[(Time of patient arrival to casualty) – (Time patient is physically shifted from casualty)]
9. **Time taken by specialty doctor to report to casualty** =[(Time Specialty doctor reports to casualty-Time CMO calls Specialty doctor)]
10. **Transfer turnaround time** = [(Time of patient arrival to the allotted room post transfer is requested) – (Time transfer is requested)]
11. **Waiting time for room allotment/bed availability post transfer is requested** = [(Time when room is allotted) – (Time when transfer is requested)].
12. **Time taken for physically shifting the patient**=[(Time patient is physically shifted – Time of Room allotment)]

    Average Admission TAT, Average time for bed availability, Average time taken for making advance payment/credit endorsement, Average time taken to begin room preparation post discharge, Average time taken for pass hand over and Average Transfer TAT has also been calculated using formulas in MS Excel(Average function).For all of the above processes the percentage of cases in different time slots has been calculated using Sort and Filter option. The percentage of reasons for delay in admission and transfer process has been calculated on the basis of frequency of occurrence. The questionnaire has been analyzed by taking out the percentage for each type of response for every

question. This has been done by counting the number of responses divided by total number of respondents multiplied by100.Graphs has been generated on MS Excel for all of the above sub processes.

CHAPTER 3

RESULTS AND FINDINGS

1. PROCESS FLOW FOR PLANNED AND WALK IN ADMISSIONS:-

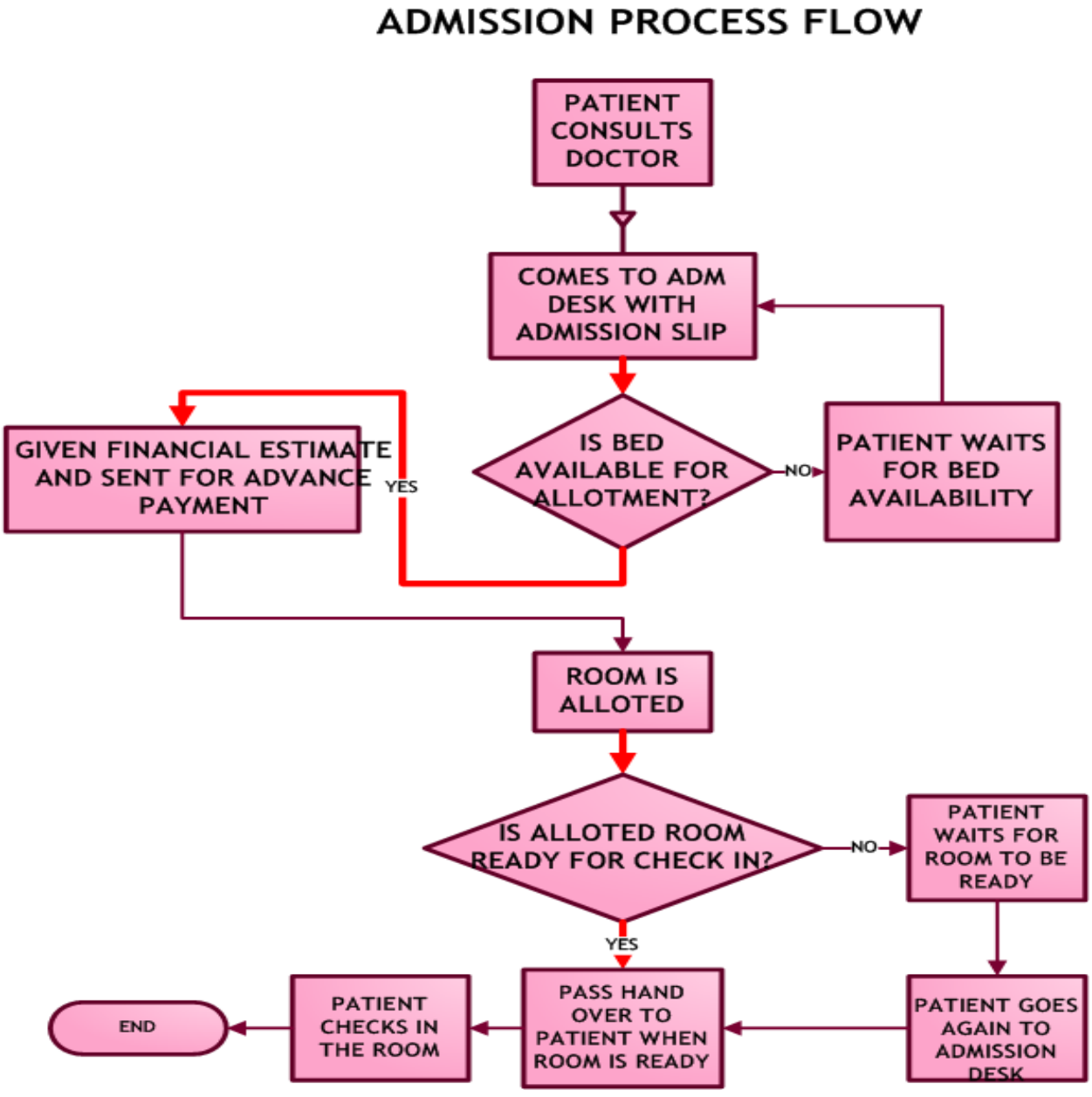
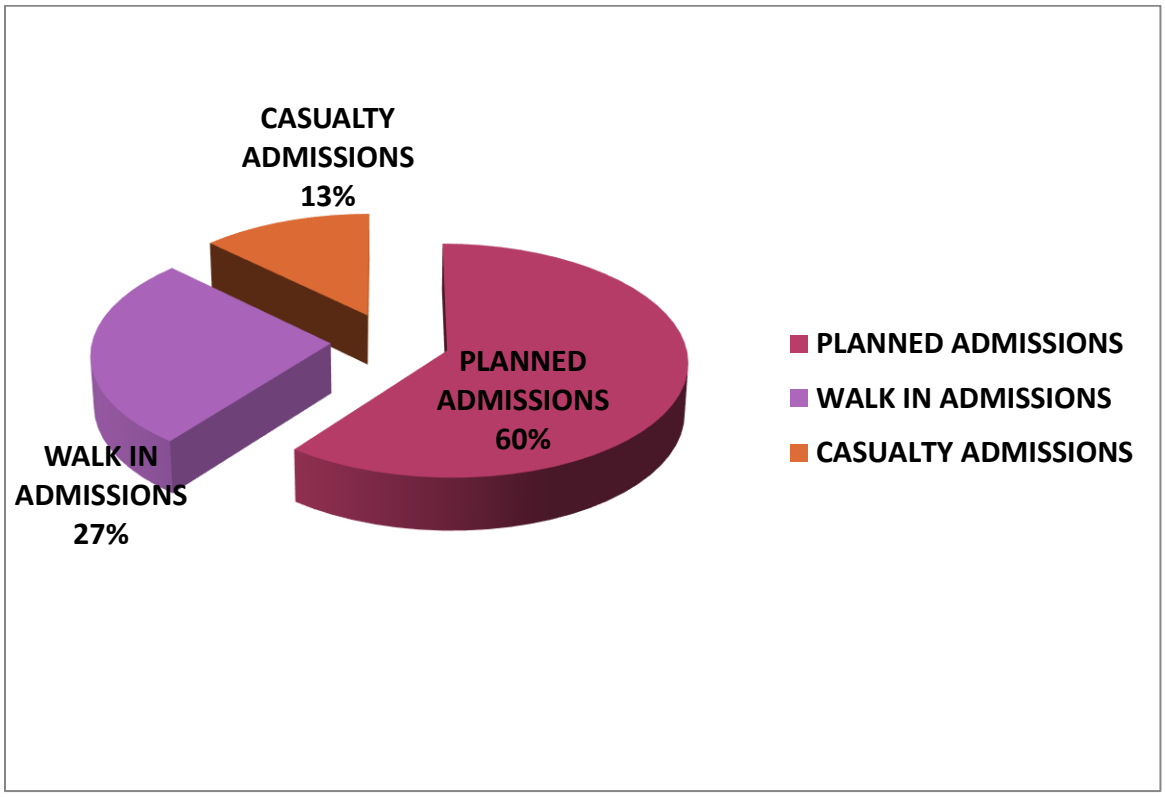


FIGURE 1:- ADMISSION PROCESS FLOW

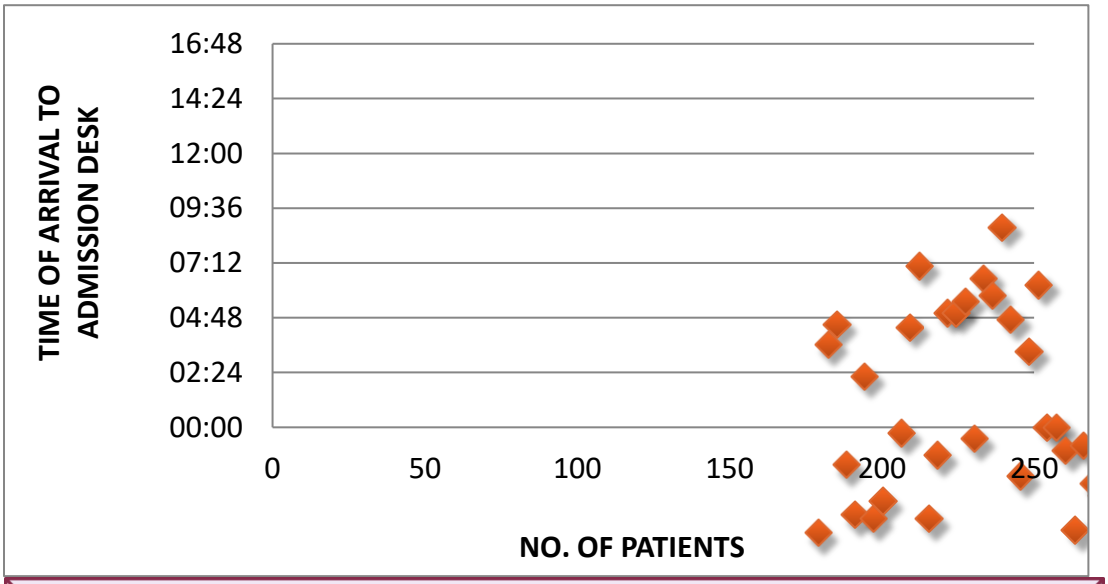
2. FINDINGS FOR PLANNED AND WALK IN ADMISSIONS:-

FIGURE 2:- PERCENTAGE DISTRIBUTION OF ADMISSIONS



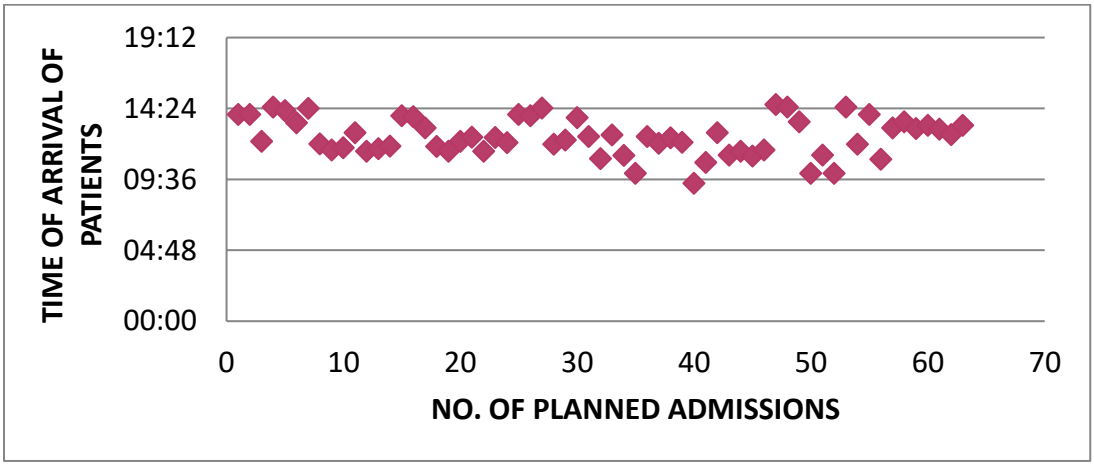
ON AN AVERAGE, 60% OF ADMISSIONS ARE ALREADY PLANNED, AROUND 13- 15% CASES ARE EMERGENCY ADMISSIONS & 25 – 27% ARE WALK INS

FIGURE 3:- PATIENTS ARRIVAL PATTERNS AT ADMISSION DESK



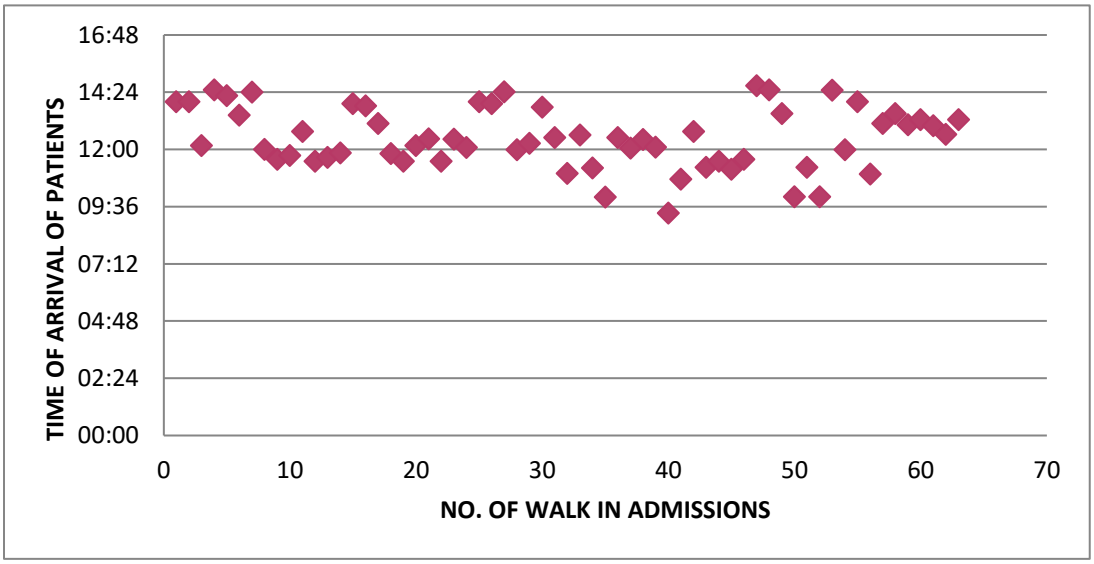
MAJORITY OF PATIENTS ARRIVE FOR ADMISSION BETWEEN 12- 14:30 INDICATING LACK OF COMMUNICATION WITH THE PATIENT ABOUT BED AVAILABILITY

FIGURE 4:- PLANNED ADMISSION PATIENTS ARRIVAL PATTERNS AT ADMISSION DESK



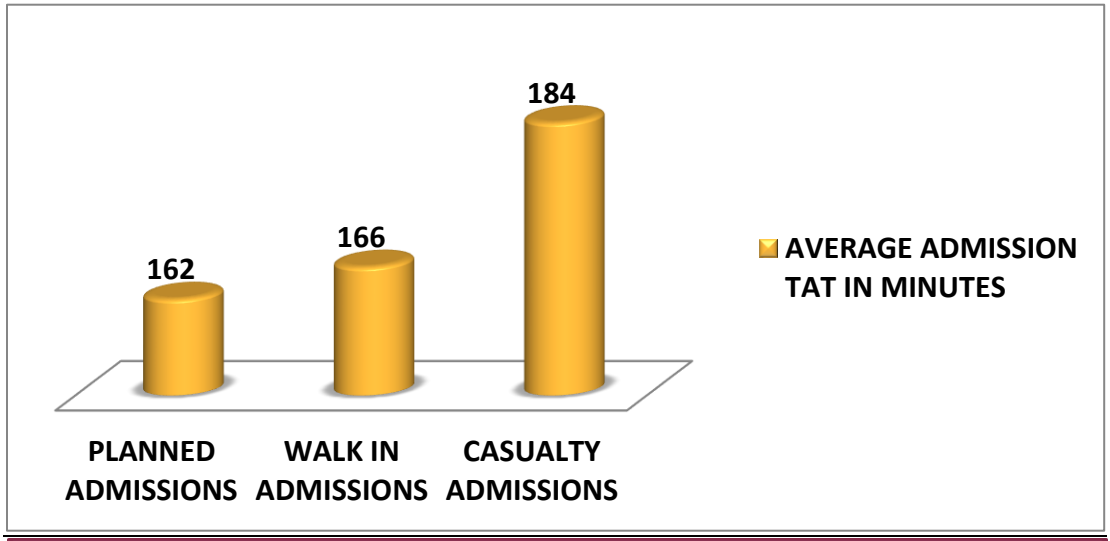
MAJORITY OF PLANNED ADMISSIONS ARRIVE BETWEEN 12-14:30.FEW PATIENTS ALSO ARRIVE IN MORNING TIME BETWEEN 9AM-12PM

FIGURE 5:- WALK IN ADMISSION PATIENTS ARRIVAL PATTERNS AT ADMISSION DESK



There is almost an equitable distribution of Walk in admissions in 12 PM-14:30 PM and 9 AM-12 PM time slots. Patients in 9 AM-12 PM slot are only little less in number as compared to 12 PM-14:30 PM time slot

FIGURE 6:- AVERAGE ADMISSION TURNAROUND TIME (IN MINUTES)

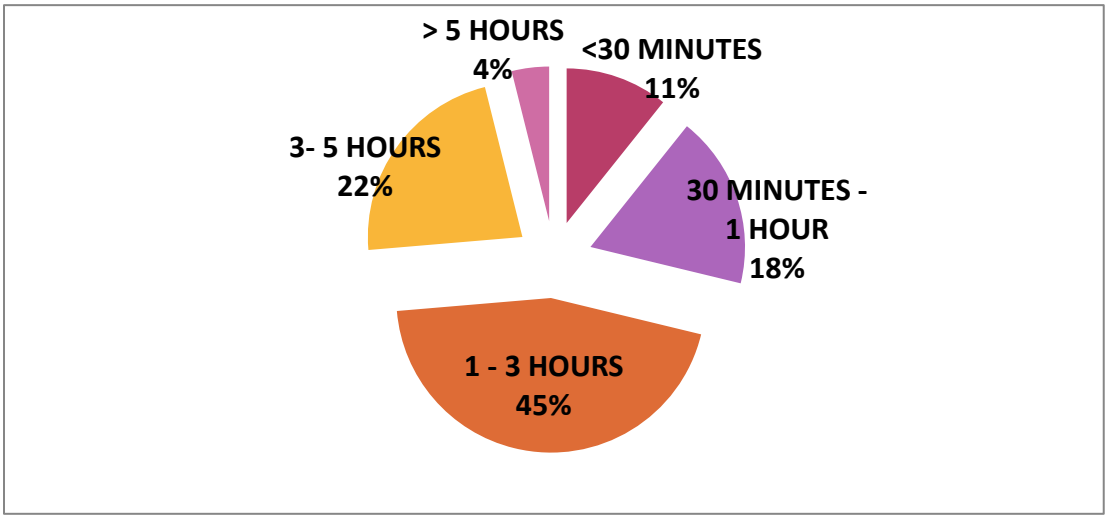


ON AN AVERAGE,PLANNED ADMISSION TURN AROUND TIME IS 162 MIN. AND WALK IN TAT IS 166 MIN. CASUALTY ADMISSION TAT IS SLIGHTLY HIGHER i.e,184 MIN.

