Summer Training at
Medica Superspecialty Hospital, Kolkata
(April 3 to June 2, 2017)

Study on Turn Around Time of Discharge Process in Medica Superspecialty Hospital

By
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Under the guidance of
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INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that **Ms. Swati Gupta** has undergone Summer Training in **Medica Superspecialty Hospital, Kolkata** from **3rd April to 2nd June 2017**.

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

I wish her success in all her future endeavors.

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GreenOT
Certified Green Operation Theatre
CERTIFIED BY BEREAU VERITUS

MEDICA Superspecialty Hospital
caring for life

CERTIFICATION NO : H-2013-0167
AN NABH ACCREDITED HOSPITAL

MHPL/HR-Communication/2017/05/9406

31st May, 2017

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Swati Gupta**, a student of Institute of Health Management Research from Jaipur, Sanganer, has successfully completed practical training at **Medica Superspecialty Hospital**, **Kolkata**, during **3rd April 2017** to **1st June, 2017**, as per her academic requirement.

Ms.Gupta has prepared a project on department of Operations at Medica Superspecialty Hospital. She was found to be an efficient & dedicated student, and her conduct was found to be excellent.

We wish her all the best for her future endeavors.

Madhumita Roy

Madhumita Roy
DGM Human Resources

Ananya Mitra
General Manager

MD

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I would also like to thank my Institutional mentor **Dr. Neetu Purohit** for providing such an opportunity to do the project and always supporting & helping in successful of my project.

ABBREVIATIONS

- RMO - Residential Medical Officer
- GRE - Guest Relation Executive
- MT- Medical Transcriptionist
- GW- General Ward
- MLC- Medico Legal Case
- DAMA- Discharge Against Medical Advice
- HDU- High Dependency Unit
- IPD- In-patient Department
- OPD- Out-patient Department
- OT- Operation Theatre
- F & B- Food & Beverages
- HDF- Hemodifiltration
- PRN- Patient Registration Number
- CCU- Critical Care Unit
- ICU- Intensive Care Unit
- CTVS- Cardio Thoracic Vascular Surgery
- FMCG- Fast Moving Consumer Goods
- TAT- Turn Around Time
- MRD- Medical Records Department
- TPA- Third Party Administrator
- HSS- Hospital Standard Schedule
- PR- Public Relations
- BLS- Basic Life Support
- ACLS- Advance Cardiac Life Support
- SP- Service Patient

CONTENTS

OBSERVATIONAL LEARNING

INTRODUCTION:

MedicaSuperspecialty Hospital is a tertiary care hospital with state-of-the-art facilities in Cardiology and Cardiac surgery, Neurology and Neurosurgery, Orthopaedics (focusing on spine and joints), Gastroenterology & GI Surgery, Kidney Diseases, including Nephrology, Urology & Transplant Surgery, ENT and Breast Diseases, and one of the country's largest and most advanced Dialysis facilities. Medica is a 500 bedded hospital with 24/7 emergency support services.

Specialized Healthcare Services

- MedicaInstitute of Cardiac Sciences
- MedicaInstitute of Neurological Diseases
- MedicaInstitute of Kidney Diseases
- MedicaInstitute of Orthopaedic Sciences
- MedicaInstitute of Gastroenterology & GI Surgery
- MedicaInstitute of Critical Care
- MedicaENT Institute
- MedicaInstitute of Breast Diseases
- Department of Emergency Medicine

Other Departments

- Department of Anaesthesiology & Pain Medicine
- Department of Dentistry
- Department of Dermatology & Cosmetology
- Department of Diabetes & Endocrinology
- Department of General Surgery
- Department of Internal Medicine
- Department of Nutrition & Dietetics
- Department of Obstetrics & Gynaecology
- Department of Paediatrics & Neonatology
- Department of Physical Therapy & Rehabilitation
- Department of Plastic & Reconstructive Surgery
- Department of Psychiatry & Psychology
- Department of Respiratory Medicine
- Department of Rheumatology

Facilities:

- IPD, OPD &Daycare
- Ambulance Services
- Diagnostics
- Dialysis
- Pharmacy
- Blood bank

MODE OF DATA COLLECTION:

The data is collected by interacting with the head of the department and employees of specific department and through personal observation.

GENERAL FINDINGS

ADMISSION

The department is located at the ground floor of the hospital. It consists of 3 Admission Desks and e Bed Management Desks.

Documents available on the Admission Desk :

- Admission Counselling Checklist
- Admission slip
- Financial Responsibility Agreement
- Admission Form
- Bill estimate
- Billing card
- Patient Registration Form
- Emergency Admission Slip
- Discharge summary

Types of Admissions:

- Emergency Admission
- Planned Admission
- Instant/ Fly-in Admission

FINANCIAL COUNSELLING

The Financial Counselling Desk is located at the ground floor of the hospital. There is one financial counsellor in the hospital. On an average 10 patients comes for financial counselling daily.

Functions:

- Coordinates for the doctors that do not have personal coordinators.
- Follow up with the patients if doctor advised them for admission.
- If any personal coordinator is absent, then financial counsellor coordinates for that doctor.
- Emergency admission counselling is done.
- Direct admission for plastic surgery (which is not included in the package) is counselled.
- When the bill estimate of the patient is increased, then the financial counsellor tells the patient relative to sign it.
- Informs the patient relatives to collect their provisional bills daily.

BED MANAGEMENT

Types of rooms available in the Hospital:

- Multi 6
- Multi 4
- Twin share
- Private
- Deluxe
- Suite
- ICU/CCU/CTVS
- HDU (Level 1 and 2)
- Neuro ICU
- Neonatal ICU
- Paediatric ICU
- Paediatric HDU
- Emergency and Triage

HELP DESK

It is located at the ground floor of the hospital. 3 Guest Relation Executives (GRE) are present at a time.

Functions:

- Patients passes are issued.
- GRE takes the in-patients to the respective floor after admission.
- Answer the queries of people.
- Dietician appointment is given.
- Guides for doctors appointment.
- Different brochures are given.
- Guides patients to reach different departments.
- Makes conversation between Doctors and Patient relatives.

REGISTRATION COUNTER

It is located at the ground floor of the hospital. There are 3 GRE present in this Department.

Certain billings are done:

- Blood Test
- Urine Test
- Dialysis
- Dietician consultation
- Dental
- Pre-Anaesthetic Checkup (PAC)
- Pre- EmployementCheckup
- Cardiac Consultation

Other Functions:

- Answer the queries of people.
- Giving estimates of various Tests to the patients.
- Making Registration Card of the patients.

REPORT DISPATCH COUNTER

It is located at the ground floor of the hospital. There are 2 GRE present in this Department. All the reports should be collected within 3 months. The Reports are arranged according to the date of different tests.

Functions:

- Provide Reports to the people who came to collect them.
- E-mail the Reports to people who have sent the request.
- Solve the report related queries.

EMERGENCY DEPARTMENT

The Emergency Department of the MedicaSuperspecialty Hospital is located at the Ground floor. Bed strength of the Department is 12 beds + 1 isolation bed. Emergency ward consists of Nursing station, Patient beds, isolation room, dirty utility, clean utility, store.

Admission Register of emergency consist of the following information:

- Patient name
- Age & Sex
- PRN & Bed no.
- Attending Doctor
- Provisional Diagnosis
- Admitting Consultant
- Date & Time of admission
- Discharge LAMA
- Transfer out
- Death
- Sign

The emergency ward has:

- Crash Trolley (1 Adult & 1 Paediatric)
- Defibrillator
- Dressing Trolley
- 3 Ventilator Machine
- Bipap Machine
- IV Cannulation Trolley
- Oxygen Cyllinder

DAY CARE DEPARTMENT

The Day Care Department of the MedicaSuperspecialty Hospital is located at the Ground floor. Bed strength of the Department is 5 beds.

Procedures done in Day Care are:

- Chemotherapy medicine is prepared
- True cut therapy
- Bone marrow biopsy
- Stitch removal
- Dressing is done
- Mole excision
- AVF
- Muscle Biopsy
- Excision of nail tumour

AMBULANCE SERVICES

The Ambulance services department is located near the emergency department of the hospital. There are total 12 ambulance of MedicaSuperspecialty Hospital.

Medica has 4 types of ambulance services:

- Medica Ambulance
- Sahayta Ambulance
- Chest Pain Ambulance Service
- Airport Ambulance

Ambulances have Basic Life Support (BLS) and Advance Cardiac Life Support (ACLS) facility.

Every ambulance has:

- Oxygen cylinder
- Oxygen mask
- Ambu Bag
- Stretcher
- Spine Board
- Stair Chair

Advance Cardiac Life Support (ACLS) Ambulance has:

- Ventilator
- Syringe Pump
- Cardiac Monitor
- Bipap Machine
- Temporary Pacemaker

Doctor is compulsory in ACLS ambulance.

PUBLIC GRIEVANCE DESK

Public Grievance Desk is present on the ground floor of the hospital. Kiosk is present only on the 6th floor. The feedback box is present on all the floors for the inpatient feedback forms collections and in all the OPDs at the ground floor.

Functions:

- Bring the feedback forms from the feedback box everyday.
- Update the written feedback of patients in the google sheet everyday.
- Do the telephonic conversation with the people if the feedback obtained is incomplete (both inpatient and outpatient feedback forms).
- Sending the updated report of the feedback to the higher management on daily basis.
- Obtain the information of the total number of discharges and the feedback forms collected from different floors.

INTERNATIONAL HELP DESK

International Help Desk is present on the ground floor of the hospital. Two junior exicutives are available on the desk.

Functions:

- Dedicated Guest support cell
  - ✓ To coordinate appointments with the doctors and answer queries through emails and over phone.
  - ✓ To provide invitation letter for hassle-free issuance of Medical visa.
  - ✓ To handle all follow up queries post treatment and discharge.
- Fit to fly
  - ✓ Fit to fly certificate is provided post completion of treatment (including the period post discharge from hospital).
- Customized Treatment Packages with Consolidated Facilities
  - ✓ Airport pick up.
  - ✓ Total treatment cost (with rehabilitation and physiotherapy if required)
  - ✓ Local phone boll.
  - ✓ Local conveyance
  - ✓ Food and stay at our guest house for the patient along with one attendant.
- Dedicated Guest Relation Executive
  - ✓ Dedicated Guest Relation Executive for each patient for all in-hospital coordination, post discharge follow-ups.

- Travel and transport facilities
    - ✓ Dedicated travel desk to facilitate bookings
    - ✓ They coordinate pick up and drop of critical patients from and to airport in ambulances fully equipped and manned to handle Basic Life Support.
    - ✓ They also provide help with non-critical transport if required.
- Diet
    - ✓ Customized diet is provided as per taste and requirement.
- Mobile connection
    - ✓ Mobile connection is provided to the patient during hospital stay.

OUT PATIENT DEPARTMENTS

All the OPDs are located on the ground floor of the hospital. There are four OPDs in MedicaSuperspecialty Hospital.

Functions:

- Out-patient Registration is done by the GRE if the patient visits the hospital for the first time.
- OPD billing is done by the GRE from the OPD reception and token number is given to the patient on first come first serve basis.
- Blood Pressure checking is compulsory for all the patients before consulting the doctor.
- Prescription scanning is compulsory and is done by the GRE for maintaining the records in the hospital.
- Out-patient feedback page is collected by the GRE in the end.
- Call handling is done to take the appointments of the patients for different doctors.
- Excel sheet is made for the International Patients visited in each OPD and quality indicator (OPD waiting time) for all the doctors.

1. OUT PATIENT DEPARTMENT 1

- ✓ OPD 1 is Medica Institute of Neurological Diseases (MIND).
- ✓ The department consists of Neuro-surgery and Neuro-medicine.
- ✓ Timings of this OPD is 8 am to 7 pm.
- ✓ Manpower of this OPD is one GRE.
- ✓ The department has 5 doctor consultation rooms, 1 faculty room and 1 director meeting room.
- ✓ Following registers are present:
    - Appointment Register
    - Refund Register
    - Epilepsy Register
    - MRD Copy
    - Manual Copy

2. OUT PATIENT DEPARTMENT 2

- ✓ It has the following departments:
  - Medica Institute of Cardiac Sciences
  - Department of Internal Medicines
  - Department of Neonatal Perinatal Medicines
  - Medica ENT Institute
  - Department of Gynaecology
  - Department of Psychiatry
- ✓ Manpower of this OPD is three GRE
- ✓ Timings of this OPD is 8 am to 8 pm.

3. OUT PATIENT DEPARTMENT 3

- ✓ OPD 3 is Medica Institute of Kidney Diseases (MIKD).
- ✓ Timings of this OPD is 8 am to 7 pm.
- ✓ Manpower of this OPD is two GRE.
- ✓ It consists of 1 procedure room, 10 doctors consulting room, audiometry and speech therapy.

4. OUT PATIENT DEPARTMENT 4

- ✓ OPD 4 is Medica Institute of Orthopaedic Sciences (MIOS).
- ✓ Timings of this OPD is 8 am to 6 pm.
- ✓ Manpower of this OPD is two GRE.
- ✓ It consists of 1 procedure room, 4 doctors consulting room.

RADIOLOGY DEPARTMENT

Radiology is an outsource department and the name of the company is Bhilai Scan and Research (BSR). It is located on the ground floor of the hospital.

Observations:

- Department reception has four GREs for doing the billing of different investigations that are available.
- There is a waiting area for the patient and their relatives to sit till their turn comes for the investigation.
- Timings are 8 am to 8 pm (Monday to Saturday) and 8 am to 4 pm (Sunday).
- Different types of forms available are:
    - ✓ MRI Checklist
    - ✓ X-ray/ CT consent form
    - ✓ HIV consent form
    - ✓ Registration form (OP,SP)
    - ✓ Male doctor consent form
- Registers maintained are:
    - ✓ MRI appointment register
    - ✓ NCV/EEG appointment register
    - ✓ Refund register
- Types of investigations in radiology department are:
    - ✓ X-ray
    - ✓ CT-Scan (Computed Tomography)
    - ✓ MRI (Magnetic Resonance Imaging)
    - ✓ USG (Ultra Sonography)
    - ✓ Neurology Investigation
        - EEG (Electro Encephalography)
        - NCV (Nerve Conducting Velocity)
    - ✓ Urology Investigation
        - Uroflowmetry
        - Urodynamic study
    - ✓ Cardiology Investigation
        - ECG

- ECHO
- TMT
- HOLTER
- Head up Till Test
- DSE (Dobutamine Stress Echo)

CORPORATE BILLING AND DISCHARGE DEPARTMENT

- The corporate billing and discharge department is located on the 6th floor of the hospital.
- There are three desktops in corporate billing.
- Manpower of the department is two junior executives.
- The packages of each corporate schedule are different.
- Average corporate discharges are 20-25 discharges per day.
- The corporate approval work is done by corporate desk which is located at the ground floor.
- The bill is checked with the billing card before finalising and then the clearance is done.
- There are 3 types of corporate:
  - ✓ TPA Corporate
  - ✓ Cash Corporate
  - ✓ Credit Corporate
- Only Rs.10,000 can be refunded in cash. The amount that exceeds this limit is refunded through cheque or draft.
- Target time for corporate discharges is:
  - ✓ Cash Corporate discharges: 2-3 hours from time of declaration
  - ✓ Credit Corporate discharges: 3 – 4 hours from time of declaration
- After clearing the bill, discharge slip is issued to the patient/Patient's relative
- Few corporate tie-ups with the hospital are:
  - ✓ DVC
  - ✓ AAI
  - ✓ WBHS
  - ✓ CGHS
  - ✓ Andaman (ANISHI)
  - ✓ SwasthyaSathi
  - ✓ ECHS
  - ✓ RGOB
  - ✓ FCI
  - ✓ CESC