TABLE 1:- AVERAGE TIME TAKEN FOR DIFFERENT SUB PROCESSES

PROCESS	AVERAGE TIME (In minutes)
WAITING FOR BED AVAILABILITY	66
AVERAGE TIME TAKEN TO MAKE ADVANCE PAYMENT/CREDIT/ADVANCE ENDORSEMENT TIME	07
AVERAGE TIME TAKEN TO BEGIN ROOM PREPARATION POST DISCHARGE OF PREVIOUS PATIENT	40
AVERAGE TIME TAKEN FOR PASS HANDOVER	13
AVERAGE ADMISSION TURN AROUND TIME	123 minutes

FIGURE 7:- TURN AROUND TIME FOR ADMISSION PROCESS



MAJORITY OF ADMISSIONS TAKE AROUND 1-3 HOURS .
LACK OF POLICY FOR TAT ON PLANNED/WALK IN ADMISSION THEREFORE, NO COMMUNICATION TO PATIENT

FIGURE 8:- TIME TAKEN FOR ADVANCE PAYMENT PRIOR ADMISSION

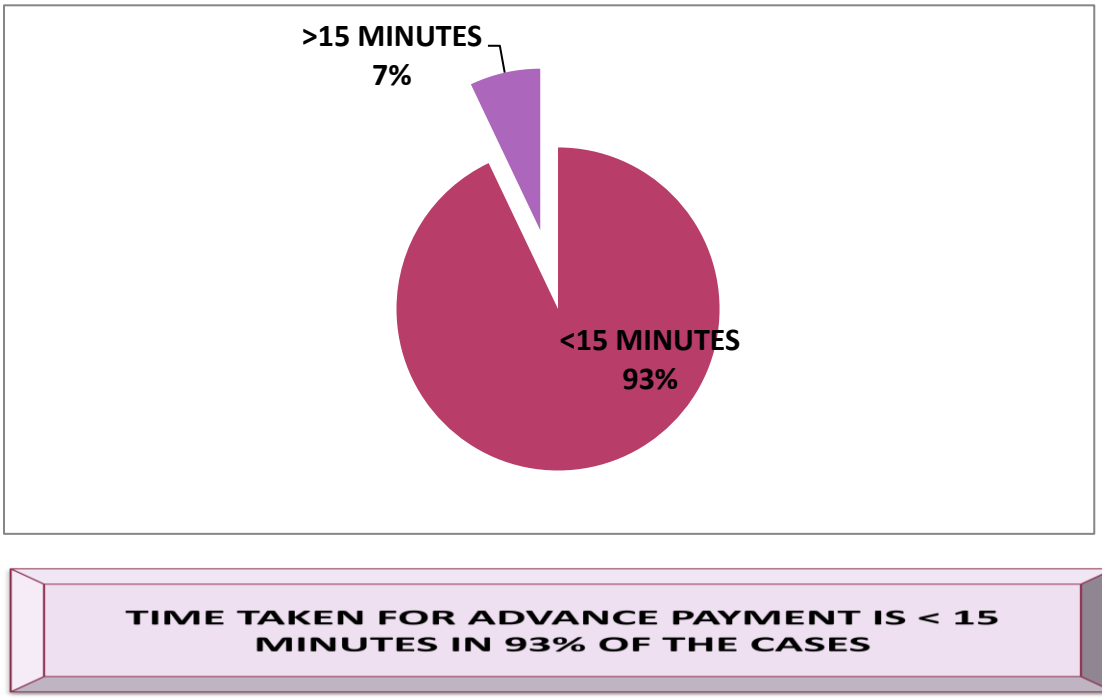


FIGURE 9:- TIME TAKEN FOR CREDIT/ADVANCE ENDORSEMENTS PRIOR TO ADMISSION

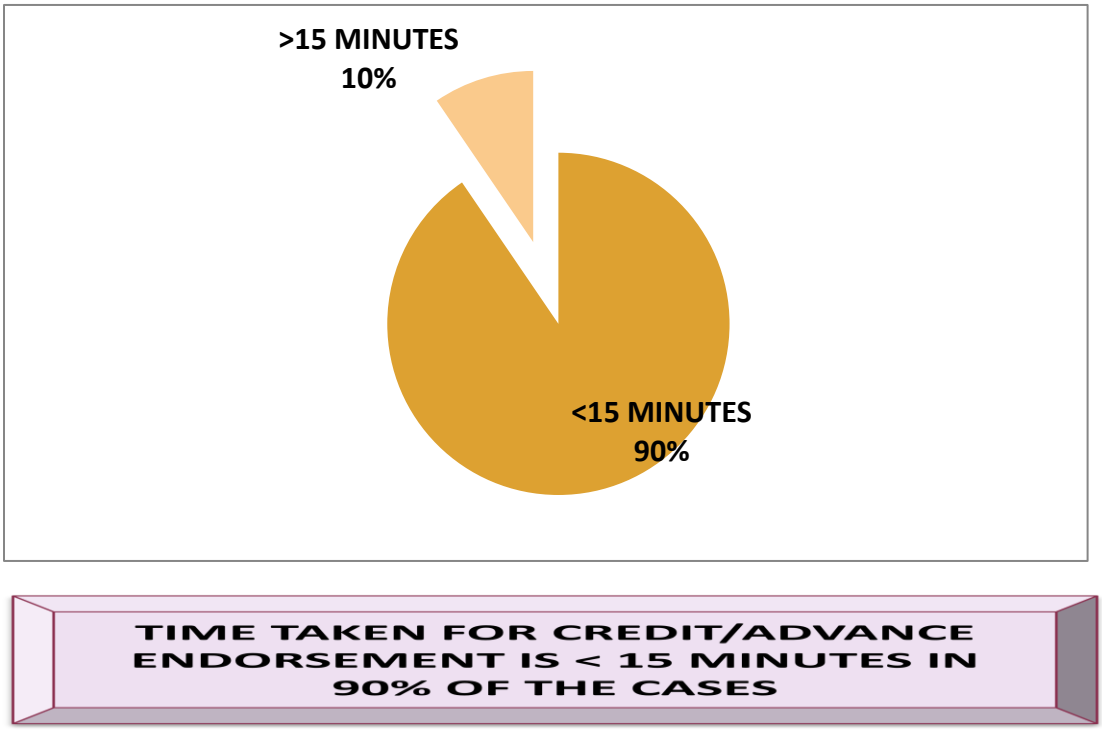
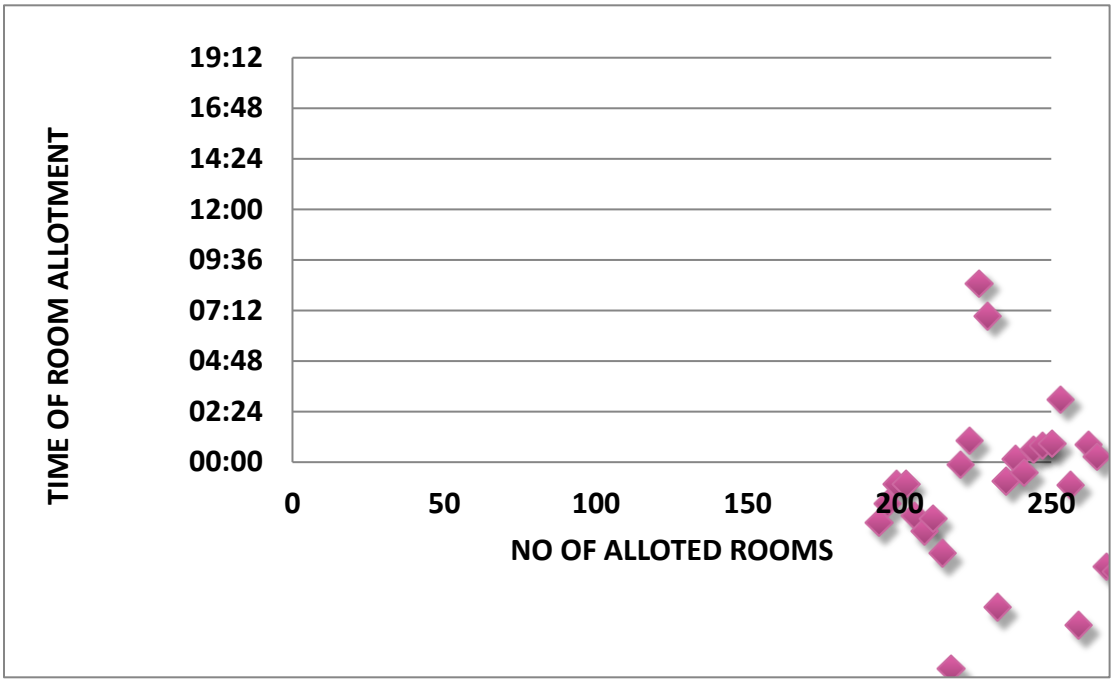
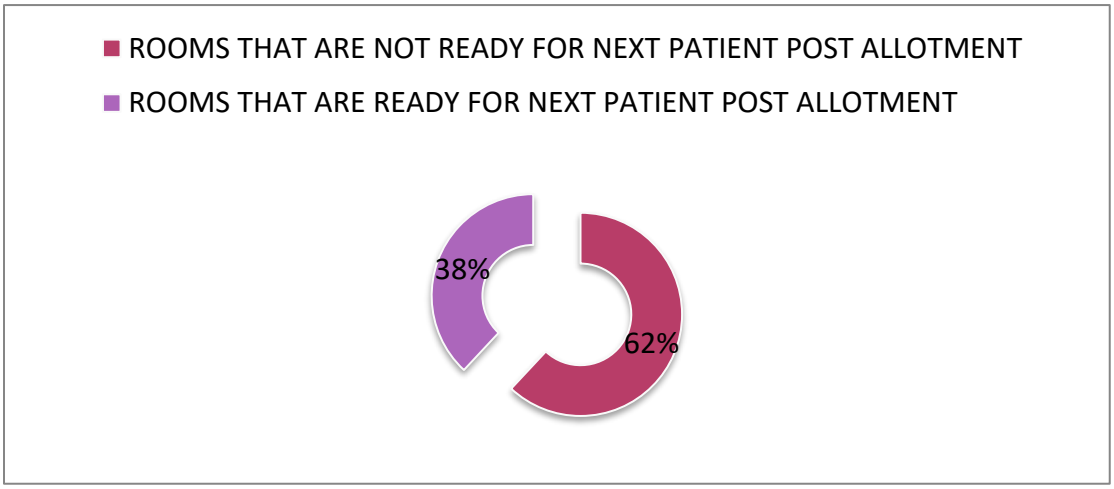


FIGURE 10:- ROOM ALLOTMENT IN DIFFERENT TIME SLOTS



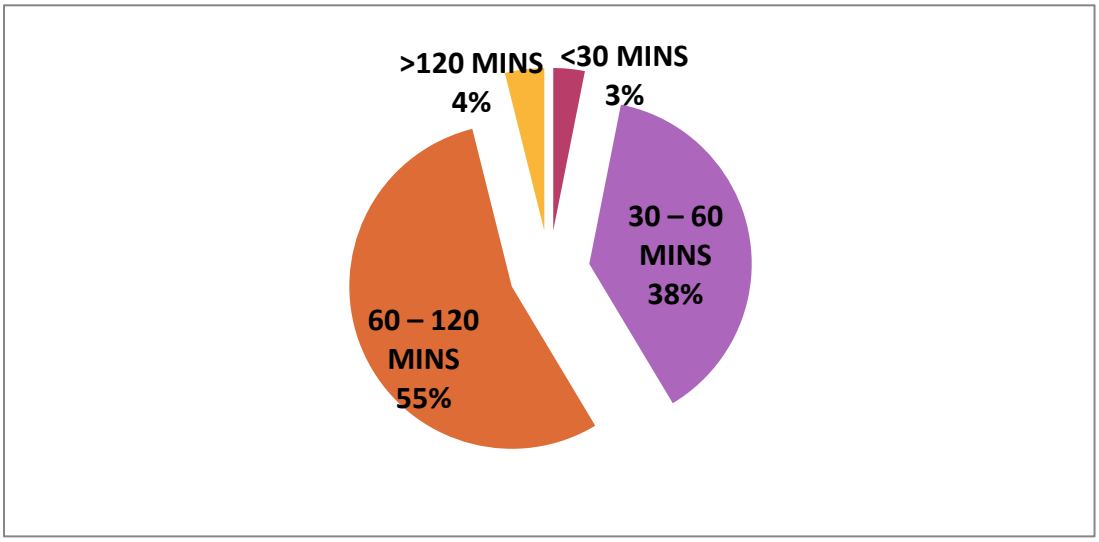
MAXIMUM ROOMS ARE ALLOTED BETWEEN 13:00 - 14:30 EVEN IF THE ROOM IS NOT VACANT/READY FOR NEXT PATIENT

FIGURE 11:- ROOM READINESS POST ALLOTMENT



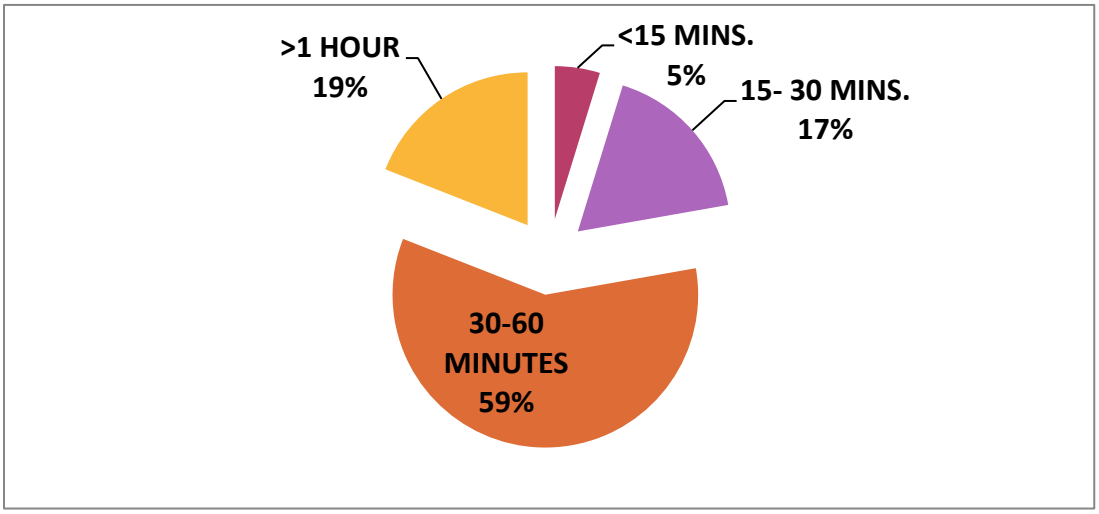
ON AN AVERAGE, 62% OF ROOMS ARE NOT VACANT/READY AT THE TIME OF ALLOTMENT

FIGURE 12:- BED TURN AROUND TIME (IN MINUTES)



IN 38% CASES BED TAT IS 30 - 60 MINS & IN 55% OF CASES IT IS 60 - 120 MINS.