- ✓ ESI (MB)
- ✓ CRPF
- ✓ Government of Tripura
- ✓ Government of Mizoram
- ✓ IIT Kharagpur
- ✓ NCSM
- ✓ Coal India

TPA DEPARTMENT (MEDICLAIM)

- There are three desktops in corporate billing.
- Manpower of the department is three junior executives and 1 doctor.
- Average TPA discharges are 20-25 discharges per day.
- Average Cash discharges are 65-70 discharges per day from the ground floor, 8-10 discharges from 4^{th} Floor and 4-5 discharges from 5^{th} floor.
- Target time for TPA discharges is 5-6 hours from time of declaration.
- After clearing the bill, discharge slip is issued to the patient/Patient's relative
- Functions:
    - ✓ Sends the request to the insurance company for the approval (Initial and Final).
    - ✓ After the approval comes, the approval papers are sent to the floors for clearing the bill.
    - ✓ Patient can either pay the bill and reimburse later or the insurer pays directly to the provider (hospital).
    - ✓ All the queries are solved by the TPA desk by giving the token number to the patient or patient relative.
    - ✓ In mediclaim, there are certain packages of the surgery.
    - ✓ Checks that address should be same on all the TPA documents.
- Following documents are required to be submitted by the patient with their signature on them:
    - ✓ Mediclaim card of patient (TPA Card).
    - ✓ ID proof of patient (voter id/ PAN card/ passport/ Adhar card/ Driving licence)
    - ✓ Policy papers (last 4 years- for individual policy)
    - ✓ Employee id card (in case of corporate policy if mediclaim card is not available).
    - ✓ Advice for admission.
    - ✓ All previous prescription (including first).
    - ✓ All treatment related investigation reports.
    - ✓ Address proof of proposer (telephone bill/ electric bill/ ration card/ current passbook).
    - ✓ Self declaration (in case of domestic injury).
    - ✓ MLC (Accident which is not domestic).
    - ✓ PAN card of proposer.

- ✓ One passport size photo.
- ✓ Bank statement and insurance money receipt.

- Hospital has tie-ups with the following TPAs and insurance companies:
  - ✓ Apollo Munich Health Insurance
  - ✓ Bajaj Allianz GIC
  - ✓ Religare Health Insurance Co. Ltd
  - ✓ HDFC Ergo GIC Ltd
  - ✓ Cigna TTK
  - ✓ National Insurance Co. Ltd
  - ✓ Universal Sompo GIC Ltd
  - ✓ New India Assurance
  - ✓ Oriental Insurance Co. Ltd
  - ✓ Genins India TPA Ltd
  - ✓ Alankit Health care TPA Ltd
  - ✓ Dedicated Health care services
  - ✓ Family Health Plan Ltd
  - ✓ Mediassist India Pvt Ltd
  - ✓ Heritage Health TPA Pvt Ltd
  - ✓ Vipul Medcorp TPA Pvt Ltd
  - ✓ Raksha TPA Pvt Ltd

CASH BILLING AND DISCHARGE DEPARTMENT

- The cash billing and discharge department is located on the ground floor, 4th floor, 5th floor and 6th floor of the hospital.
- Final bill clearance is done from here for cash and TPA Scheduled patients.
- HMIS (Hospital Management Information System) software is used for billing.
- The price of the treatment is different for cash schedule patients, TPA schedule patients and corporate schedule patients.
- Cash Payment up toRs 1,99,999 is taken, after that
    - ✓ Cheque
    - ✓ RTGS
    - ✓ NEFT
    - ✓ Bank Draft
    - ✓ Fund Transfer
    - ✓ Debit/Credit Card
- Functions:
    - ✓ Bill is cross checked with the billing card of the patient.
    - ✓ Patient or Patient's relatives are provided with the provisional bill/ oblique final bill.
    - ✓ Cash/Card payment is done from here.
- After clearing the bill, discharge slip is issued to the patient/Patient's relative.
- Manpower of Cash billing & Discharge:
    - ✓ For ground floor is 4.
    - ✓ For 4th& 5th Floor is 1.
- Refund is given from the ground floor cash billing & discharge:
    - ✓ Below Rs 10,000 Cash or Cheque is given.
    - ✓ Above Rs 10,000 only cheque is given.
    - ✓ UptoRs 2,00,000 NEFT is done.
    - ✓ Above Rs 2,00,000 RTGS is done.

DIALYSIS

There are 3 dialysis rooms in MedicaSuperspecialty Hospital.
The dialysis unit is located on the 1st floor of the hospital.

Bed Strength

1. Dialysis 1 – 21 Beds.
2. Dialysis 2 – 17 Beds.
3. Dialysis 3 –5 Beds.

- There are 4 shifts of dialysis:
  - ✓ Morning (6am to 11 am)
  - ✓ Afternoon (12pm to 4 pm)
  - ✓ Evening (5pm to 9 pm)
  - ✓ Night (10pm to 2 am)
- There are 3 types of Dialysis:
  - ✓ Low Flux Dialysis
  - ✓ High Flux Dialysis
  - ✓ HDF (Hemodifiltration) Dialysis.
- There are two machines available for Dialysis
  - ✓ Fresenius Medical Care 4008S
  - ✓ Fresenius Medical Care 5008S
- The following dialysis services are available in the hospital:
  - ✓ Dialysis High Flux
  - ✓ Dialysis High Flux (First)
  - ✓ Dialysis High Flux (Single use)
  - ✓ Dialysis High Flux bibag (Single use)
  - ✓ Dialysis High Flux with bibag
  - ✓ Dialysis High Flux with bibag (first)
  - ✓ Dialysis Low Flux (Standard)
  - ✓ Dialysis Low Flux (Standard First)
  - ✓ Dialysis Online HDF
  - ✓ Dialysis Online HDF (First)
  - ✓ Dialysis Online HDF (Single Use)
  - ✓ Body Composition Monitor.

- Following Register are maintained:
  - ✓ Duty assignment dialysis
  - ✓ Dialysis IB Billing book
  - ✓ Patient registration Dialysis book.
  - ✓ Blood Transfusion book.
  - ✓ Transfer Out book
  - ✓ Pathology Book
  - ✓ Leave Demand book
  - ✓ Inventory Book
  - ✓ Communication Dialysis book
  - ✓ Staff Log book
  - ✓ Dialysis Counselling book for Staff Nurses
  - ✓ Bio Medical Book
  - ✓ Patient's Serology & Vaccination Book
  - ✓ Dialysis Quality Indicator.
  - ✓ Staff Vaccination Book
- Observations:
  - ✓ The patient coming for Dialysis is weighed before and after the Dialysis.
  - ✓ In Dialysis 1 & 2 there are two separate rooms, 1 for Hepatitis B +ve Patient and 1 for Hepatitis C +ve patient.
  - ✓ The dialysis process is usually of 4 hours.
  - ✓ There are two types of filter used in Dialysis process i.e. single use and multiple use filter.

INPATIENT DEPARTMENT FLOORS

- *4th Floor*

  - ✓ There are Multi-6 & Multi-4 rooms available on this floor, One is twin sharing room (7A & 7B) and One is single room isolation (38).
  - ✓ Floor reception is present in the middle of the floor.
  - ✓ Dirty Utility, Medical Transcriptionist and Cash & TPA Billing & Discharge is present behind the floor reception.
  - ✓ There are two wings on this floor:
    - A wing (Room no.- 401 to 408)
    - B wing (Room no.- 409 to 416)
  - ✓ There are two nursing stations on the floor, 1 in each wing.
  - ✓ Room no 405 (Bed no.- 18 to 23) is a neurosurgical ward (Male) and Room no 407 (Bed no.- 28 to 33) is a neurosurgical ward (Female).
  - ✓ Room no 409 is an investigation room for EEG and NCV.
  - ✓ Room no 417 (75 to 80) is a paediatric ward.
  - ✓ Visitor timing on this floor is:
    - Morning- 9am to 12 pm
    - Evening- 3pm to 7 pm.
  - ✓ The main functions of the floor coordinator are:
    - To coordinate with nurses, doctors, patient relatives.
    - To solve the queries of patient/ patient relatives.
    - To inform about the discharge of the patient to the concerned person over the telephone.
    - To get the Pharmacy and blood bank clearance from the respective departments.
    - To survey the entire ward with respect to queries of the patients etc.
    - To give the feedback form to the patient relatives at the time of the discharge.
    - To show the discharge bed in the HMIS software after the discharge summary and the bill is ready.

- The daily outstanding bill for the Cash & the TPA patients is given at the Floor reception by the floor GRE.

✓ The following registers are maintained on the floor:
- Outstanding follow up register
- Discharge summary handover register.
- Discharge register.
- Bed Management (Transfer).
- Discharge Room cleaning Checklist.

✓ The average discharges per day from this floor is 20.

✓ The following files are maintained on the floor:
- OT list
- Important documents
- Occupancy
- Feedback from box.

- *5th Floor*

✓ There is HDU, General Ward and Isolation rooms located on this floor.

✓ There are two wings on this floor:
- A wing (Bed no.- 501 to 543)
- B wing (Bed no.- 544 to 597).

✓ There are total 60 Beds in the general ward, 5 beds in isolation and 26 beds in HDU.

✓ Bed no 515A &515B and 516A &516B are negative isolation rooms and Bed no 44 is positive isolation room.

✓ Average discharges from this floor are 13.

✓ The main functions of the floor coordinator are same as that of the 4^{th} Floor.

✓ Discharge register consists of:

- Serial no
- Bed no
- PRN (Patient Register Number)
- Patients name
- Schedule
- Doctor's name
- Planned/ Unplanned
- Discharge time

- Discharge summary time
- Bill send time
- Slip issue time
- Patients physically out time
- Remarks

- *6th Floor*

  ✓ This floor also has two wings:
    - A wing (601 to 616)
    - B Wing (617 to 631)

  ✓ This floor consists of
    - Twin sharing rooms
    - Deluxe rooms
    - Suite
    - Private rooms

  ✓ Corporate billing & discharge is located on this floor.

CRITICAL CARE UNIT (CCU)

- CCU is located on the first floor of the hospital. In total there are three CCU with total 32 Bed strength.
    - ✓ CCU 1 – 12 Beds.
    - ✓ CCU 2 – 10 Beds.
    - ✓ CCU 3 – 10 Beds.
- CCU 1 has 11 standard beds and 1 Isolation beds whereas CCU 2 and CCU 3 has 9 standard Beds and 1 Isolation beds.
- Equipment used in CCU are:
    - ✓ Ventillator
    - ✓ Syringe pump
    - ✓ Cardiac Monitor
    - ✓ BiPAP Machine
    - ✓ Nebulization machine
    - ✓ Dialysis machine
    - ✓ ECMO Machine- Extra corporal membrane oxygenation
    - ✓ Defribrillator
    - ✓ ECG Machine
    - ✓ ECHO Machine
    - ✓ USG Machine
    - ✓ Doppler Machine
    - ✓ Glucometer
    - ✓ Oxygen Cylinder
    - ✓ Centralize monitor
    - ✓ EICU- Electronic ICU
    - ✓ TEG Machine
- Nursing staff of CCU:
    - ✓ CCU 1- 31
    - ✓ CCU2- 26
    - ✓ CCU3- 27

HDU (HIGH DEPENDENCY UNIT)

- HDU is located on the 1st floor, 2nd floor and 5th floor of the hospital.
- HDU 2 is for specifically neuro patients and HDU 1 and HDU 5 is for patients from all the departments.
- HDU provides more nursing care as compared to General Ward.
- HDU takes constant cardiac monitoring of the patients.
- Bed strength of HDU is as follows:
    - ✓ HDU 1- 19 beds
    - ✓ HDU 2- 11 beds
    - ✓ HDU 5- 26 beds

OT (OPERATION THEATRE)

- Operation Theatre is located on the 2nd floor of the hospital.
- The nurse and technicians are required different in number for different surgeries.
- The 1st surgery starts at 8 am in the OT
- Generally the patient comes half an hour before the Operation to the Pre operative room.
- Cleaning time of the OT:
    - ✓ 5 to 6 mins for non-infected cases.
    - ✓ 10 to 15 mins for infected cases (fumigation).
- It consists of:
    - ✓ Pre/Post operative room
    - ✓ Changing room for doctor's and staff
    - ✓ OT Reception
    - ✓ Labour room
    - ✓ Doctor's room
    - ✓ Doctor's lounge
    - ✓ Sluice
    - ✓ Dirty Utility
    - ✓ Operation Theatres
    - ✓ OT Pharmacy
- There are total 10 Operation Theatres in the hospital:
    - ✓ OT 1 and 2- Cardiac Surgery
    - ✓ OT 3 and 4- Neuro Surgery
    - ✓ OT 5 and 6- Orthopaedic Surgery
    - ✓ OT 7- ENT Surgery
    - ✓ OT 8- General Surgery
    - ✓ OT 9- Gynaecology Surgery
    - ✓ OT 10- Urology Surgery
- The white board is maintained everyday for the operations which are scheduled in each OT.
- White Board consists of:
    - ✓ Serial no.
    - ✓ OT no.

- ✓ Time
- ✓ Patient Name
- ✓ Ward
- ✓ Age/Sex
- ✓ PRN No
- ✓ Surgery Name
- ✓ Surgeon Name
- ✓ Anaesthetist
- ✓ Technician
- ✓ Recovery
- ✓ OT Time
- ✓ Out time

- Few equipment's that are housed inside the OT are:

  - ✓ Anaesthesia M/C
  - ✓ OT Table
  - ✓ OT light
  - ✓ Patient's Monitors
  - ✓ ESU
  - ✓ Lap. Camera console
  - ✓ Lap. Light source
  - ✓ Lap. Monitor
  - ✓ CO2Insufulator
  - ✓ Harmonic Scalpel
  - ✓ C-Arm
  - ✓ ACT Machine
  - ✓ IABP Machine
  - ✓ HCU
  - ✓ Heart Lung Machine

CATH LABORATORY

- The Cath lab is located on the 1st floor of the hospital.
- Everything in the Cathlab is interventional.
- Cath lab consists of:
    - ✓ Pre/Post- operativeCathlab rooms
    - ✓ Two Cathlabs
    - ✓ One Control room and
    - ✓ One Cath pharmacy
- There are two labs for cathlab operations:
    - ✓ Lab1 uses Philips Machines
    - ✓ Lab2 uses GE Lab Machines.
- Total manpower of Cath lab:
    - ✓ Operations -2
    - ✓ Transcriptionist – 1
    - ✓ Techinicians-3
    - ✓ Administrator-1
    - ✓ Pharmacy Store handling-2
    - ✓ Doctors- 10 to 12
    - ✓ Nurses – 15
- The bed strength of pre/post operative room is 10.
- Average cases per day are 15 to 20.
- Procedures:
    - ✓ Angiography (CAG)
    - ✓ Angioplasty (PTCA)
    - ✓ EP Procedure
    - ✓ FFR
    - ✓ PAG
    - ✓ Pacemaker
    - ✓ TPI
    - ✓ Balloon MitraloValvuloplasty
    - ✓ IVUS
    - ✓ BMV
    - ✓ Ventricular Septal Defect procedure
- Equipment's used in the CATH lab are:

- ✓ Haemo dynamic monitor
- ✓ Anaesthisia machine
- ✓ IVUS Machine
- ✓ EP Machine

- Cathlab is highly revenue generating as most of the packages are of short duration.