FIGURE 13:- TIME TAKEN TO BEGIN ROOM PREPARATION POST DISCHARGE



IN 59% OF CASES IT TOOK 30 – 60 MINS TO BEGIN ROOM PREPARATION & IN 19 % OF CASES IT TOOK >60 MINS
THIS INDICATES LACK OF COMMUNICATION BETWEEN WARD SECRETARIES AND HOUSEKEEPING AND /OR NON AVAILABILITY OF HOUSEKEEPING STAFF

FIGURE 14:- TIME TAKEN IN PASS HAND OVER POST ROOM READINESS

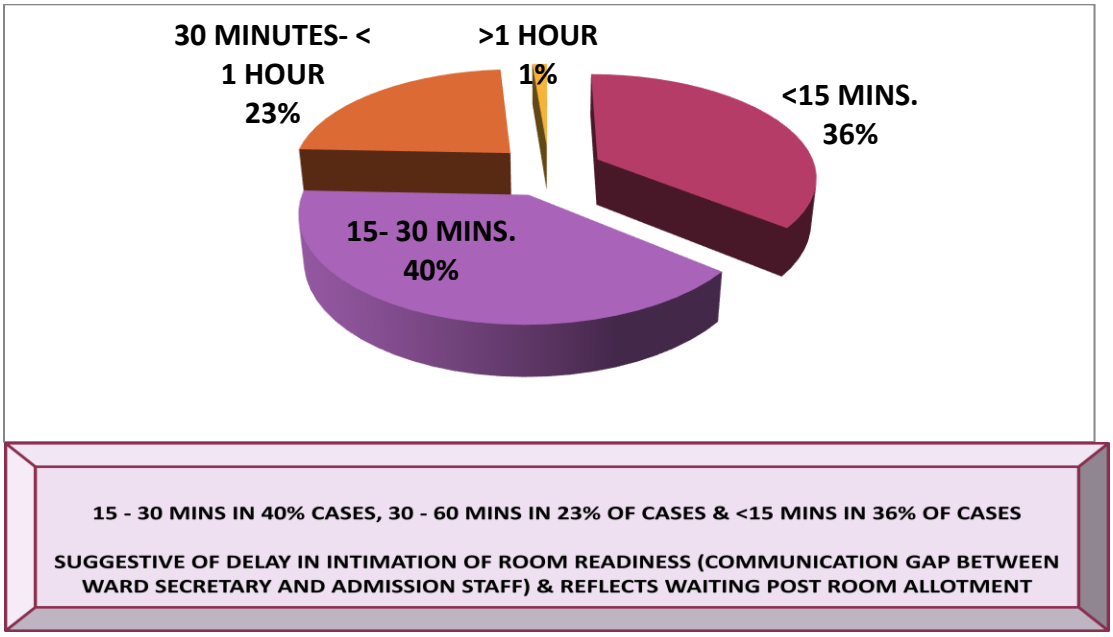


FIGURE15:- PERCENTAGE OF PATIENTS NOT GIVEN PRE ADMISSION COUNSELING

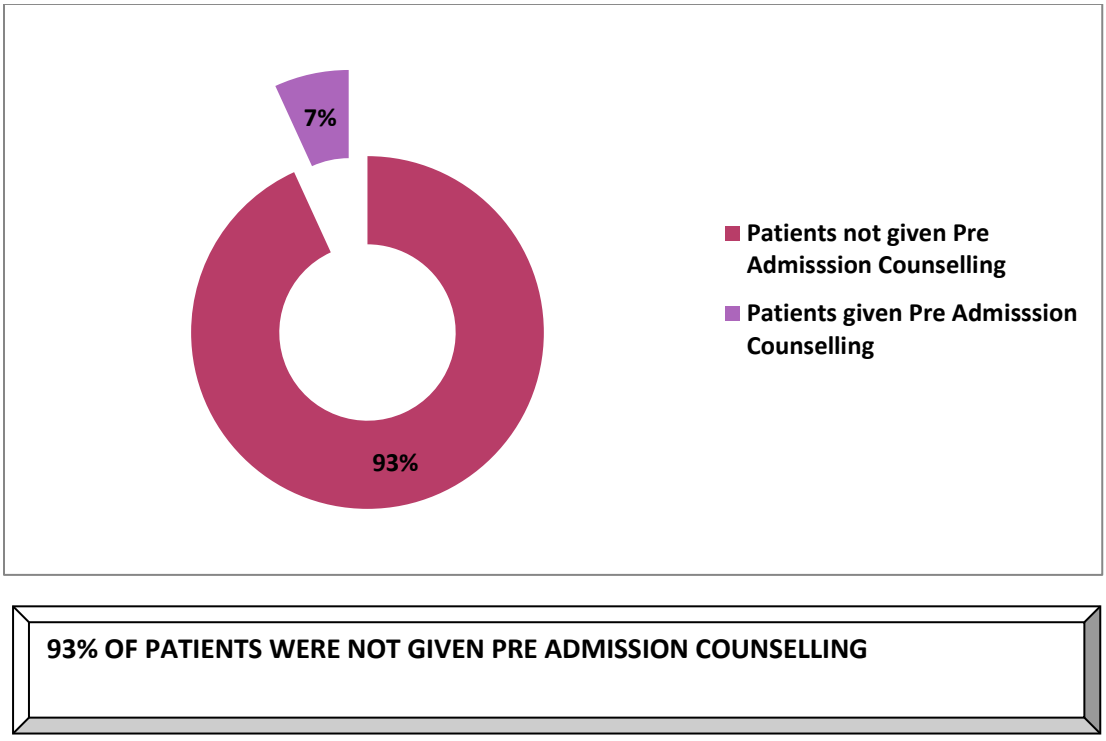


FIGURE 16:-REASONS FOR DELAY IN ADMISSION PROCESS

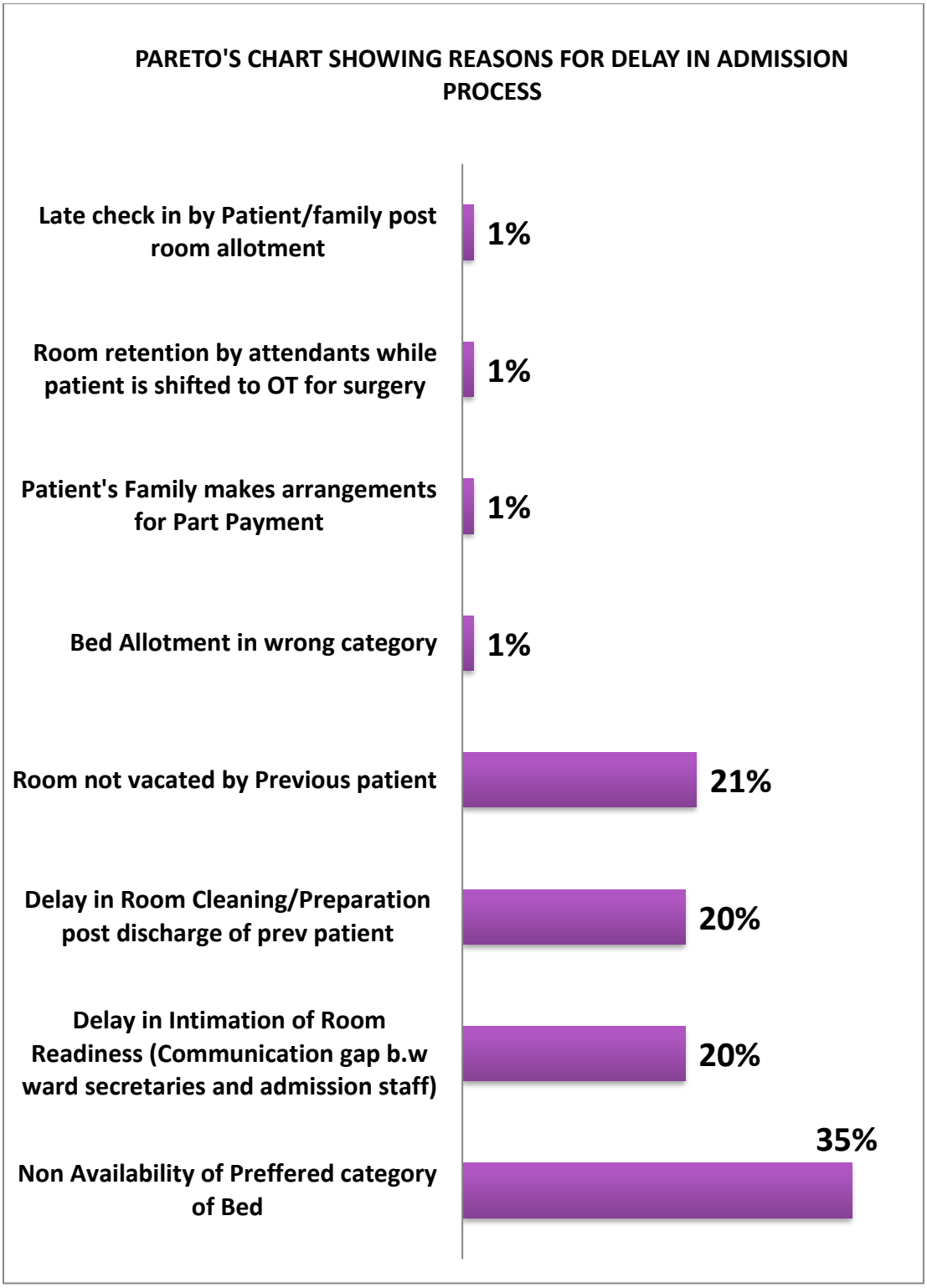
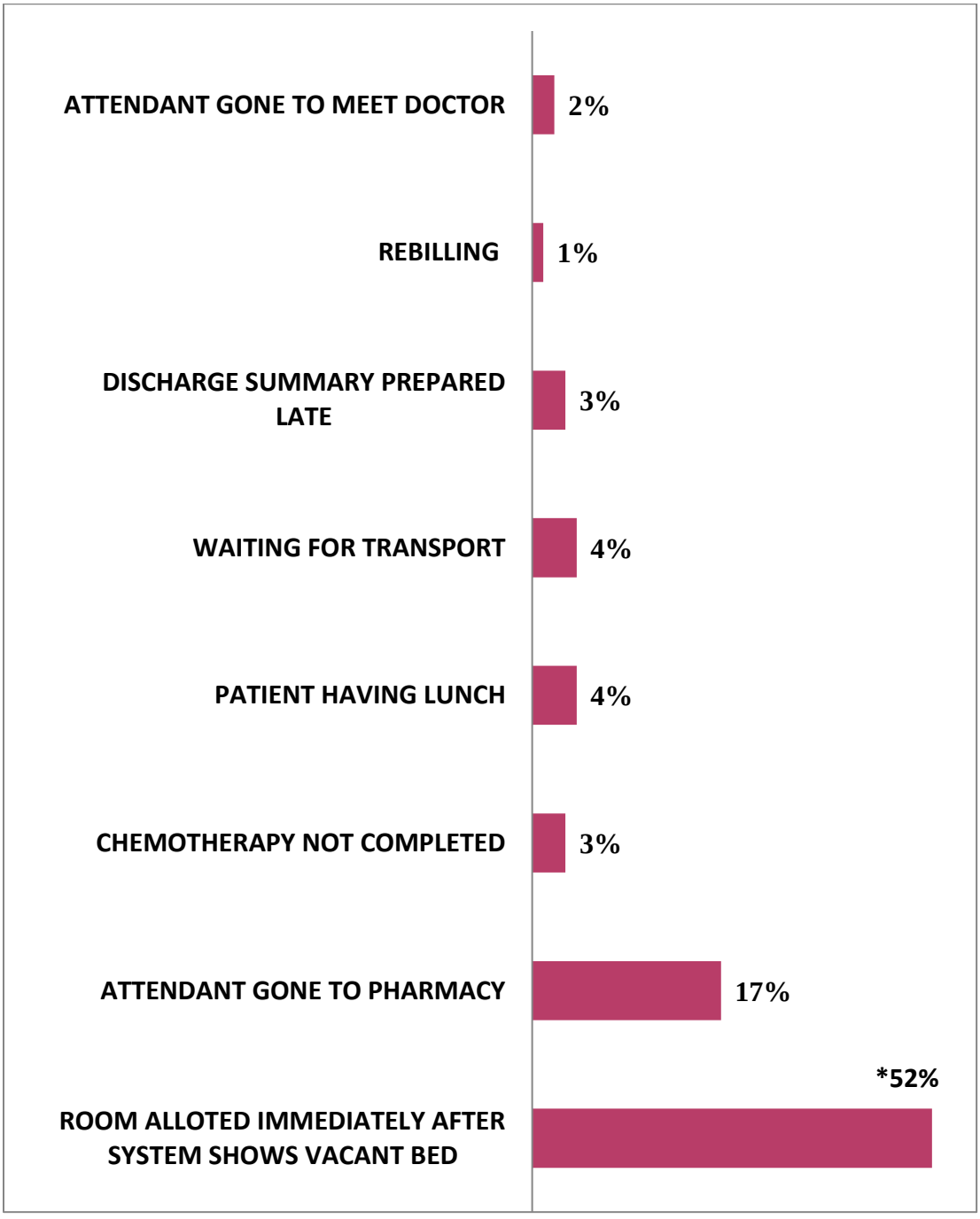


FIGURE 17:-REASONS FOR NOT VACATING THE ROOM POST SYSTEM DISCHARGE OF PREV PATIENT



***In 52% cases, Room is allotted before the discharge process of previous patient is complete. This leads to allotment of non vacant rooms because physical discharge of patient occurs on an average one hour after the system discharge [Source: Discharge Study by Quality Cell of the Study Hospital]**