HOUSEKEEPING DEPARTMENT

- The housekeeping department is located at the ground floor of the hospital
- The housekeeping department is outsourced and the name of the company is DTSS (Duster Total Solutions Service).
- The housekeeping department of the hospital functions in two parts:
  - ✓ Cleaning and disinfecting
  - ✓ Laundry and linen services

Cleaning and Disinfecting

- In general area, machine scrubbing is done.
- There are 3 processes of cleaning:
  - ✓ Manual Scrubbing
  - ✓ Mopping:
    - Wet Mopping
    - Dry Mopping
  - ✓ Machine Scrubbing
- Dusting is done on regular basis and cleaning is done three times a day.
  - ✓ Morning
  - ✓ Afternoon
  - ✓ Night and as per requirement
- Infected bed is dusted hourly.

Biomedical Waste

- Colour coding of the biomedical waste is as follows:
  - ✓ Yellow- body fluids, body parts, blood, infected.
  - ✓ Red- plastic items (saline items)
  - ✓ Blue- glass items (glass bottles)
  - ✓ White- sharp items (needles)
- Packets are provided in the entire hospital. Nurses use these packets and when they are 1/3rd filled, then the housekeeping staff changes them.
- "Medicare" is the outsourced company that takes the waste.

Laundry and Linen Services

- The laundry and linen department of the hospital is also outsourced and the names of the companies are “Ellodot” and “Tex Care”.
- Ellodot supplies uniform and OT linens whereas Tex Care supplies bathing and bed linen.
- When the soiled linen is given to the company, they return it after 24 hours.
- The following stock of the linen is maintained:
  - ✓ 5 uniforms per patient
  - ✓ 3 uniforms per staff
- Linen tag is important to see the longitivity of the cloth (month & year is mentioned on it).
- Inventory is done on one Sunday in a month.
- There are 2 in-house tailors available in the department.
- The faded/ teared items are discarded quarterly after checking and the new items are indented accordingly.
- Following items are available:
  - ✓ Bed sheet
  - ✓ Pillow cover
  - ✓ Blanket
  - ✓ curtains
  - ✓ Patient pant
  - ✓ Patient shirt
  - ✓ Hand towel
  - ✓ Bath towel
  - ✓ Baby clothes
  - ✓ Bed sheets
  - ✓ Patient gown
  - ✓ Surgeon gown

MEDICAL RECORDS DEPARTMENT

The Medical Records Department is located on the 3rd floor of the hospital. Medical records is a systematic documentation of a single patient's medical history and care across time with one particular healthcare provider's jurisdiction. It includes various notes entered over time by healthcare professionals, recording of observation and administration of drugs and therapies orders for the administration of drugs, test results, X-ray, reports etc. Manpower of the department is 4. ICD coding of the diagnosis is done in the medical record files of all the patients.

Observations:

- Scanning of OP Prescriptions done in the OPD from portable scanner is saved as a record in the MRD.
- IP Files of all the patients is kept here as a documentation.
- Files of MLC cases and expired cases are kept separately and one yellow sheet is extra attached to it.
- Files are kept as per the date of discharges.
- If there is any discrepancy in the file, then it is sent back to the ward for correction and asked to return the file within two days of discharge.
- Dialysis files are also kept separately.
- The records are kept in the hospital of two months. After that the files are sent to the Crown (outsourced company to keep the documents).

Department objective:

- Proper maintenance of inpatient medical records and out-patient prescriptions.
- Maintenance of integrity and confidentiality of medical records.
- Submission of the data to the government authorities.
- Audit of closed files.
- Sending of birth and death reports to the government authorities.

Functions:

- Maintenance of all medical records of out-patients and in patients.
- Assembly of the records.
- Keeping the medical records of out-patients and in patients.
- Scanning of out-patients prescriptions.
- Maintaining hospital statistics(admission, discharge, DAMA).

Documents list:

- MLC form/ cause of death/ DAMA consent.
- Discharge summary/ Death summary.
- Patient information sheet
- Admission slip
- Admission form
- Counselling records
- Signature face sheet
- History and finding sheet
- Pain score
- Progress note
- Consultant referral
- Transfer information sheet
- Any other physician forms
- Dietician forms
- Physiotherapy forms
- Operation note
- Consent forms
- Medicine card
- Nursing forms
- All types of reports
- Other documents

Registers maintained are:

- Visitor's register
- Document handover register
- Birth register
- Death intimation register
- Cause of death receiving register
- Audit register
- MLC register
- Missing records register
- Compactor key register
- Letter number register
- Staff movement register

MEDICAL TRANSCRIPTIONIST (MT)

The Medical Transcriptionist is available on the 4th and 5th floor of the hospital as maximum discharges occurs from these floors.

Functions:

- RMO/ consulting doctor gives the discharge summary draft to the Medical Transcriptionist.
- Medical Transcriptionist types the summary in the system and get it signed by the doctor if the discharge summary is correct.
- The discharge summary of Cardio Thoracic Vascular Surgery and nephrology department is signed by the consulting doctor himself.
- Discharge summary of Urology and ENT department is made by the Medical Transcriptionist by seeing the file.
- Excel sheet is made by the Medical Transcriptionist for planned and unplanned discharges.
- Discharge summary of all the departments is made except neuro surgery, gastrology, pediatric and cardiology.
- Discharge summary is made of the following areas:
    - ✓ Emergency
    - ✓ Operation Theatre
    - ✓ Critical Care Unit
    - ✓ High Dependency Unit
    - ✓ 4th floor
    - ✓ 5th floor
    - ✓ 6th floor

Discharge summary format:

- Reason for admission
- Present history
- Preliminary diagnosis
- Diagnosis at discharge
    - ✓ Principle diagnosis
    - ✓ Secondary
    - ✓ Complications
- Clinical/ Investigation
    - ✓ Clinical investigation as enclosed
    - ✓ Vitals
    - ✓ General appearance
    - ✓ ENT

    - ✓ Heart
    - ✓ Lungs
    - ✓ Abdomen
    - ✓ CNS
- Course of events during hospital stay
- Lab investigation
    - ✓ Radiology
    - ✓ ECHO
    - ✓ ECG
    - ✓ Others
- Procedures (with dates)
- Condition at the time of discharge.
- Discharge medicines
- Recommendations
- Follow-up
- Emergency
- Signature
    - ✓ Patient/ patient's relatives
    - ✓ Clinical doctor

PHARMACY DEPARTMENT

There are the following pharmacy departments in the hospital:

- Out patient Pharmacy- located at the ground floor of the hospital
- In patient Pharmacy- located at the third floor of the hospital
- Operation theatre Pharmacy- located at the second floor of the hospital
- Dialysis Pharmacy- located at the first floor of the hospital
- Cath Pharmacy- located at the first floor of the hospital

Out-Patient Pharmacy

- There are three staff members allocated for OP pharmacy.
    - ✓ One for finding the medicine and retrieving them in the basket.
    - ✓ One for generating the bill in HMIS.
    - ✓ Dispensing the medicine to the patient, explaining them and collecting money.
- Inventory is maintained on the basis of alphabetic order based on the type of medicine.
- Look a like medicines and sound a like medicines are kept separately.
- Manpower of the department is 13
- There are two pharmacist licences for OP Pharmacy.
- Walking aids, toilet seats are kept in one corner.
- Different types of medicines are:
    - ✓ Tablets
    - ✓ Syrups
    - ✓ Container/ lotions
    - ✓ Ointments/ creams
    - ✓ Injections
    - ✓ Rotacaps/ respules
    - ✓ FMCG/ drops
    - ✓ Surgicals
- There are three refridgerators on OP Pharmacy. List of the items that are kept in refridgerators are:
    - ✓ Insulin injections
    - ✓ Vaccines
    - ✓ Nasal spray
    - ✓ Eye drops
    - ✓ Suppositories

- ✓ Blood forming vaccines

- Files that are maintained in OP Pharmacy are:
  - ✓ Daily audit file
  - ✓ Cash refund file
  - ✓ Reverse file
  - ✓ Special discount bill
  - ✓ Cash deposit file
  - ✓ Credit file
  - ✓ Discharge patient details file

In-Patient Pharmacy

- Medicines are sent to the in-patients floors from this pharmacy.
- Medicines are indented by the ward pharmacist for the patients in different wards, billing is done and the medicines are dispensed accordingly.
- The printers available in IP Pharmacy is different for CCU and General Ward.
- There is a medication error form in case the medicine is indented or dispatched wrongly.
- Medicines are taken by the transport staff from IP Pharmacy to different wards.
- The following drugs are kept separately:
  - ✓ Emergency drugs
  - ✓ Look a like medicines
  - ✓ Sound a like medicines
  - ✓ High risk drugs
  - ✓ Narcotic drugs
  - ✓ Oncology drugs
  - ✓ HAZMAT
- The medicines are returned three months before their expiry to the main store.
- Non-moving medicines are returned within six months.
- Manpower of the department is 16.
- There are three pharmacist licences for OP Pharmacy.
- There are two baskets maintained:
  - ✓ One for ground, first and second floor.
  - ✓ One for fourth, fifth and sixth floor.

Operation Theatre Pharmacy

- Surgical items, medicines and fluids are kept in OT Pharmacy.
- There are two types of kits in OT Pharmacy:
    - ✓ Surgical kit- Nurse takes it
    - ✓ Anaesthesia kit- Technician takes it
- Items for the surgery are indented everyday at 6 pm for tomorrow's operation and the kits are prepared accordingly.
- Items which are not used in the surgery are returned back to the pharmacy and they are cross checked. Paper entry of these items is done.
- OT Pharmacy billing is done from OT Pharmacy.
- Emergency kits are already prepared in advance.
- Surgery items kit list is available in the pharmacy.
- Manpower of the OT Pharmacy is 7.
- There are two pharmacist licences for OT Pharmacy.
- High value audit is done regularly, department audit is done weekly, financial audit is done yearly, internal audit is done quarterly.

SECURITY DEPARTMENT

The security department is located at the ground floor of the hospital. The security department of the hospital is outsourced and the name of the company is GFS (Groups Facility and Services). There are approximately 100 security guards with 4 supervisors. There are total 17 types of passes available in the department.

Security guards are located on all the entrances and floors of the hospital.

Functions:

- Identification of risk and threat perception.
- Observation, surveillance and policing.
- Investigation, corrective action.
- Intelligence gathering.
- Security against intrusion, theft, robbery.
- Review of policy and procedure regularly.
- Transport and parking control.
- Search on receipt of bomb threat.
- Liaison.
- Asset control.
- Impart training in case of fire.
- Key control.
- Advise security on management matters.
- Responsible for mortuary management.

FOOD AND BEVERAGES DEPARTMENT

The food and beverages department is located at the ground floor of the hospital. This department is outsourced and the name of the vendor is "Rozanna". Only 5 medica staff is allotted in this department.

The equipments are provided by the hospital and the crockery, cutlery, glasswares are provided by Rozanna.

Observations:

- Washing Area
  - ✓ Dish Washing Area
  - ✓ Pot Washing Area
- Vegetable cutting Area
- Cooking Area
- Store
  - ✓ Non- vegetarian Refridgerator (-18 degree)
  - ✓ Vegetarian walk in cooler (0-5 degree)
  - ✓ Vegetarian Refridgerator (0-5 degree)
- Dry Waste Dustbin
- Wet Waste Dustbin
- Liquid diet preparation Area
- Cash Area
- Stored Items

The sanitization of the vegetables is done in 30 litres of water + 2 soma tablets after washing them from fresh water.

Vegetarian fridge consists:

- ✓ Milk
- ✓ Cold drinks
- ✓ Butter
- ✓ Cheese

Walk in cooler consists the following with date mentioned on it:

- ✓ Raw food
- ✓ Cooked food

Temperatures maintained are:

- ✓ Immediately cooked food- 90 degrees
- ✓ Food when served to the patient- above 65 degrees

Different colours of boards used are:

- ✓ Green- salad and fruits
- ✓ Yellow- other vegetables
- ✓ Red- chicken
- ✓ Blue- sea food items (fish)
- ✓ White- dairy products

Boards are cleaned through sanitization process i.e. 10 litres of water + 2 soma tablets.

Vegetarian and non-vegetarian preparation areas are different.

All the raw materials is purchased by Metro Cash and Carry.

Different equipments used in the kitchen are:

- ✓ Baine Mairy (food wormer)
- ✓ Food Trolley
- ✓ Sandwich maker
- ✓ Microwave
- ✓ Toaster
- ✓ Grinder
- ✓ Pulviser- for making paste
- ✓ Mixer
- ✓ Idly maker
- ✓ Refridgerator
- ✓ Service table
- ✓ Rack
- ✓ Dish washer

Chemicals used for cleaning utensils are:

- ✓ Somadine
- ✓ Soma Multi
- ✓ Soma Tap

Types of food:

- ✓ Normal food
- ✓ Soft food
- ✓ Therapeutic food
  - Renal food
  - Diabetic food

Serve timings of food are:

- ✓ Bed tea- 6:30 am to 7:15 am
- ✓ Breakfast- 8:30 am to 9:15 am
- ✓ Mid-morning beverage/ suppliments- 10:30 am to 11:30 am
- ✓ Lunch- 12:30 pm to 1:15 pm
- ✓ Evening tea/ snacks- 3:30 pm to 4:15 pm
- ✓ Dinner- 7:30pm to 8:30pm

DIETETICS DEPARTMENT

The dietetics department is located on the fifth floor of the hospital. The work timings of the department are from 8 am to 8 pm. The total manpower of the department is 8.

Functions:

- Dietician gives the rounds in the in-patient wards and suggests the diets to the patients according to their condition.
- Councils patient/ patient relatives.
- Dietician takes the religious, economic and social factors in consideration for making the diet chart of the patient.
- Diet chart is provided to the new admission and the discharged patients.
- The dietician sets the meals of the patients as per their choice and requirements.
- The dietician coordinates with the food and beverages department for the meals of the patients.
- Dietician clinically works:
    - ✓ Nutritional screening on rounds
    - ✓ Care Plan
    - ✓ Daily diet changes
    - ✓ Follow-up with the patients.
- Dietician gives the diet sheet of the patients to the F and B Department at the following timings:
    - ✓ 10 am (after updation of wards)
    - ✓ 12 pm (lunch- diet change/ new admission)
    - ✓ 4 pm (updated dinner)
    - ✓ 7 pm (final dinner sheet)
    - ✓ 8 pm (updated breakfast sheet)

INTERNAL TRANSPORT DEPARTMENT

The internal transport department is located at the ground floor of the hospital. The manpower of the department is 40.