3. PROCESS FLOW FOR CASUALTY ADMISSIONS:-

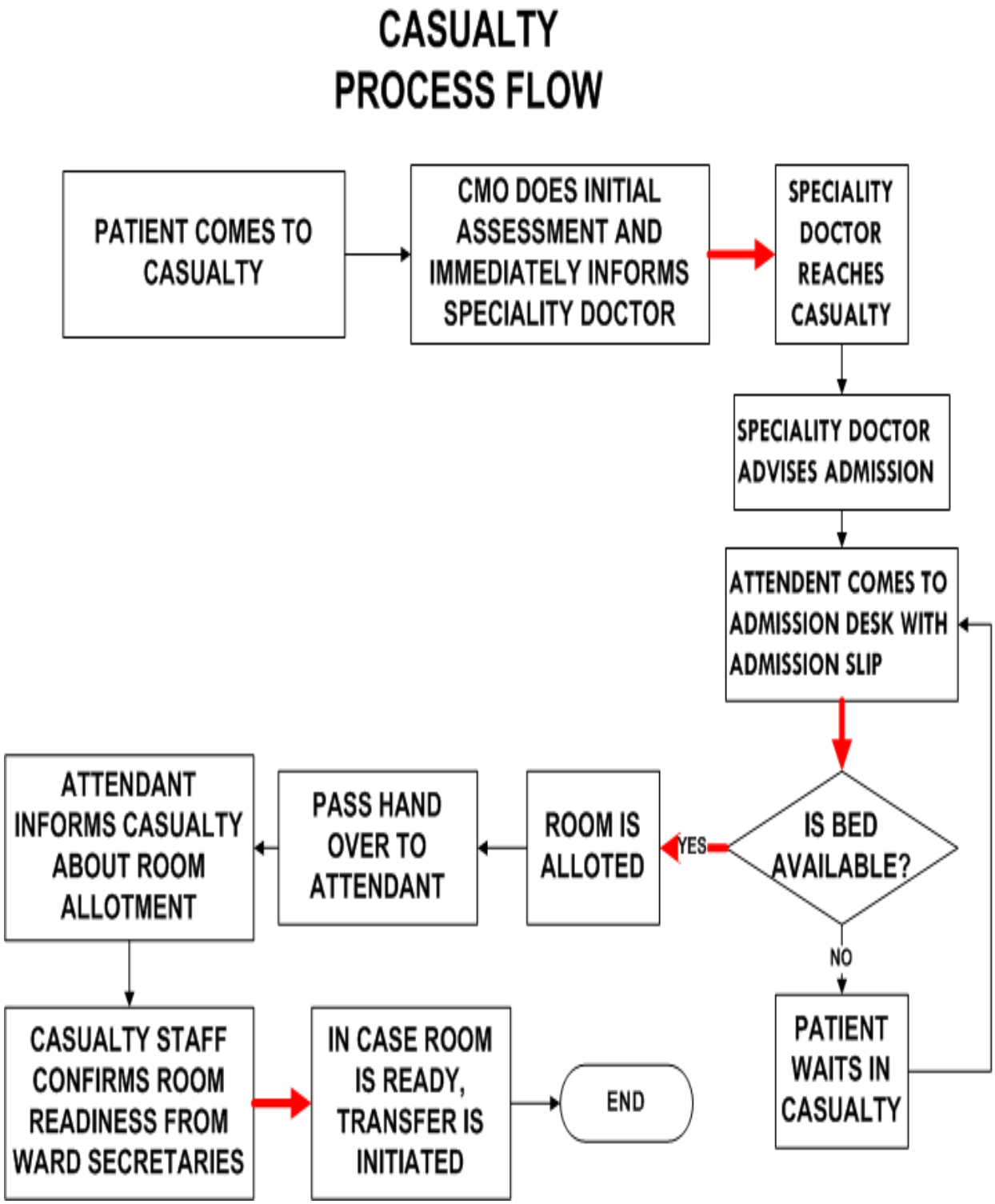


FIGURE 18:-PROCESS FLOW FOR CASUALTY ADMISSION

4. FINDINGS FOR CASUALTY ADMISSIONS:-

FIGURE 19:- TIME TAKEN BY SPECIALITY DOCTOR TO REPORT TO CASUALTY POST INTIMATION BY CMO

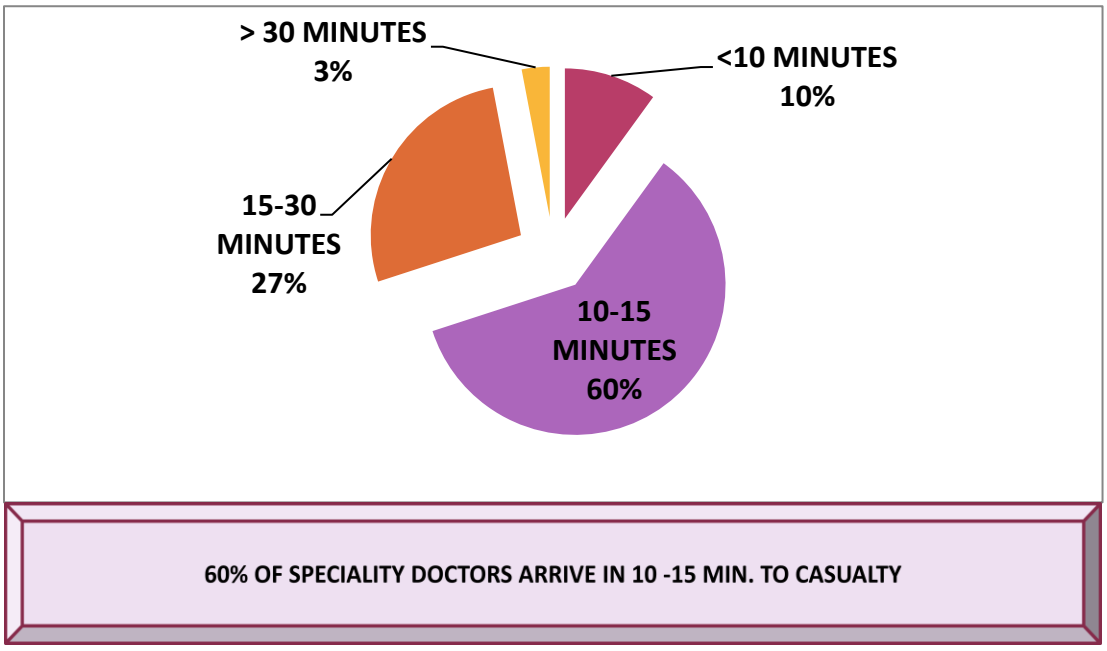


FIGURE 20:- CASUALTY LENGTH OF STAY

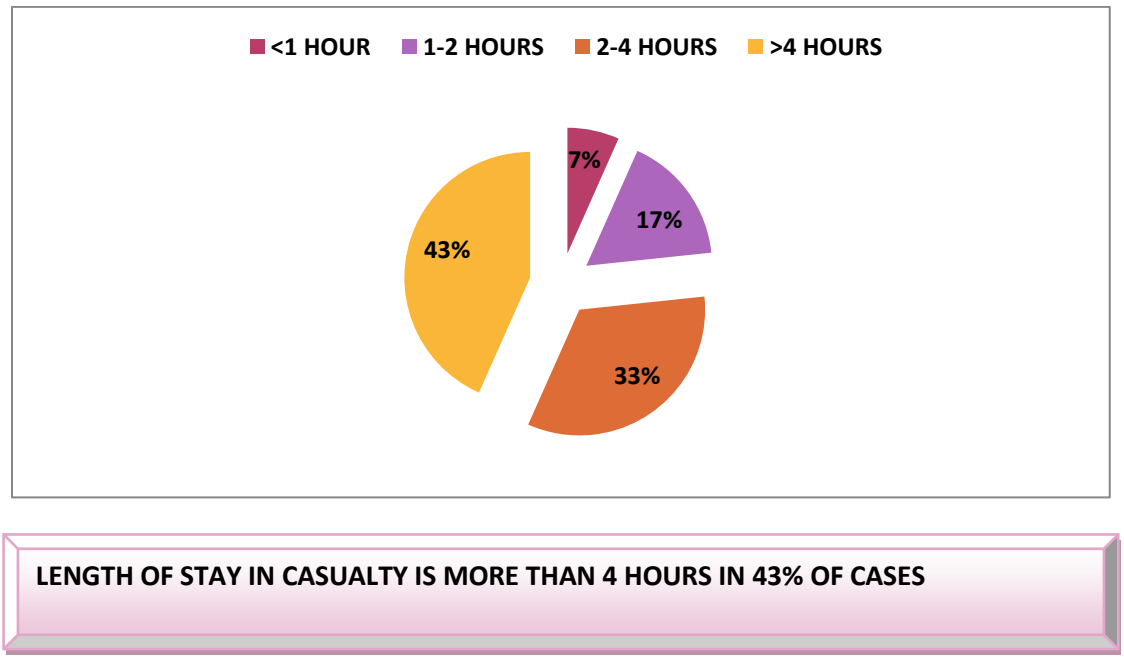
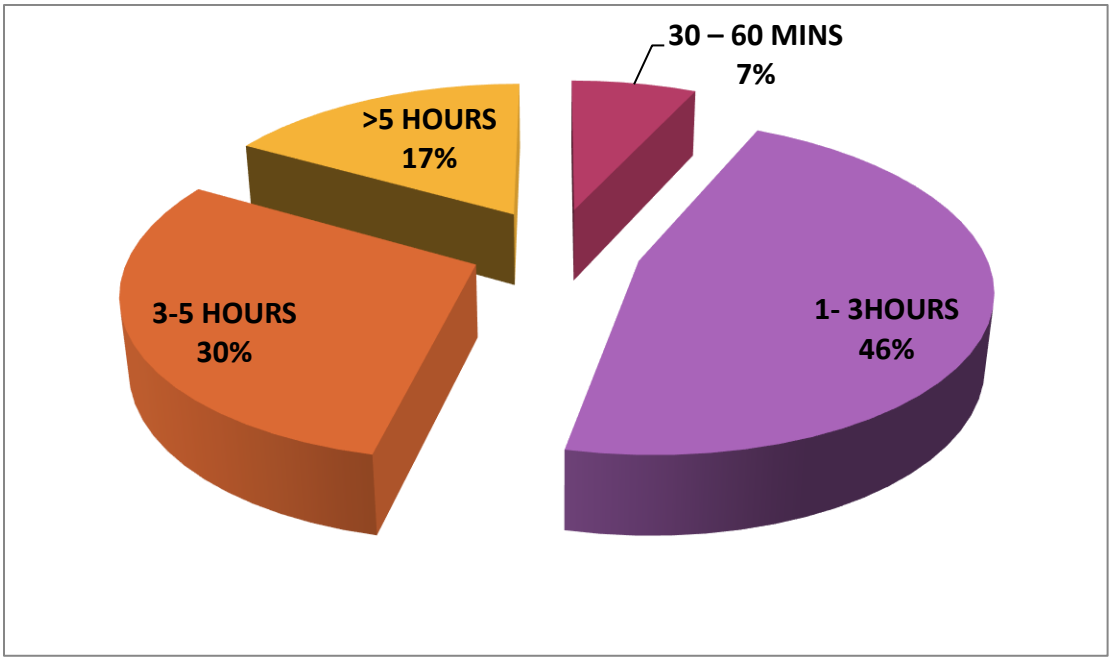
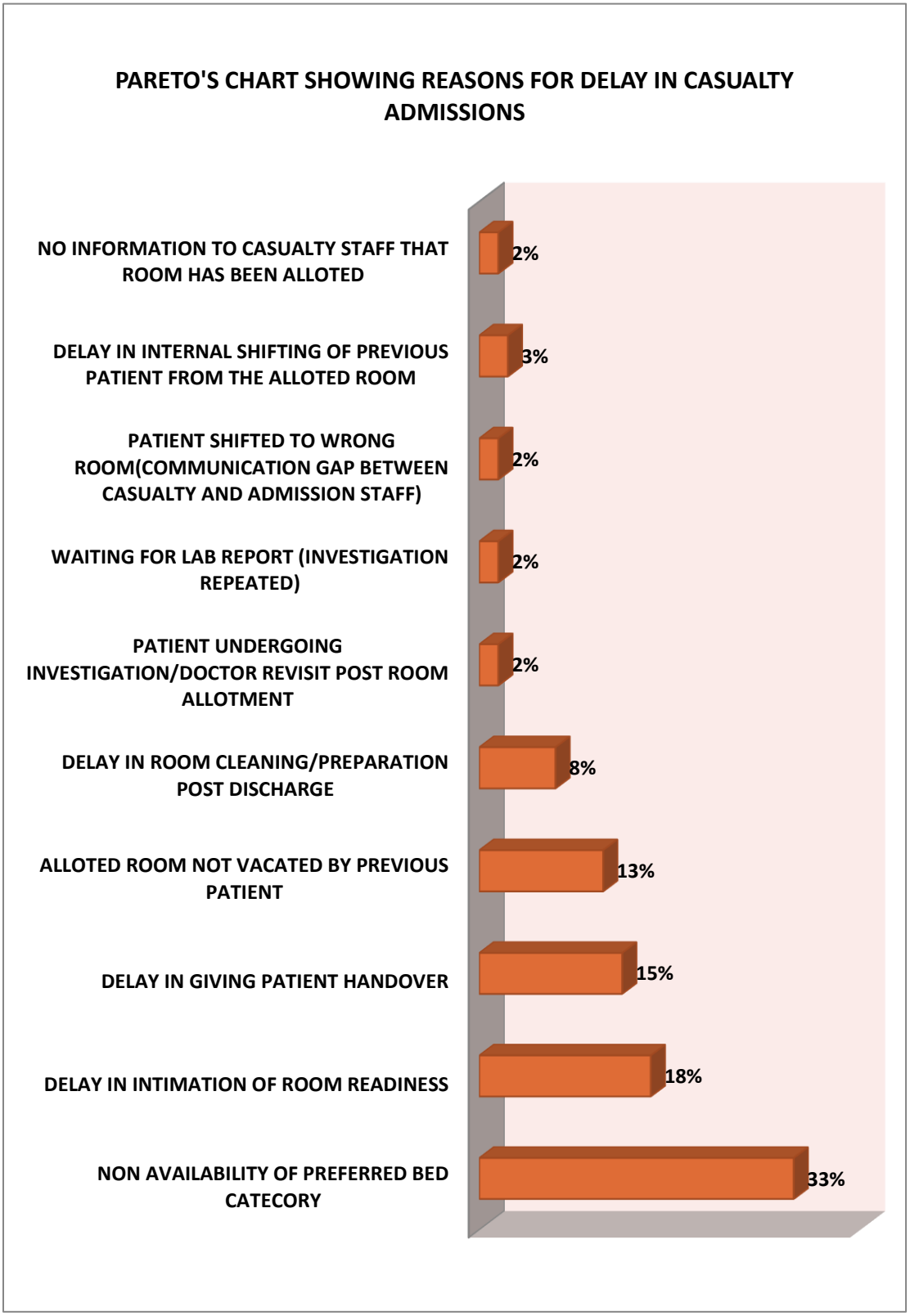


FIGURE 21:- TOTAL CASUALTY ADMISSION TAT



46% OF CASUALTY ADMISSIONS TAKES 1-3 HOURS AND 30% TAKES 3-5 HOURS

FIGURE 22:-REASONS FOR DELAY IN CASUALTY ADMISSION PROCESS



5. PROCESS FLOW FOR ICU TO WARD TRANSFERS:-

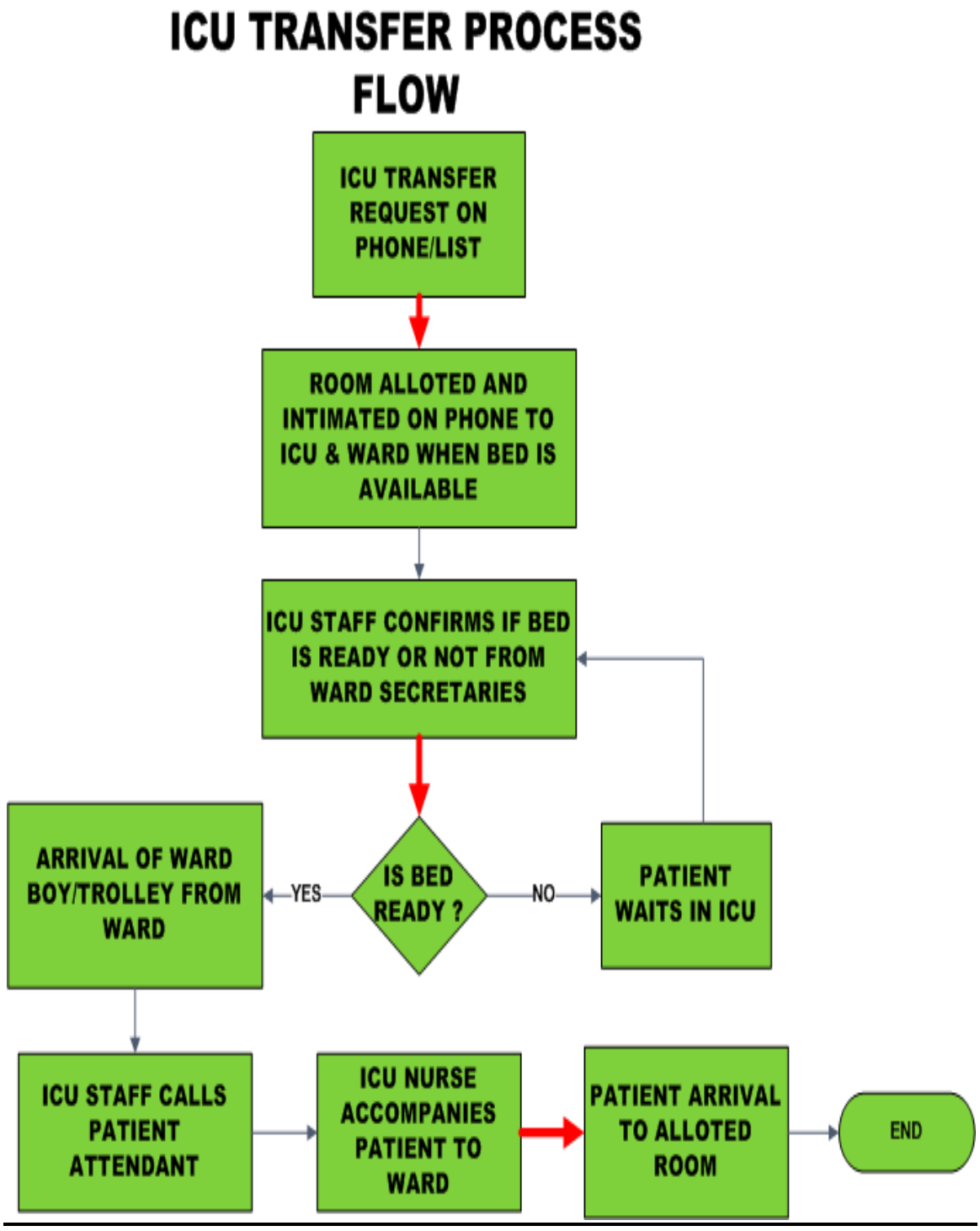
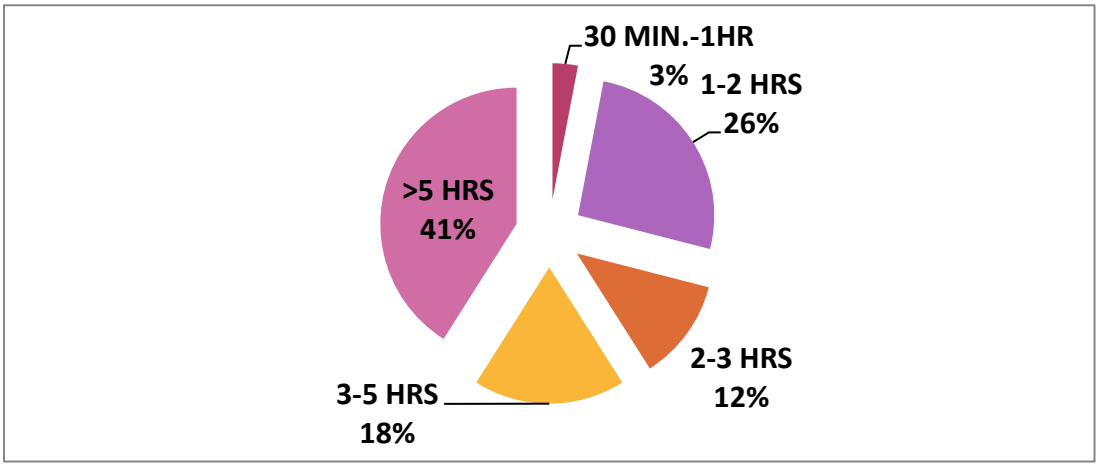