Observations:

- The internal transport includes:
  - ✓ Wheelchair
  - ✓ Stretcher
- Coordination of the dialysis patients is done.
- The department has the waiting area for the emergency and the dialysis patients.
- Closing of the hospicare software call is important after the transport staff reaches the respective department.
- Transport tracking record paper is maintained by each transport staff.
- Communication is done by the following modes:
  - ✓ Telephone
  - ✓ Hospicare software
  - ✓ Walky talky

Functions:

- Provides the dialysis visiting cards (valid for 24 hours).
- Assigns the duties to the transport staff as per the requirement.
- Verification of the date and time of the dialysis of patients is done from here.
- The secondary report of the housekeeping department is done from here.
- Constant coordination with the housekeeping and the transport staff about their movement in the hospital.
- Transport staff is always available in the following departments:
  - ✓ Gastrology
  - ✓ OPD 4
  - ✓ 4^{th} floor
  - ✓ 5^{th} floor
  - ✓ 6^{th} floor
  - ✓ Radiology

PROJECT TOPIC

A study on Turn Around Time of Discharge Process in MedicaSuperspecialty Hospital

CONTENTS

INTRODUCTION

Discharge includes the medical instructions that the patient is needed to recover fully. Discharge process is the point at which the patient leave the hospital and either return home or is transferred to another facility such as for rehabilitation or to a nursing home.
Discharge planning is a service that considers the patients needs after the hospital stay, and may involve various services such as nursing care, physiotherapy, dietary advice, post operative do's and don'ts, post operative follow up instructions, information about whom to contact in case of an Emergency. How to identify warning signs and other services.
As the final step in the hospital experience, the discharge process is likely to be well remembered by the patient and relative, even if everything else went satisfactorily, a slow, frustrating discharge process can result in low patient satisfaction.
The discharge process is a critical bottleneck for efficient patient flow, slow and unpredictable discharge translates into a reduction in effective bed capacity and admission process delays.
The term discharge planning may be used to refer to the service provided to help patients arrange for services such as rehabilitation, physical therapy, occupational therapy, visiting nurses, or nursing home care. This service may be provided by a case manager or by the hospital's social service department.

The patient may request this service, or the physician may make the request in the form of a referral to the department. The patient is evaluated to see what services he or she requires, as well as what services he or she qualifies for (such as meals-on-wheels), or what services the patient's insurance will cover.

The patient may be discharged home with a visit from a visiting nurse later the same day to assess the patient's need for these services and to make arrangements for him or her in the home. A person may be discharged home only when certain equipment such as a hospital-style bed and oxygen has been delivered to the home. If a patient feels he or she is being discharged before he or she is ready, the patient can file a complaint with the hospital's ombudsman.

Usually our doctors will inform the patient relative a day in advance about the discharge so that one can make necessary arrangements for leaving the hospital. All care is taken to ensure that patient discharges take place in the minimum time possible. However, it's advisable to get in touch with the floor coordinator once your doctor advises discharge for your patient.

5 Modes of discharges are:

1. Normal
2. Expired
3. DAMA
4. LAMA
5. Transfer

The relatives of the patient will have to complete the following responsibilities:

- Clear all hospital dues.
- Return all hospital passes given to them for the attendant and visitors.
- Understand the treatment follow up instructions.
- Handover of all the hospital items given to them, to the nursing staff.
- Collect all their personal belongings.
- Vacate the cupboards allotted to them.
- Collect the discharge summary which contains information on your medical condition and treatment.
- Collect medicines, if any.
- On clearing all the hospital dues, a discharge slip will be given to the relatives, which is to be handed over to the ward nurse before leaving the ward.
- Filling up the feedback form to help us continuously monitor our services so as to serve you better. Complaints and compliments help us assess and motivate us to do better.

GENERAL THINGS FOR EFFECTIVE DISCHARGE

- The discharge planning process begins as soon as it is practical after the patient is admitted to the hospital.
- All patients should receive a comprehensive assessment of their actual and potential discharge needs by relevant members of the multi professional team.
- No discharge should be considered “routine”. All discharge has the potential to become complicated.
- Time spent talking to patients and assessing their needs at the start of the process can uncover potential problems and help to facilitate a smooth planned discharge.
- A discharge date should be set as early as possible, although it is recognized that ultimately any discharge is dependent on the clinical progress of the patient and may be subject to change.
- Discharge documentation should be concise, easy to use and most importantly relevant.
- Staff should familiarize themselves with documentation used in the discharge process and ensure they are competent in its completion.
- Despite pressures to maximize bed usage, patients should only be discharged when they are medically and psychologically fit to be discharged.
- Untimely discharge may result in a rapid readmission of patients transferred through the ICU. After the recovery for two days on an average, thus vacating bed for the patients in the OT and making it possible for other patients who need a surgery to avail the services of the surgeon.
- Communication between all departments is very important.
- Team participating in the planning of a patients discharge should be aware of all other members involved, including those in external agencies.
- Patient especially those requiring social care/ community nursing input should ideally not be discharged at weekends or late in the day.

LITERATURE REVIEW

Discharge is defined as a selective process that differentiates between the patients who are able to continue the recovery process outside the hospital and those who are not yet ready to leave the hospital (Galai, Israeli, et al., 2003).

Achieving safe, timely and patient centric discharge from hospital to home is an importantquality indicator and a measure for the effective and integrated care of the patient (Joint Improvement Team, 2014).

Delay in discharge refers to the condition where a patient is ready to be medically well enough for the discharge from the hospital but he/she is unable to leave hospital because the arrangements for continuing care have not been finalized/completed (Bryan, 2010).

The Health Service Executive Special Delivery Unit defines delay in discharge process as: "**A patient who remains in hospital after a senior doctor has documented in the healthcare record that the patient can be discharged" (Health Service Executive, 2013).**

On one systematic review, itwas found that the % of inappropriate use of acute care beds ranged in between 15% and 50% (Sheppard, 2010). The problem of delay in discharge from hospital is a longstanding concernand though it's a common problem, few countries have managed to tackle it successfully (Joint Improvement Team, 2010).
According to Hendy et al(2012),delays in discharge are costly and depressing for patients.

To improve the process of discharge and address inconsistencies in the discharge documentation and referral, a national code of practice for integrated discharge planning was published by the HSE in 2008 with local guidelines for nurse/midwife-facilitated discharge planning (HSE 2008, 2009). These have recently been replaced by the Integrated Care Guidance: A practical guide to discharge and transfer from hospital (HSE, 2014).

The Health Information & Quality Authority (2013) has developed National Standards for Patient Discharge. Similar planned approaches to patient discharge were introduced through policy and guidance by Departments of Health in England, Wales, Northern Ireland and Scotland.

A few number of factors have been associated with delayed discharge including the characteristics of patients (Challis, Hughes *et al.* 2014); care organisation in the hospital (Glasby, *et al.* 2006); long-term care access and services of the community on discharge (Gallagher *et al.* 2008).

Evidences exists that the patients who experienced delay in the discharge process had higher risk of negative outcomes. For example: increased anxiety (Kydd, 2008); increased exposure to hospital acquired infection HAI).

A comparative time motion study of all types of patient discharges in a hospital by Tak, Kulkarni, and More states that any hospital needs to work on finer aspects of the discharge process, to make it more patient friendly and less time consuming as it directly connects to patient satisfaction. This time motion study recorded the time needed for completion of discharge process for all type of discharges. Turn Around Time(TAT) or Time motion study is a direct and continuous observation of a task, using a stopwatch, video camera etc, to record the time taken to a accomplish a task. It concluded that tedious discharge process contributes to patient dissatisfaction.