FIGURE 23:-PROCESS FLOW FOR ICU TO WARD TRANSFERS

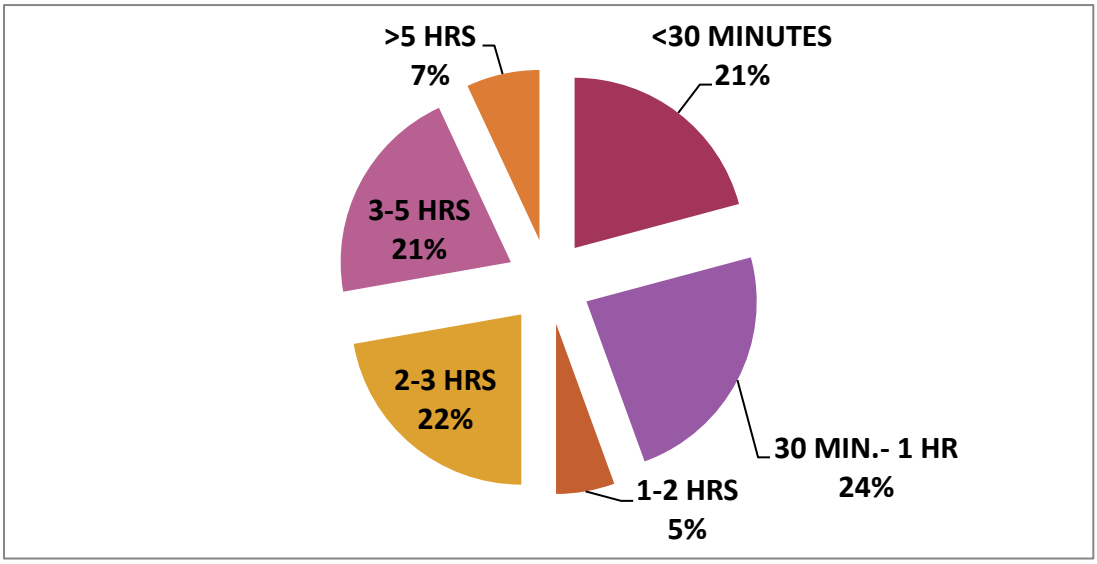
6. FINDINGS FOR ICU TO WARD TRANSFERS:-

FIGURE 24:- TURNAROUND TIME FOR ICU TO WARD TRANSFERS



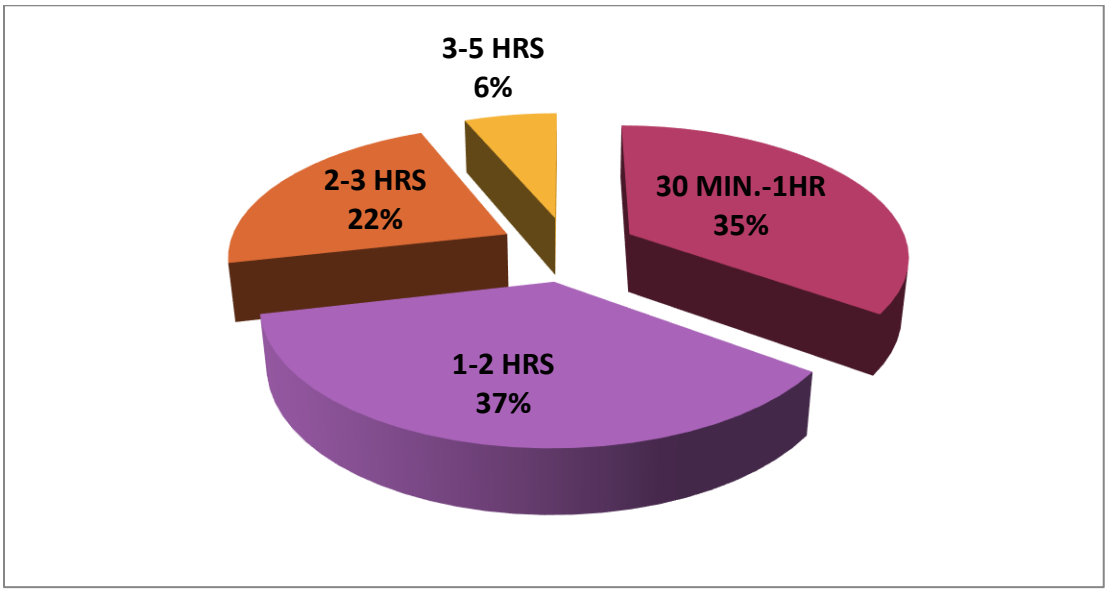
41% OF ICU TRANSFERS HAVE TAT >5 HOURS AND 26 % HAVE TAT 1-2 HOURS

FIGURE 25:- WAITING TIME FOR BED AVAILABILITY PRIOR TO ROOM ALLOTMENT



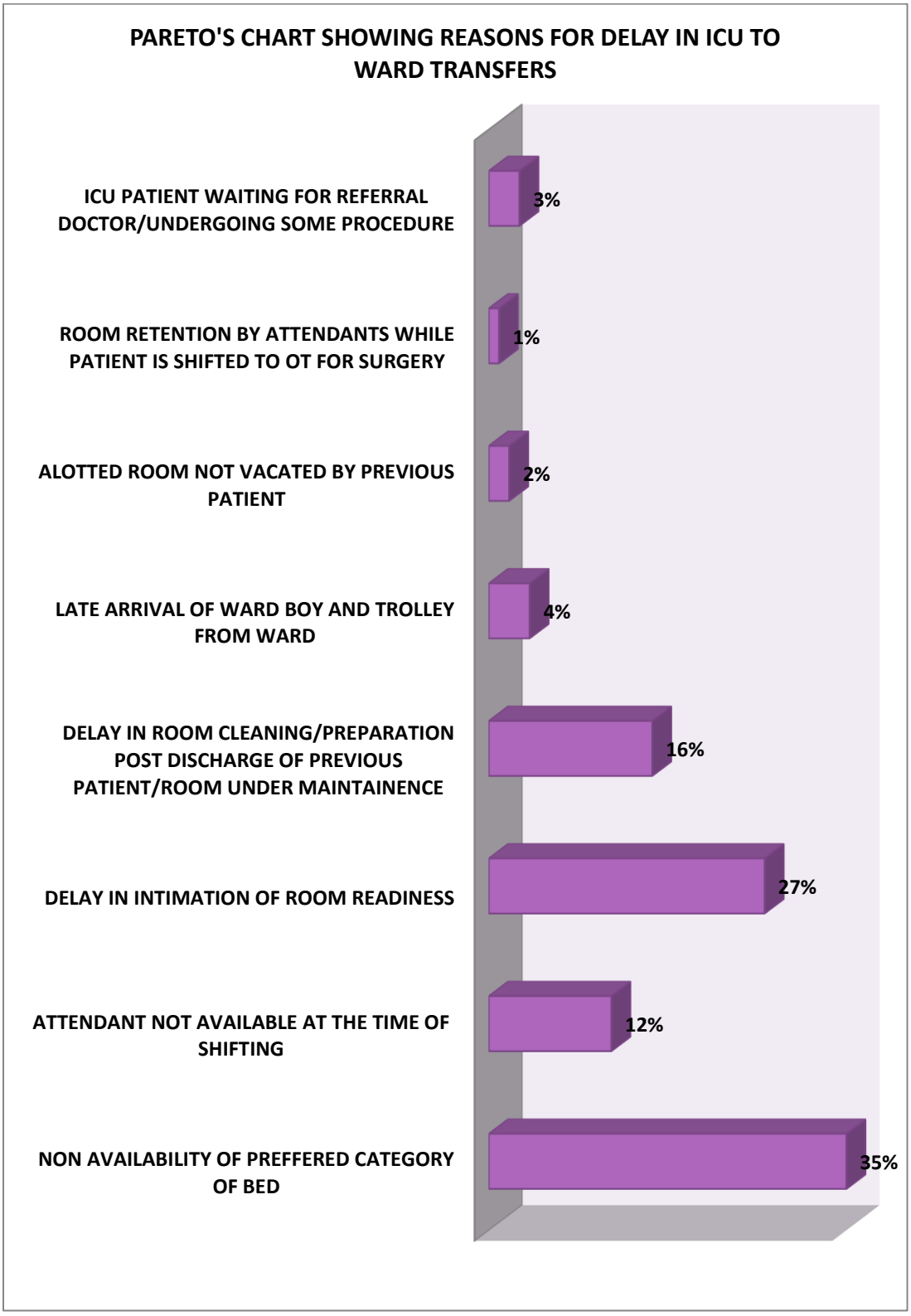
WAITING OF 30 – 60 MINS IN 24% CASES,2-3 HRS IN 22% OF THE CASES & 3-5 HRS IN 21% OF CASES

FIGURE 26:- TIME TAKEN FOR PHYSICAL SHIFTING OF ICU PATIENT POST ROOM ALLOTMENT



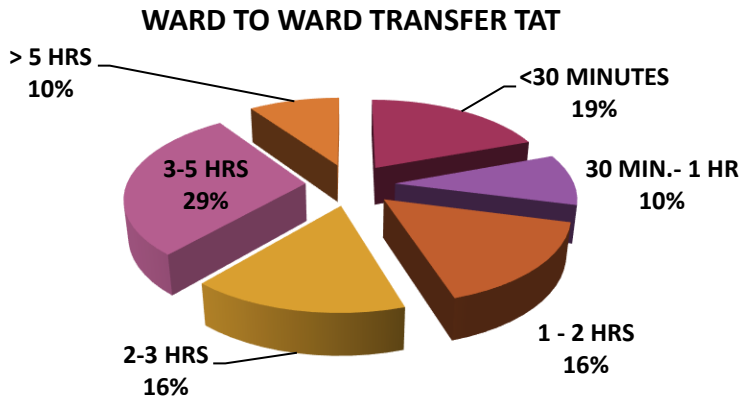
35 % OF PHYSICAL SHIFTINGS TAKE 30 – 60 MINS, 37% TAKE 1-2 HRS ;
AND 22% TAKE 2-3 HOURS

FIGURE 27:-REASONS FOR DELAY IN ICU TO WARD TRANSFERS



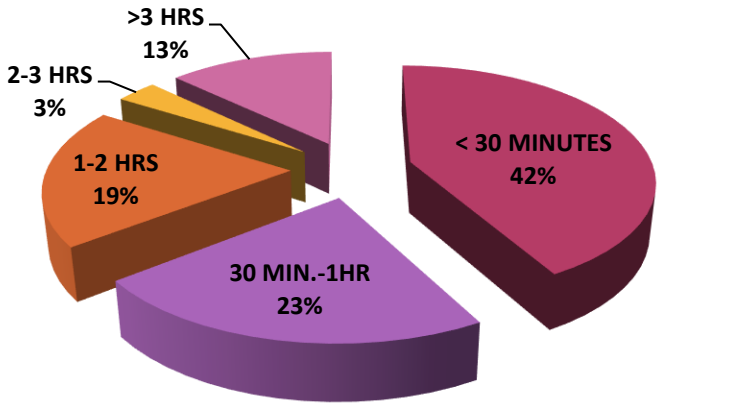
7. FINDINGS FOR WARD TO WARD TRANSFERS:-

FIGURE 28:-WARD TO WARD TRANSFER TURNAROUND TIME



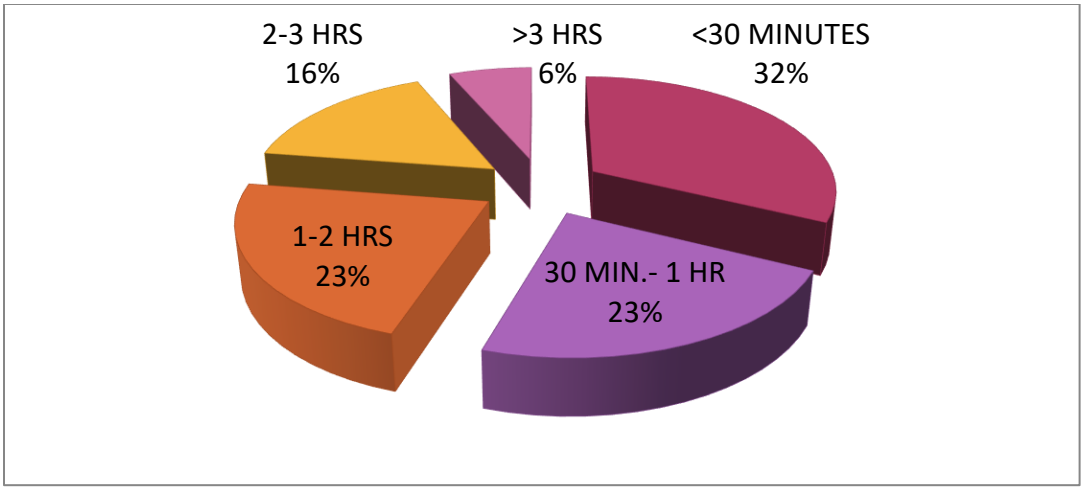
INTER WARD TRANSFER TIME IS 1-3 HOURS IN 32% OF CASES AND 3-5 HOURS IN 29% CASES

FIGURE 29:-WAITING TIME FOR BED AVAILABILITY



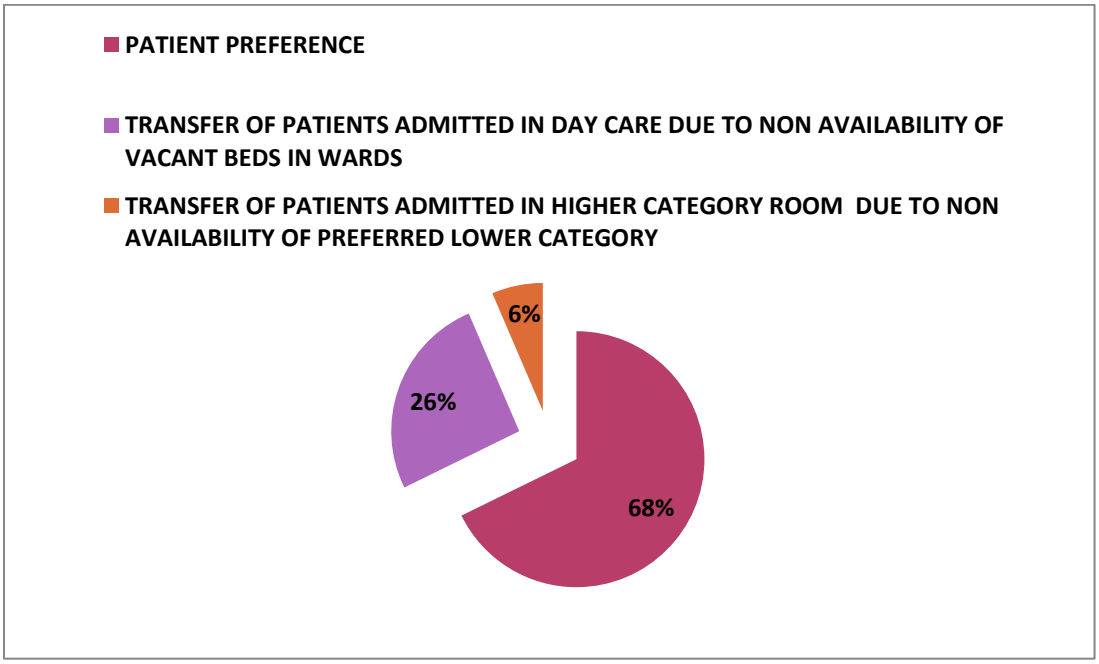
WAITING FOR BED AVAILABILITY IS <30 MINUTES IN 42% OF CASES AND 30-120 MINUTES IN 42% OF CASES

FIGURE 30:-TIME TAKEN FOR PHYSICAL SHIFTING OF PATIENT



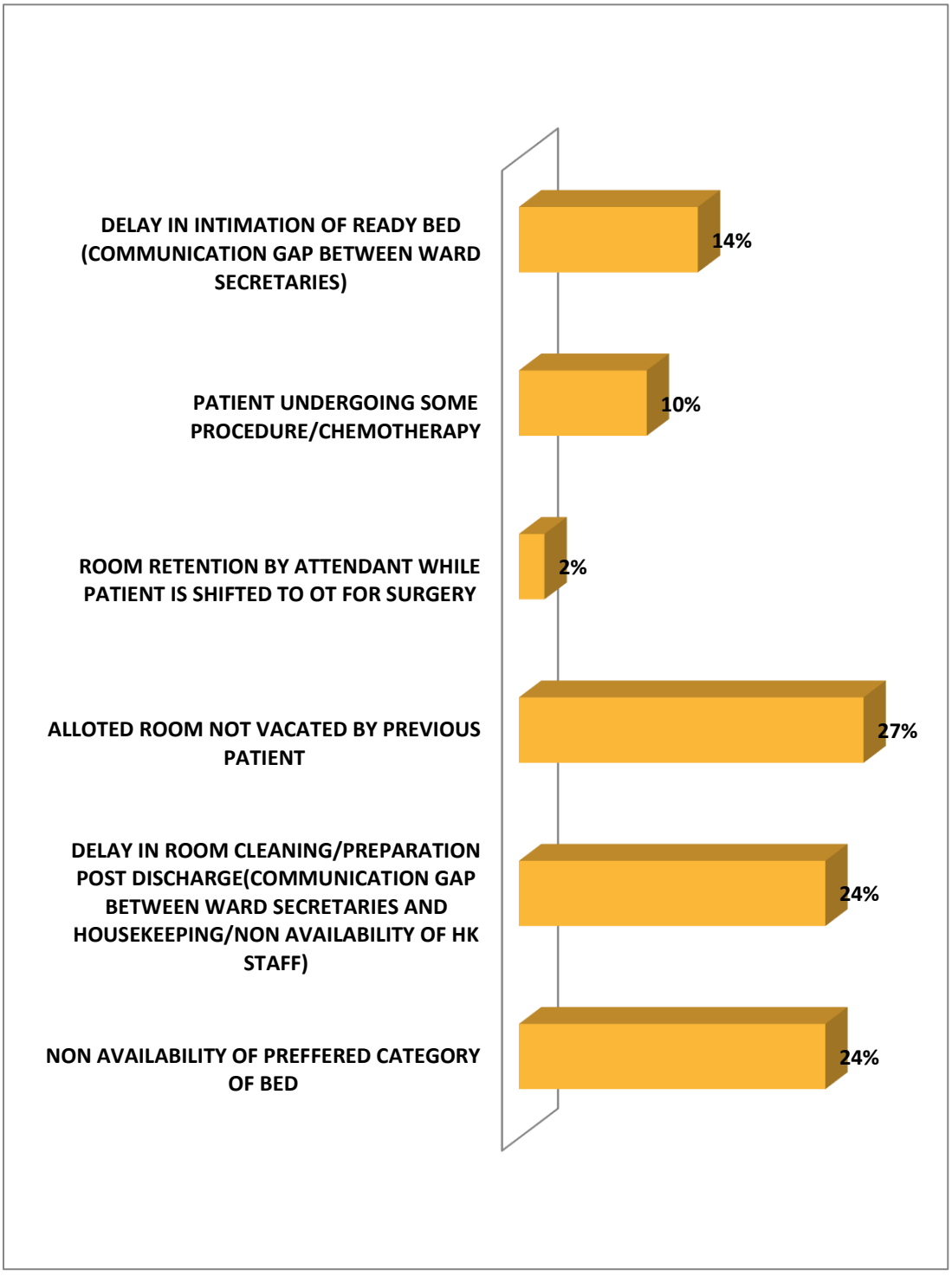
TIME TAKEN FOR PHYSICAL SHIFTING OF PATIENT IS <30 MINUTES IN 32% OF CASES 30 MINUTES-1 HOUR IN 23% OF CASES AND 1-2 HOURS IN 23% OF CASES

FIGURE 31 :- TYPE OF INTER WARD TRANSFERS STUDIED



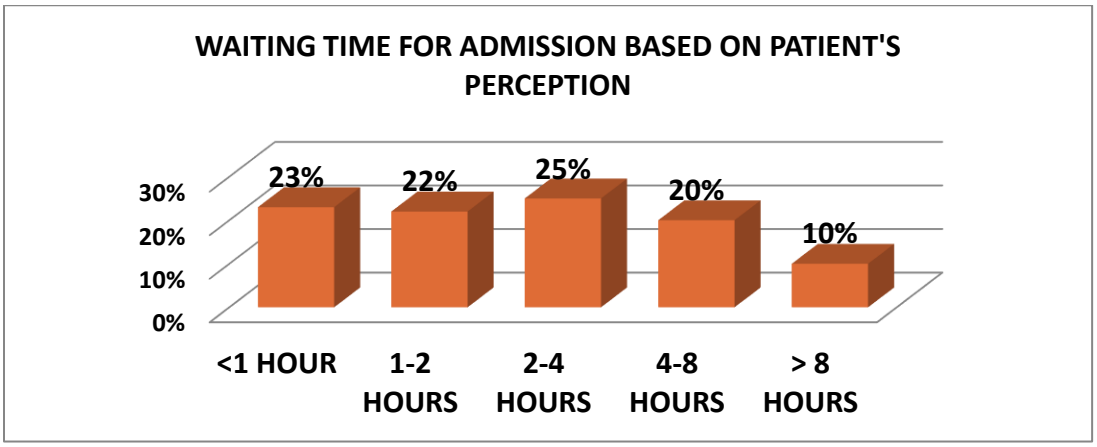
68 % INTER WARD TRANSFERS ARE DUE TO PATIENT PREFERENCE FOR A PARTICULAR ROOM/WARD/BED CATEGORY

FIGURE 32:- REASONS FOR DELAY IN INTER WARD TRANSFERS



8. FINDINGS FROM INTERACTIVE SURVEY:-

FIGURE 33:-WAITING TIME FOR ADMISSION BASED ON PATIENT PERCEPTION



<1 hour : 22% ; 1-2 hours: 23% ; 2-4 hours: 25% ;4-8 hours: 20% ; > 8 hours: 10%

FIGURE 34:-% OF PATIENTS WHO PERCEIVED ADMISSION WAITING TIME TO BE HIGHER THAN THE ACTUAL WAITING TIME

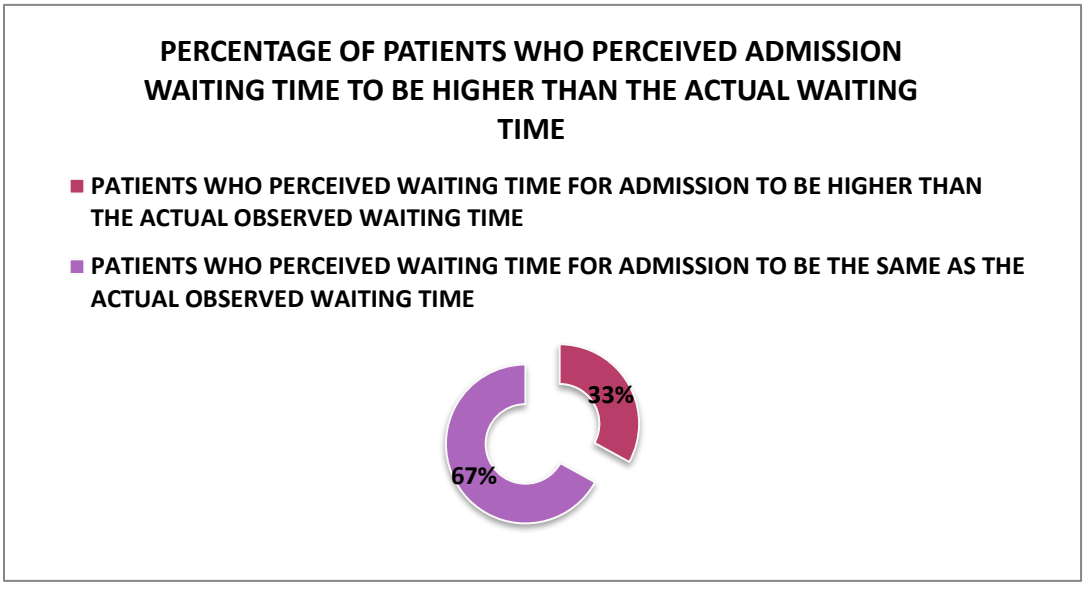
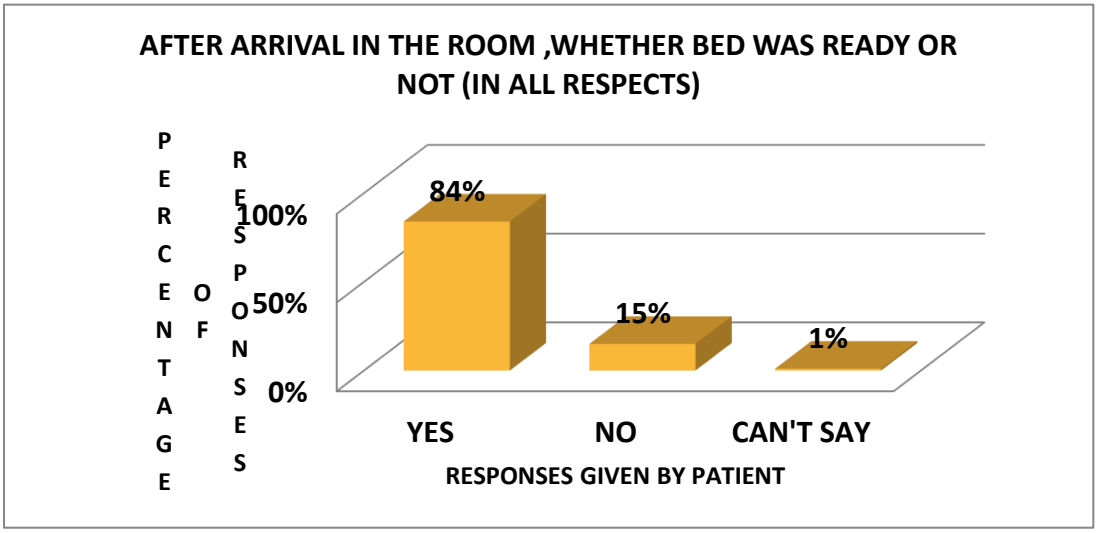
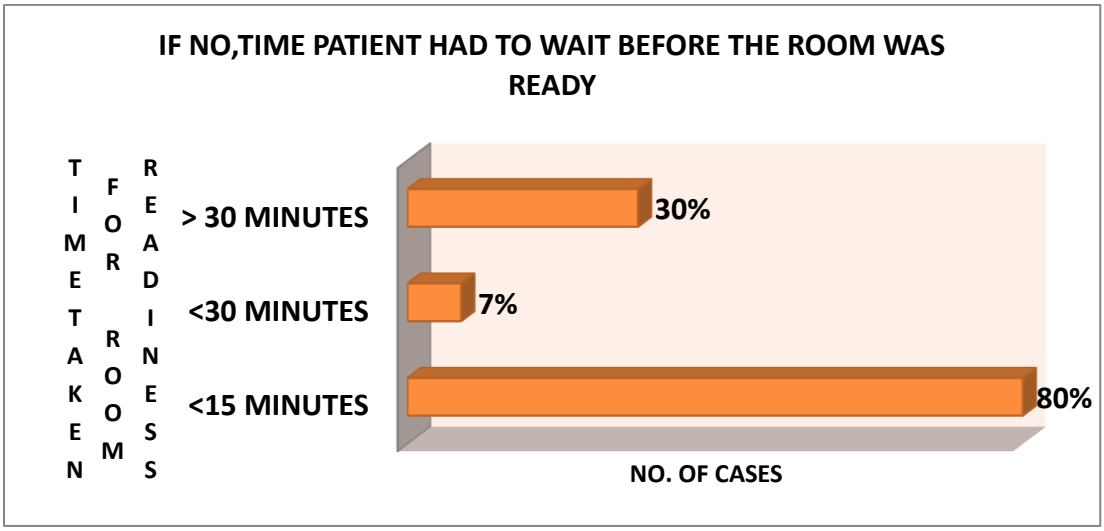


FIGURE 35:-PERCENTAGE OF RESPONSES FOR BED READINESS POST PATIENT ARRIVAL IN ROOM



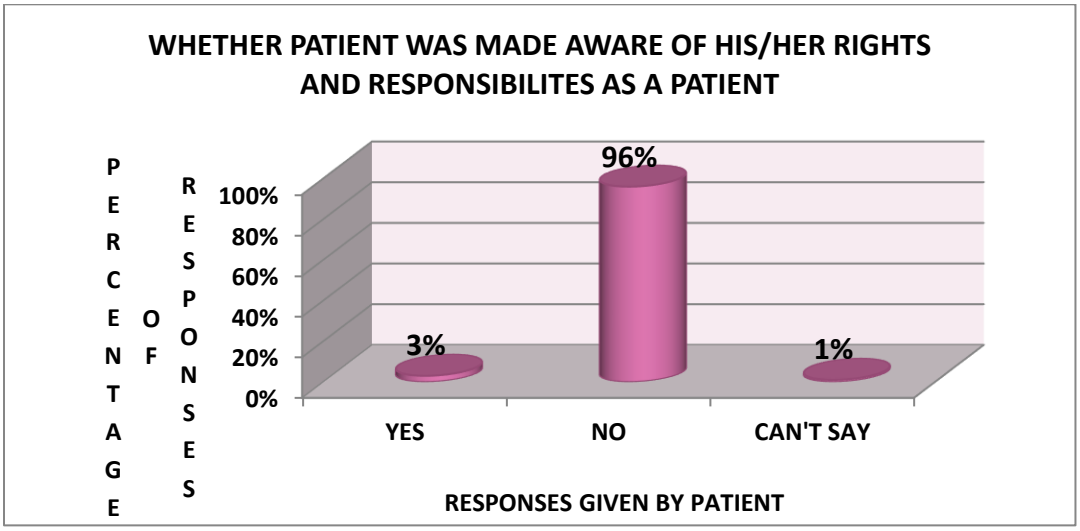
IN 84% OF CASES, BED WAS READY POST PATIENT ARRIVAL IN ROOM

FIGURE 36:-TIME TAKEN FOR BED PREPARATION POST PATIENT ARRIVAL IN ROOM(IN CASES WHERE ROOM WAS NOT READY AT THE TIME OF ALLOTMENT)



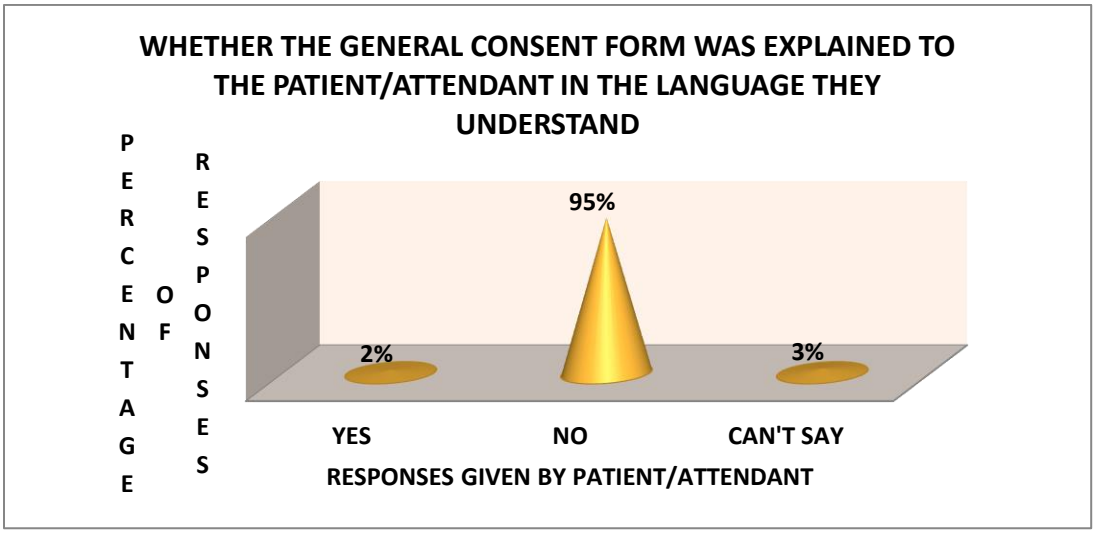
IN 80% OF CASES, BED WAS READY WITHIN 15 MINUTES POST PATIENT ARRIVAL IN ROOM

FIGURE 37:-PERCENTAGE OF PATIENTS WHO WERE/WERE NOT MADE AWARE OF THEIR RIGHTS & RESPONSIBILITIES



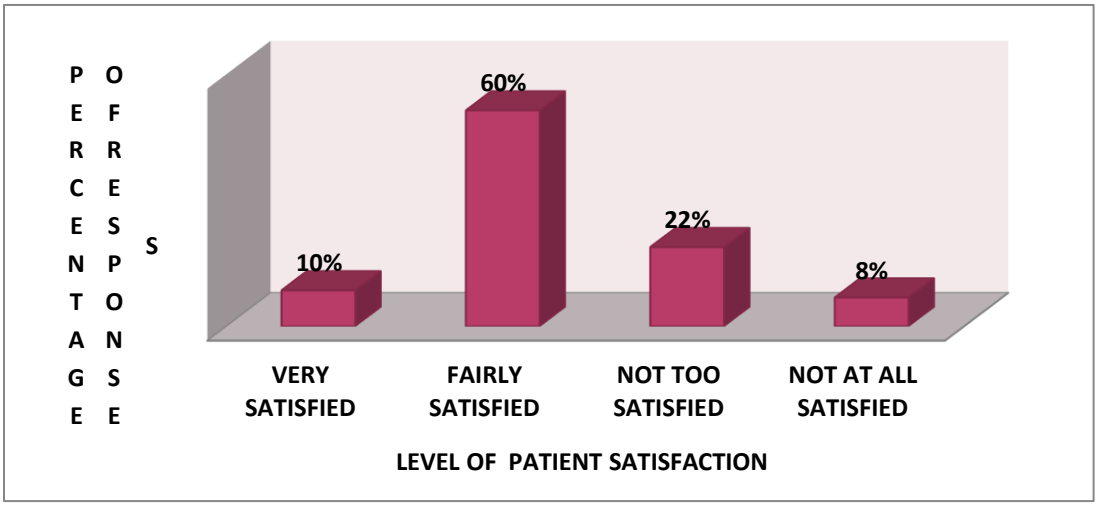
96% OF PATIENTS WERE NOT MADE AWARE OF RIGHTS & RESPONSIBILITIES AS A PATIENT

FIGURE 38:- PERCENTAGE OF PATIENTS WHO WERE/WERE NOT EXPLAINED GENERAL CONSENT FORM



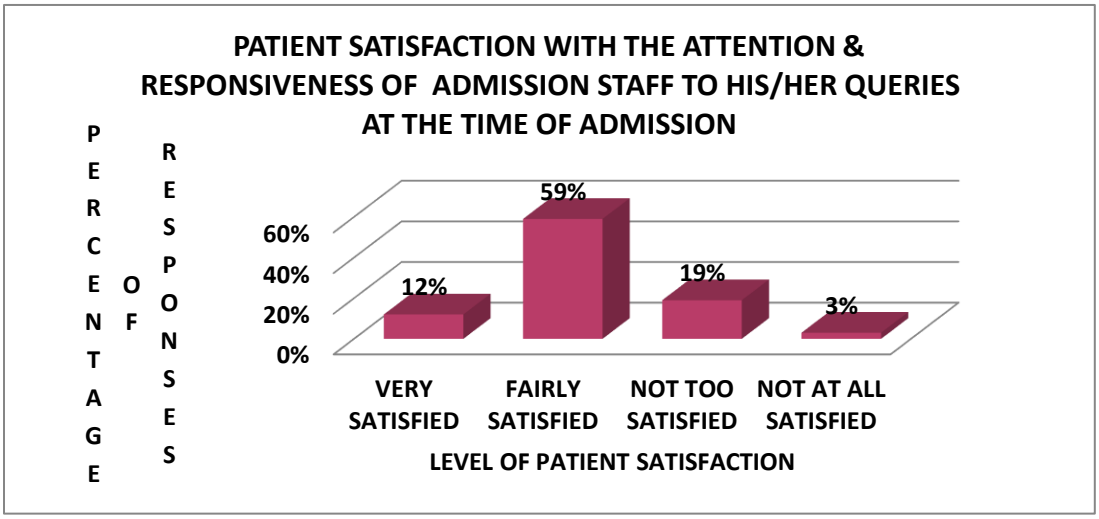
GENERAL CONSENT WAS NOT EXPLAINED TO 95% OF PATIENTS/ATTENDANTS

FIGURE39:-LEVEL OF PATIENT SATISFACTION WITH ATTENTION & RESPONSIVENESS OF ADMISSION STAFF TO HIS/HER PREFERENCES REGARDING BED CATEGORY OPTED



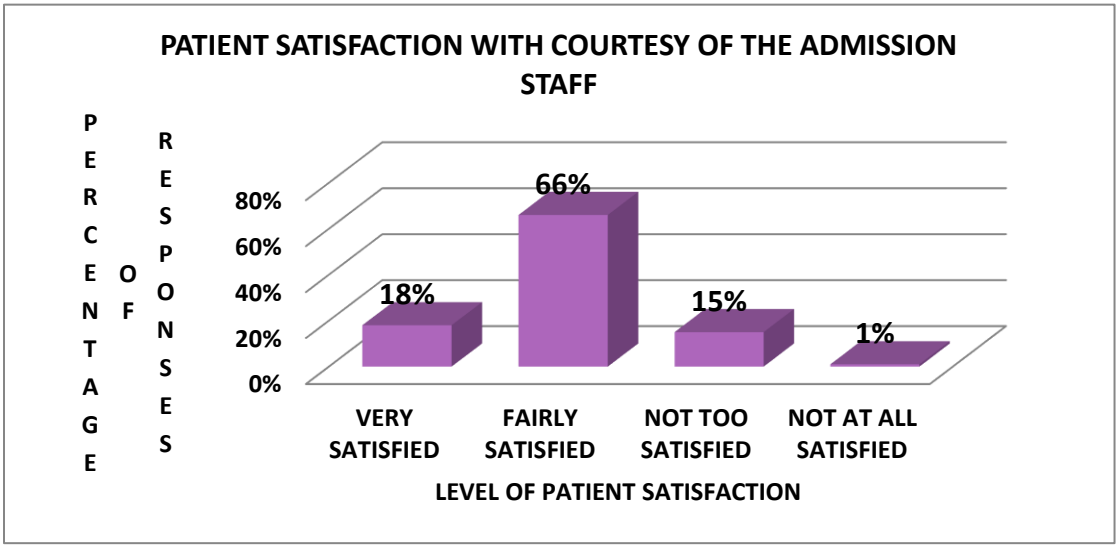
60% OF PATIENTS WERE FAIRLY SATISFIED WITH ATTENTION & RESPONSIVENESS OF ADMISSION STAFF TO HIS/HER PREFERENCES REGARDING BED CATEGORY OPTED

FIGURE40:-LEVEL OF PATIENT SATISFACTION WITH ATTENTION & RESPONSIVENESS OF ADMISSION STAFF TO HIS/HER QUERIES AT THE TIME OF ADMISSION



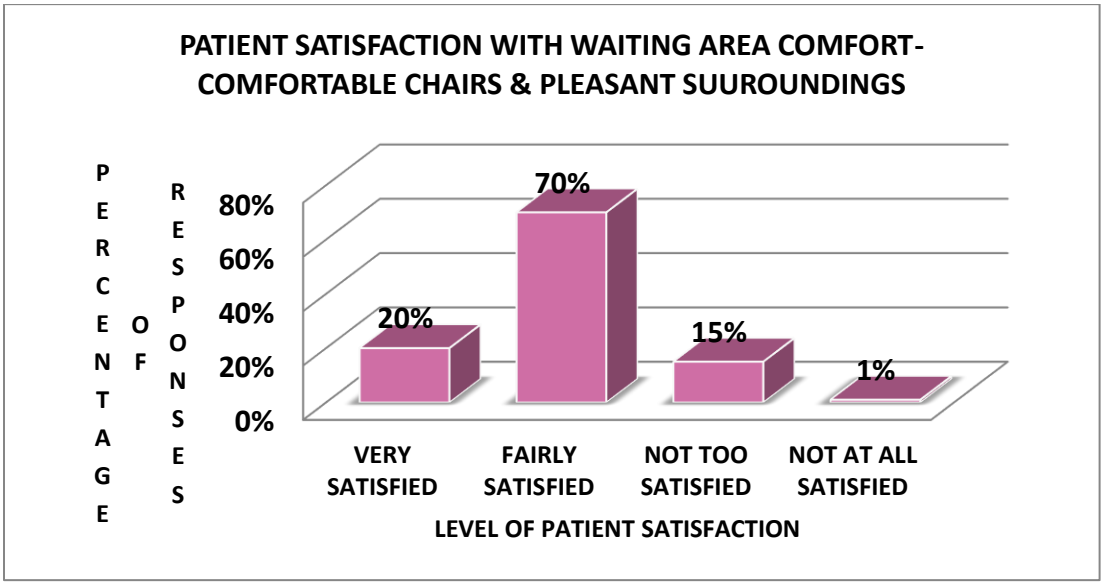
60% OF PATIENTS WERE FAIRLY SATISFIED WITH ATTENTION & RESPONSIVENESS OF ADMISSION STAFF TO HIS/HER QUERIES AT THE TIME OF ADMISSION

FIGURE 41:- LEVEL OF PATIENT SATISFACTION WITH COURTESY OF ADMISSION STAFF



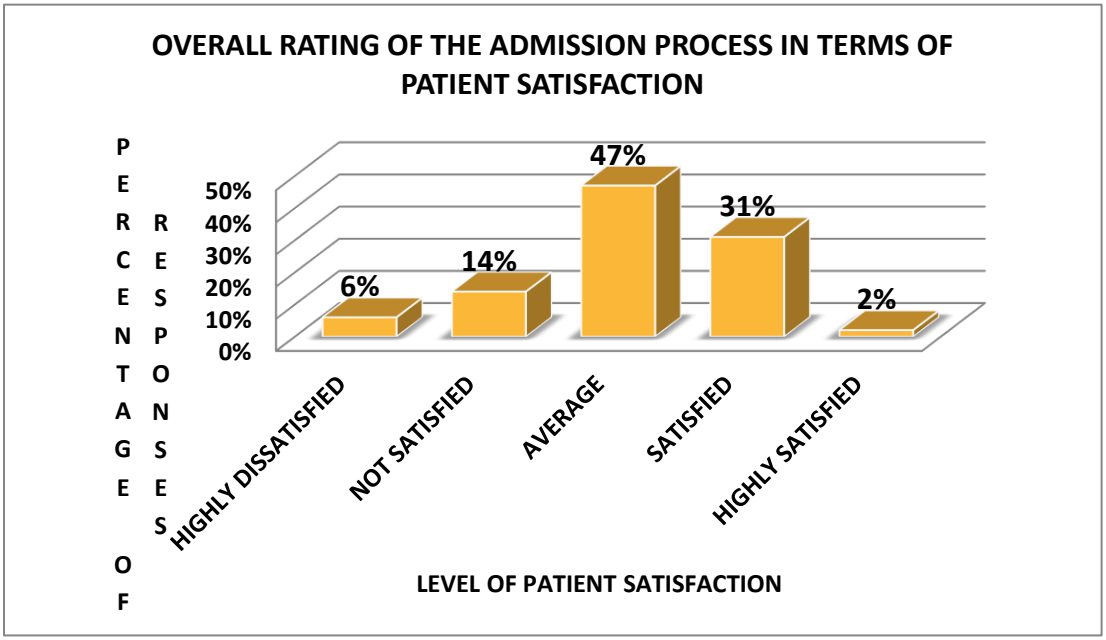
66% OF PATIENTS WERE FAIRLY SATISFIED WITH THE COURTESY OF ADMISSION STAFF

FIGURE 42:- LEVEL OF PATIENT SATISFACTION WITH WAITING AREA COMFORT



70% OF PATIENTS WERE FAIRLY SATISFIED WITH THE WAITING AREA

FIGURE 43:-OVERALL RATING OF THE ADMISSION PROCESS IN TERMS OF PATIENT SATISFACTION



47% OF PATIENTS RATED THE ADMISSION PROCESS AS AVERAGE IN TERMS OF SATISFACTION LEVEL

FIGURE 44:- WAITING TIME & LEVEL OF PATIENT SATISFACTION

Most of the Patients who waited for < 1 hour were satisfied with the admission process.

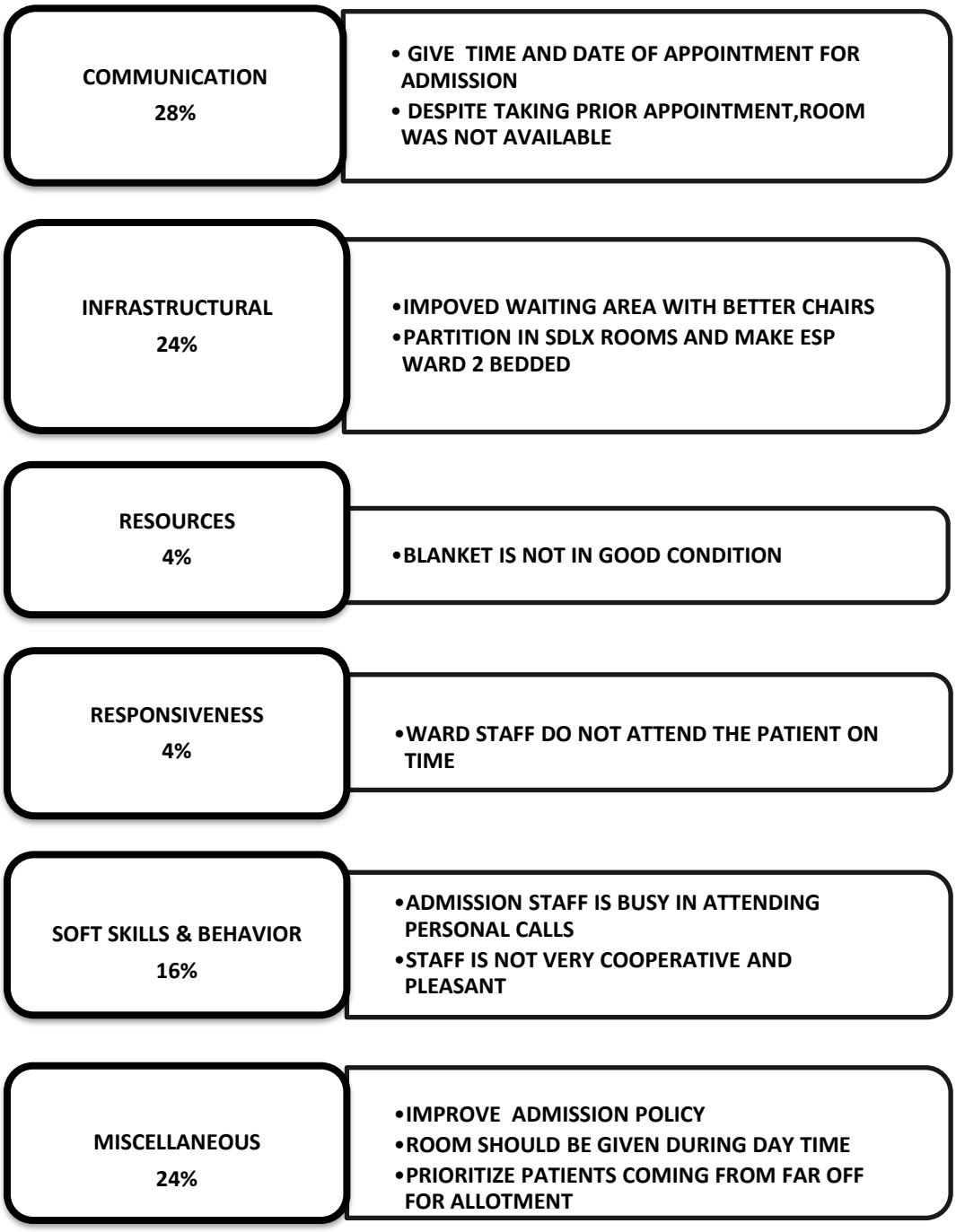
Majority of Patient who waited for 1-2 hours rated admission process as average in terms of patient satisfaction

Majority of patients who waited for 2-4 hours were not satisfied with the admission process

Majority of patients who waited for 4-8 hours rated admission process as average in terms of patient satisfaction

Majority of patients who waited for >8 hours were highly dissatisfied with admission process

FIGURE45:-SUGGESTIONS/COMMENTS MADE BY PATIENTS DURING SURVEY



KEY FINDINGS/OBSERVATIONS

1. **For Planned and Walk In Admissions:-**

- On an average, Planned Admissions are 60%, Walk Ins are 25 – 27% and Emergency Admissions are 13- 15%.
- Average Time Taken for Planned Admissions is 162 minutes, 166 minutes for Walk in Admissions and 184 minutes for Casualty Admissions.
- Majority of admissions take around 1-3 hours.
- 62% of rooms are not vacant/ready at the time of allotment.
- Time taken to begin room preparation post discharge is 30 – 60 minutes.
- Time taken for pass hand over is 15 - 30 minutes in 40% of the cases and 30 – 60 minutes in 23% of cases.
- 11% of the patients do not get the desired category.
- 93% of patients do not get pre admission counseling.
- Major Reasons for delay in admission process are as follows:-

1. Non Availability of preferred category of beds (35%).
2. Room not vacated by previous patient (21%).
3. Delay in intimation of room readiness, suggestive of communication gap between ward secretaries and admission staff (20%).
4. Delay in room cleaning/preparation post discharge of previous patient, suggestive of communication gap between Ward secretaries and Housekeeping staff (20%).

2. **For Casualty Admissions:-**

- Total Casualty Admission Turn Around Time is 1-3 hours in 46 % of cases & 3 - 5 hours in 30% cases
- Time taken by specialty doctor to report to casualty is 10 - 15 minutes in 60 % of cases
- 37% of casualty beds have Turn Around Time of 1-3 hrs and for 33% of beds, it is 3-5 hrs
- Major reasons for delay in Casualty Admissions are as follows:-

1. Non availability of preferred category of bed,
2. Allotted room not vacated by previous patient,
3. Delay in giving patient hand over,
4. Delay in intimation of room readiness

3. For ICU to Ward Transfers:-

- Most of the transfers are requested between 9:30-10:30 am.
- 41% of ICU Transfers have turnaround time of >5 hours & 26 % have turnaround time of 1-2 hours.
- Average Turnaround Time for ICU to Ward transfers is 4 hours.
- Waiting time for bed availability is 30 – 60 minutes in 24% cases and 2-3 hrs in 22% cases.
- Physical shifting from ICU takes 30 – 60 minutes in 35% cases, 60 - 120 minutes in 37% cases and 2-3 hrs in 22% cases.
- Average time taken for physically shifting patient from ICU to Ward post room allotment is 90 minutes.
- Major reasons for delay in ICU to Ward transfers:-

1. Non availability of preferred category of bed (35%)
2. Attendant not available at the time of shifting (12%)
3. Delay in intimation of room readiness (27%)
4. Delay in room cleaning/preparation post discharge (16%)

4. For Ward to Ward transfers:-

- Inter Ward Transfer Time is 1-3 hours in 32% cases and 3-5 hours in 29% cases
- Waiting for Bed Availability is less than 30 minutes in 42% of the cases and 30-120 minutes in 42% cases

- Patient Shifting takes less than 30 minutes in 32 % of cases, 30 -60 minutes in 23% cases and 60-120 minutes in other 23% cases.
- MAJOR REASONS FOR DELAY ARE AS FOLLOWS:-

1. Non availability of preferred bed category (24%)
2. Room not vacated by previous patient (27%)
3. Delay in room cleaning/preparation (24%)

CHAPTER 4

DISCUSSION

The findings reveal that most of the admissions are planned. Most of the patient arrivals for admission are between 11:30 – 2:30 PM and on an average Waiting time for bed availability is one hour six minutes post patient arrival at admission desk with admission slip and it is one of the major reasons for delay in admission process as is also confirmed by many other studies(Report of the Physician Hospital Care Committee,2006 ; Proudlove N C et al,2003). Maximum rooms are allotted between 1:00- 2:30 PM. Patients were allotted rooms during this time period when system showed vacant bed in 52% cases i.e, Room is allotted before previous patients' discharge process is complete. Discharge study done by Quality Cell of the hospital revealed that physical discharge takes on an average one hour post system discharge of patient. This occurs because the billing section shows discharge/vacant bed on system as soon as the patient's medical record (Discharge File)comes for billing irrespective of the bill being cleared by attendant or not. Thus rooms allotted post system discharge of patient are not vacant and the present study shows that around 62% of rooms are not vacant/ready at the time of bed allotment. Thus patients had to wait first for bed availability and thereafter for bed readiness. T his may lead to higher perceived waiting time than the actual waiting for admission as is revealed in the present study that 33% of the patients perceived waiting time for admission to be more than the actual observed waiting time. The findings have shown that one of the grey areas in admission process is the patient arrival pattern to the admission Desk. This finding is supported by a study which suggests that adopting an appointment system to spread the arrivals for admission and avoid unacceptable levels of inputs at certain times of the day can reduce patient waiting (Georgievskiy I et al) .Admission Staff calls all the planned appointment admission patients at 12 PM resulting in chaos and crowding at admission desk. However, few of planned admission patients turn up in morning itself as the patients are coming since many years and/or months and know that few beds are available in morning time. The occasional few available beds in the morning are utilized for internal transfers and not for planned and walk in admissions. Also, few of non-appointment patients arrive in the morning as no information is given to them about bed availability and admission turnaround time. Thus it is imperative to define admission TAT in the policy and

communicate it to the patient at the time of booking admission. The present study also shows that 92% of patients were not given pre admission counseling leading to further delays in the admission process like Room was retained by attendant when patient was shifted to OT. Such delays arose because attendant was not informed at the time of admission that room has to be vacated when patient leaves for OT.

The average admission turnaround time was found to be 123 minutes, which included average waiting time of 66 minutes for bed availability, Average time of 40 minutes to begin room preparation post previous patient's discharge and Average time of 13 minutes for pass handover to patient/attendant and Average time of 7 minutes for making advance payment. Thus, major delay in admission/patient placement turnaround time was due to delay in beginning room preparation post discharge of previous patient. The Bed Turnaround time in 55% cases was 1-2 hours and in 38% cases ½- 1 hour. In order to bring down the admission turnaround time it is imperative to reduce the bed turnaround time as has been stated and recommended in various studies. One hospital reduced Average bed turnaround time reduced from 150 minutes to 47 minutes, a 69 percent decrease ,which in turn reduced Time for inpatient bed assignment to bed placement from 157 minutes to 55 minutes.(Wilson M J et al,2005) In Another study in a hospital ,Average time from arrival to bed placement decreased from 219 minutes to 94 minutes (a decrease of 57 percent); and to accomplish this, new standardized procedures were created, and then affected staff was educated about alterations to their role(Marcia J.Wilson, Khoa Nguyen,2004).Another major reason for delay in admission process was delay in intimation of bed readiness to admission desk. This was supported by a study which stated that delayed notification to the admission registered nurse - who is responsible for the admission process—of a clean and ready bed often leads to delays in OR throughputs and ED holds, and impacted the movement of patients throughout the hospital. (Pellicone A, Martocci M,2006).

Casualty Admission Average turnaround time is 3hours .Major reason for delay is non availability of beds. This finding is supported by many studies on ED overcrowding(Matthias Azzopardi et al,2011; Tashkandy M A,2008)The key driver of trolley waits(the time from the decision to admit to leaving A&E) is recognized to be lack of beds resulting from very high occupancy, (Proudlove N C et al,2003).). Other reason for delay in Emergency Admission Process is Delay in intimation of room readiness to casualty staff as is

supported by a study (Pellicone A, Martocci M, 2006). Alloted room not vacated by previous patient also leads to delay in Emergency admission process. Literature findings confirm that a lack of "ready and available admitting beds" contributes forcibly to emergency department overcrowding (E. Howell et al,2008).Delay in giving patient hand over is another reason for delay and is supported by literature (Ann L. Hendrich, Nelson Lee,2005) for transfer process. Other minor reasons for delay were Late arrival of laboratory reports (2%).This finding was supported by a study(Tashkandy M A,2008) but this reason constituted 10.3% of delay as compared to 2% in the present study.

Another aspect of bed management covered in the study is intra hospital transfers. Two types of transfers are studied - ICU to Ward Transfer and Ward to Ward transfers. Most of the transfers requested between 9:30-10:30 am. 41% of ICU transfers have turnaround time of >5 hours & 26 % have TAT of 1-2 hours. Average TAT is 4 hours for ICU to Ward transfers. 35 % of physical shifting from ICU take 30 – 60 minutes, 37% take 1-2 hours ; and 22% take 2-3 hours), Major reasons for delay were(1)non availability of preferred category beds (Ann L. Hendrich, Nelson Lee,2005). When the hospital is in 'bed block', patients cannot be transferred out of ICU this often results in ICU retaining patients longer than necessary (Sandra Bunn,2007)

(2)Delay in intimation of Room readiness to ICU staff by Ward Secretaries. (Ann L. Hendrich, Nelson Lee,2005)Poor communication between the ICU and destination was identified as a contributing factor to the unnecessary delays in a study by Mei-Sing Ong et al,201, (3)Delay in room cleaning/preparation post discharge of previous patient (Ann L. Hendrich, Nelson Lee,2005). and

(4) Attendant not available at the time of physical shifting. This finding is not supported by any of the literature. Other minor reasons were (5)ICU patient waiting for referral doctor or undergoing some procedure, (Ann L. Hendrich, Nelson Lee,2005) (6)late arrival of ward boy and trolley,(7) Room retention by attendants while patient shifted to OT and (8)Room not vacated by previous patient (Ann L. Hendrich, Nelson Lee,2005). These findings are supported by few studies on transfers .These delays in turn impact the rotation of patients in ICU after the surgery and, finally, in operating theatres. (B Ortiga, 2010).

Inter Ward Transfer Time In 32% Cases Is 1-3 Hours & in 29% Of The Cases, it is 3-5 Hours**.** Waiting for bed availability in 42% of the cases is < 30 minutes, 42 % of the cases it

is 30 – 120 minutes .Patient shifting in < 30 minutes of room allotment in 32% of cases and 30 -60 minutes in 23 % cases 60 -120 minutes in remaining 23%.Major Reasons For Delay are the same as have been identified for other processes like Non availability of preferred bed category, Room not vacated by previous patient, Delay in room cleaning/preparation.(Hendrich A L, Nelson L,2005)

The findings from an interactive survey with patients reveal that 47% of patients rated the admission process as average in terms of patient satisfaction.33% were satisfied and 20 % were not satisfied with the admission process. Most of the Patients who waited for < 1 hour were satisfied with the admission process. Majority of Patient who waited for 1-2 hours rated admission process as average. Patients who waited for 2-4 hours were not satisfied with the admission process. Majority of patients who waited for 4-8 hours rated admission process as average. Majority of patients who waited for >8 hours were highly dissatisfied with the admission process.Mekoth N,2011,states that the higher the perceived courtesy of the hospital staff, the higher the patient satisfaction, The higher the perceived length of waiting time, the lower the patient satisfaction. Courtesy and waiting time have been found to be unrelated to patient satisfaction.

The study of the two processes- admissions and transfers and time tracking of the various sub processes identified that communication gap is the second major reason for delays in the process the first being non availability of vacant beds. Not much can be done about increasing the number of beds because of space constraints but by maximizing the utilization of limited resources, much of the unnecessary delays can be reduced.

The present study has few limitations as follows:-

1. Due to time constraints, data collection was limited.

2. Sample size is small and may not be true representative of the entire population.

3. Some of the information for data collection relied upon the memory of patients and staff.

4. Admissions occurring during night were not included in the study.

5. Only those Intra ward transfers are included in the study that were requested by patients as per their preference ,Transfers from day care and Transfers from higher to lower category.

CHAPTER 5

RECOMMENDATIONS

1. Expansion of the Hospital to increase the number of hospital beds-

The volume of patients coming to the hospital is exponentially increasing since 2006-07 till date as per the data from M.R.D leading to acute shortage of beds. This has resulted in extended waiting times for bed availability. The findings for both admission process and transfers revealed that expansion is probably the ultimate solution for the problem.

2. Staggered Admission Plan-

Majority of patient arrivals are between 11:30 AM to 2:30 PM. Patients were allotted rooms during this time period when system showed vacant bed. Discharge study done by Quality Cell of the hospital revealed that physical discharge takes on an average one hour post system discharge of patient. This occurs because the billing section shows discharge on system as soon as the patient's medical record (Discharge File)comes for billing irrespective of whether the bill is cleared by attendant or not. Thus rooms allotted post system discharge of patient are not vacant.

The admission Desk Staff calls all the planned appointment admission patients at 12 PM resulting in chaos and crowding at admission desk. Lot of planned admission patients turn up in morning itself as the patients are coming since many years and/or months and know that few beds are available in morning time. The few available in the morning are reserved for ICU transfers). Another lot of non-appointment patients arrive in the morning as no information is given to them about bed availability. Thus, instead of calling all patients at 12 PM or before that, admissions can be staggered between 12 to 4 PM.

3. Improved Communication system between different stakeholders-

COMMUNICATION WITH THE PATIENT:-

- Explain admission/waiting list process-Taking appointment for admission does not mean that room has been booked. It just means the order of priority in which room will be allotted on the day of admission.
- Give printed information with wait list number & contact telephone number to patients so that they call before coming
- One Interpreter for international patients
- Pre admission counseling to every admission

COMMUNICATION BETWEEN WARD SECRETARIES & ADMISSION STAFF FOR BED ALLOTMENT:-

- Implementation of Hospital Information System in wards for intimation of clean and ready beds to admission desk. When a patient would be discharged from an inpatient bed, ward secretary would be responsible for entering information in the hospital computer system. The computer entry sends an automated message to Dedicated Housekeeping teams that the room/bed is vacant and ready to be cleaned..Dedicated housekeeping teams for cleaning and preparing rooms post discharge of patient..
- Use common sharing folder/intranet for intimation of room readiness to admission desk until implementation of HIS.

COMMUNICATION BETWEEN WARD SECRETARIES AND HOUSEKEEPING STAFF:-

- **Use of visual communication system -**
  - Using jars with color coded slips of paper- Two jars can be placed at the nursing station—one representing clean beds and other representing dirty beds. Once a patient checked out, the nurse would put a bright red slip of paper with the patient's room number into one of the jars. When housekeeping staff finished cleaning and preparing the room for an incoming patient, they removed the red slip from the first jar and put a green slip with the same room number in the second jar. The green slip in the jar served as a highly visible notice to the Ward Secretary that a clean and ready bed was available(Case study by IRI consultants)

- Display of soft board near nursing station-A soft board can be put near nursing station. As soon as the patient physically vacates the nurse will put room/bed number on a slip of paper indicating dirty bed. Housekeeping staff would see the slip; clean the room and handover the slip to Ward Secretary. Ward Secretary can then intimate clean and ready beds to Admission staff.

3. **Focus on three P's:-**

POLICY

1. Implementation of Policies for Planned/Walk in & Emergency Admissions for prioritizing bed allotment.
2. Define Turn Around Time for each type of admission and communicate this to patient at the time of booking admission**.**

PROCESS

1. Allotment of only clean and ready rooms :- Patients were assigned to an inpatient bed when the room was empty but not yet cleaned and even when room was not vacant. Admission staff had no way of knowing when the room was clean and ready for the patient without making multiple phone calls to several wards. Assignment of clean and ready beds, will eliminate an extraordinary volume of phone calls between Ward Secretaries and Admission staff.
2. Call/SMS every planned admission patient a day before admission :-This will act as a reminder to the patient and also facilitate in knowing if there are any cancellations .
3. Wards should send a List of tentative next day discharges to admissions desk to anticipate next day bed availability: Last ones on the admission waiting list can then be intimated a day before to come only when bed availability is confirmed with admission desk.
4. Bed Requests: ICU Staff often requested an inpatient bed before the patient was clinically ready to leave ICU. This resulted in empty beds assigned for hours with no patients in them, while other patients could have been admitted to that room.
   ICU staff should be more precise in their communications.

They can send a "cleared for admission" message to the Admission Desk at the time when transfer is requested. Only then will the Admission staff assign a clean and ready bed to the ICU patient.

5. Communication facility for calling ICU patient's attendant(Post paid mobile phones to Ward Secretaries in MICU and SICU.

PEOPLE

1. TRAINING - Soft skills/ Etiquettes/Behavior
2. Rotation of Front Desk Executives

4. CONTINUOUS MONITORING:-

- ❖ No. of Patients sent home at the time of admission because of non availability of beds
- ❖ No. of Patients whose admission has been deferred on medical grounds
- ❖ No. of Patients who did not come on admission date

CONCLUSION

Management of inpatient admissions and transfers is essential to enhance the quality of patient care. In an era when hospitals nationwide are being forced to do more with less resources due to increasingly growing demand, many factors contribute to increased patient waiting for room/bed assignment/allotment , at times forcing facilities to go for deferring even the planned admissions. Even Post operative patients from SICU or stable patients from MICU sometimes have to wait for long time before they are physically shifted from ICU due to waiting for vacant beds in wards. While many of these factors are outside of a hospital's control like increasing number of admissions every year etc., others can be influenced through staff and management's focus on patient flow across the hospital. Many strategies are available for fixing these problems but the critical first steps include having leadership's commitment, followed by putting the right multidisciplinary teams to integrate all processes related to admissions & transfers and putting the right metrics and evaluation measures in place. Building bigger hospitals is the solution but improving patient flow (Parnell J M, Rachel M) is also important to maximize the utilization of resources.

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Annexure 1
PATIENT SATISFACTION SURVEY

INSTRUCTIONS FOR SURVEY COMPLETION

- *Your answers are important. They will help us improve our services to the patients.*
- *REMEMBER, **THE SURVEY IS COMPLETELY CONFIDENTIAL**. No information that you furnish shall be given to anyone in the hospital.*
- *Sometimes you may consider one staff member to have given excellent service and another to have given poor service. We want your overall opinion*
- *There is no right or wrong answer; it is your opinion that is important.*

A. CONCERNING YOUR ADMISSION TO HOSPITAL PLEASE TICK THE APPROPRIATE CHOICE: -

1. Following arrival at the admission desk with admission slip (i.e., after consultation with your doctor and / or after getting done all the investigations), how long did you wait before admission to a room or ward?

   A. < 1 HOUR **[ ]** B. 1-2 HOURS **[ ]** C. 2-4 HOURS **[ ]**

   D. 4-8 HOURS **[ ]** E. > 8 HOURS **[ ]** F. CANNOT REMEMBER **[ ]**

   G. DID NOT HAVE TO WAIT **[ ]**

2. After arrival in the room, was the bed/room ready (in all respects)?

   A. YES **[ ]** B. NO **[ ]** C.CAN'T SAY **[ ]**

3. If not, how long did you wait before it was ready?

   A. <15 MIN. **[ ]** B. < HALF HOUR **[ ]** C. > HALF HOUR **[ ]**

4. Were you made aware of your rights and responsibilities as a patient at the time of admission?

   A. YES **[ ]** B. NO **[ ]** C. CAN'T SAY **[ ]**

5. Was the general consent form explained to you in the language you understand at the time of admission?

   A. Yes **[ ]** B. NO **[ ]** C. CAN'T SAY **[ ]**

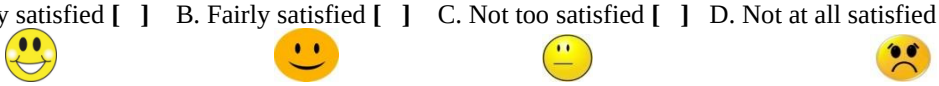
B. PLEASE RATE HOW SATISFIED YOU WERE WITH EACH OF THE FOLLOWING ASPECTS OF THE ADMISSION (Tick the appropriate choice)-

6. The attention and responsiveness of admitting staff to your preferences/ needs regarding bed category that you opted

   A. Very satisfied **[ ]** B. Fairly satisfied **[ ]** C. Not too satisfied **[ ]** D. Not at all satisfied **[ ]**

7. The attention and responsiveness of the admitting staff to your queries (if any) at the time of admission

   A. Very satisfied **[ ]** B. Fairly satisfied **[ ]** C. Not too satisfied **[ ]** D. Not at all satisfied **[ ]**



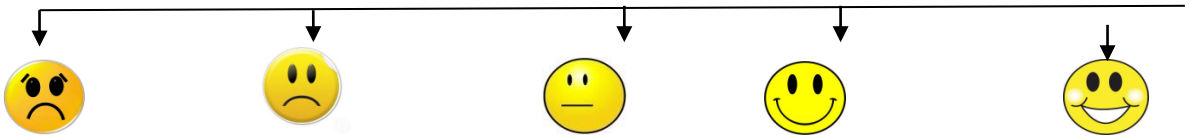
8. Courtesy of the admission staff

   A. Very satisfied **[ ]** B. Fairly satisfied **[ ]** C. Not too satisfied **[ ]** D. Not at all satisfied **[ ]**

9. Waiting area comfort- comfortable chairs and pleasant surroundings

   A. Very satisfied **[ ]** B. Fairly satisfied **[ ]** C. Not too satisfied **[ ]** D. Not at all satisfied **[ ]**

10. On the scale given below, how would you rate our admission process (in terms of patient satisfaction)?



11. Please give us your suggestion/s (if any) to help us improve the admission process-

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Thank you very much for completing this survey. We value your feedback.

रोगी संतुष्टि सर्वेक्षण

सर्वेक्षण पूरा करने के लिए निर्देश

- आपका उत्तर महत्वपूर्ण हैं, हमें रोगियों के लिए हमारी सेवाओं में सुधार में मदद मिलेगी |
- सर्वेक्षण पूरी तरह से गोपनीय है. प्रस्तुत जानकारी अस्पताल में किसी को भी नहीं दी जाएगी |
- कभी कभी हो सकता है,एक स्टाफ सदस्य का। उत्कृष्ट सेवा **ho** और एक अन्य स्टाफ सदस्य **का। n ho.** हम आप**का।** समग्र राय चाहते हैं |
- **y**हाँ कोई सही या गलत जवाब नहीं है, यह **kevl** आपका। महत्वपूर्ण राय है |

A. अस्पताल में अपने प्रवेश के *आधar pr* कृपया टिक से उपयुक्त विकल्प cune: -

1. प्रवेश पर्ची के साथ प्रवेश डेस्क पर पहुंचने के बाद(यानी, अपने चिकित्सक के साथ परामर्श के बाद और / या सभी जांच के बाद), *आपne* कितनी देर तक कमरे या वार्ड **imlne ka** इंतजार किया था?

   (ए) 1 घंटे **[ ]** (बी) **1-2** घंटे **[ ]** (सी) **2- 4** घंटे **[ ]**
   (डी) **4-8** घंटे **[** (ई) **> 8** घंटे **[ ]** (फ) याद नहीं कर सकते **[ ]**
   (जी) इंतजार नहीं किया **[ ]**

2. कमरे में आने के बाद , बिस्तर (**pUrl trh se**) तैयार था?

   (ए) हाँ **[ ]** (बी) नहीं **[ ]** (सी) कह नहीं सकते **[ ]**

3. यदि नहीं, to आपne कितनी देर बिस्तर तैयार **hone ka** इंतजार किया था?

   (ए) <15 मिनट **[ ]** (बी) < आधे घंटे **[ ]** (सी) > आधे घंटे **[ ]**

4. क्या आप**ko** प्रवेश के समय एक रोगी के अधिकारों और जिम्मेदारियों के बारे में btaya gya?

   (ए) हाँ **[ ]** (बी) नहीं **[ ]** (सी) कह नहीं सकते **[ ]**

5. क्या आप**ko** "सहमति फार्म" आप**ke** प्रवेश के समय आप**kI** भाषा में समझाया **gya**?

(ए) हाँ [ ] (बी) नहीं [ ] (सी) कह नहीं सकते [ ]

B. **कृपया संतुष्ट के आधar pr निम्नलिखित पहलुओं में से उचित विकल्प pr टिक lgaए-**

6. आपकe चुनe बिस्तर वर्ग के **ihsab se** स्टाफ ne आपkI वरीयताएँ / जरूरतों ka ध्यान r%a –

(ए) बहुत संतुष्ट [ ] (बी) संतुष्ट [ ]

(सी) असंतुष्ट [ ] (डी) बहुत असंतुष्ट [ ]

7. और प्रवेश समय आपकe प्रश्नों (यदि कोई हो) pr कर्मचारियों ka ध्यान/ जवाब -

(ए) बहुत संतुष्ट [ ] (बी) संतुष्ट [ ]

(सी) असंतुष्ट [ ] (डी) बहुत असंतुष्ट [ ]

8. स्टाफ **ka brtav**

(ए) बहुत संतुष्ट [ ] (बी) संतुष्ट [ ]

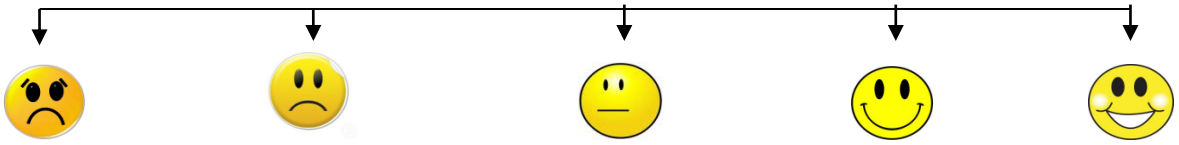
(सी) असंतुष्ट [ ] (डी) बहुत असंतुष्ट [ ]

9. प्रतीक्षा क्षेत्र में- आरामदेह कुर्सियों और सुखद वातावरण -

(ए) बहुत संतुष्ट [ ] (बी) संतुष्ट [ ]

(सी) असंतुष्ट [ ] (डी) बहुत असंतुष्ट [ ]

10. नीचे दिए गए पैमाने पर, आप कैसे हमारे प्रवेश प्रक्रिया को रेट (रोगी की संतुष्टि के मामले में) krege ?



अत्यधिक असंतुष्ट | **असंतुष्ट** | औसत | संतुष्ट | अत्यधिक संतुष्ट

11. कृपया हमें प्रवेश प्रक्रिया में सुधार के लिए, अपने सुझाव दे(यदि कोई हो) -

इस सर्वेक्षण को पूरा करने के लिए बहुत बहुत धन्यवाद. आपके जवाब अमूल्य है.