Another study on time management of discharge and billing process in tertiary care teaching hospital by Janita VinayaKumari aimed at ascertaining average time taken for the patient to be discharged. This article on role of discharge planning and other determinants in total discharge time by Mehta, Nair, Rao and Shukla established discharge time, as a crucial quality indicator and presented measures to control the discharge time.

The study concluded that planning the discharges reduced the total time of discharge process. Departmental clearance and patient-related factors also impact the discharge time. Hence, an effort should be made to plan as many discharges as possible to enhance the discharge flow process. Failure to synchronize admissions and discharges commonly results when discharges are not managed efficiently. Creating a more consistent and predictable discharge schedule can help improve flow.

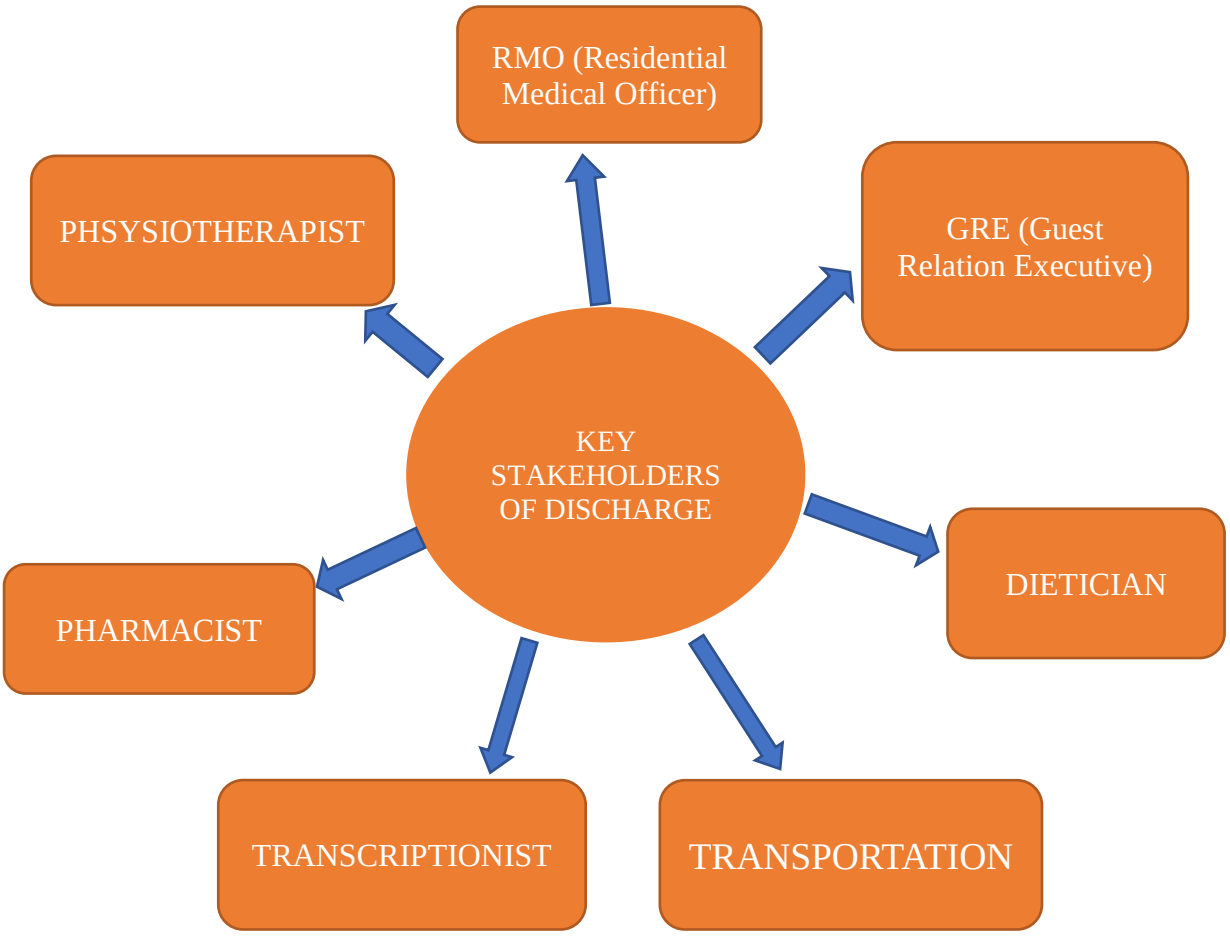
Traditionally, hospitals have attempted to "batch" discharges by establishing a set time for all patients to be discharged; however, this approach has been largely unsuccessful. Scheduling the discharge creates a continuous flow process, spreading discharge times throughout the day. This approach streamlines the process, better addresses the needs of patients and families, and helps coordinate the placement of patients who are admitted and transferred with discharges that occur throughout the day.

OBJECTIVES

1. To understand the Discharge process of the hospital
2. To identify of the role of the stakeholders in the Discharge process.
3. To identify the causes of delay.
4. To suggest key strategies to overcome the delay in discharge process.

ROLE OF STAKEHOLDERS AT THE TIME OF DISCHARGE

It is important to understand who is responsible for what in any work environment to avoid the mistakes andmissing activities. In this case, the job positions that are directly or indirectly connected with the discharge process are: RMO, Floor GRE, Physiotherapist, Transcriptionist, Dietician,Pharmacist,Transportation, Nursing and consulting doctor. The following is a brief description of what these positions are about and what part of their responsibilities is related to the discharge process.



RMO(Residential Medical Officer)

- Attends the patient.
- Writes the discharge summary of certain departments.
- Patient consultation.
- Keeps the record file
- Sign on the discharge summary(by consultant doctor/RMO)
- Does the correction in the discharge summary if required.
- Does the dressing of the patient if required.

MEDICAL TRANSCRIPTIONIST

- Types the discharge summary from the draft copy written by the consultant doctor/RMO.
- Gets the discharge summary signed by the desired doctor.
- Gives the signed copies of the printed discharge summary on the floor reception (2 copies in case of cash schedule and corporate cash schedule patients and 3 copies in case of TPA and corporate credit schedule patients.

NURSES

- The nurse checks the written order on the progress note by the doctor on patient's file.
- Informs the RMO to make the discharge summary.
- Printed discharge summary is received by the nurse in the ward after checking the number of copies and doctor's signature on it.
- Discharge summary is attached to the patient's file.
- All the reports and investigations are collected and attached with discharged file. If any report is pending before discharge, then the due slip should be given with signature of the allocated staff or senior sister.
- When the discharge slip is received by the allocated staff or senior sister then the nurse explains the discharge summary to patient/ patient relative and discharge file is given to them along with their radiology test reports.

All the documents of the patient's file are kept for documentation in the hospital in Medical Records Department.

PHYSIOTHERAPIST

- The physiotherapist handover is done only in few cases where it is required (CABG patients, orthopaedic patients).
- Physiotherapist explains the exercises and councils the patient as per their requirement.

WARD PHARMACIST

- Explains the medications that are mentioned discharge summary as per the time and doses.
- If patient wants to purchase the discharge medicines from hospital, then the pharmacist informs the OP pharmacy and medicines are delivered in the ward.
- Discharge medicine counselling and their substitutes are told by the pharmacist.

DIETICIAN ROLE

- Gives the diet chart/sheet to the patient.
- Explaining the diet chart to the patient/patient's relative and does the counselling regarding their diet.

FLOOR GRE(GUEST RELATION EXECUTIVE)

- Updates the final bill in HMIS
- Ask for the pharmacy clearance from the inpatient pharmacy department after the medicines are returned and indented and blood bank clearance.
- Sends the bill to the discharge counter.
- Bill is cleared by patient/patient relatives.
- Discharge slip is issued.

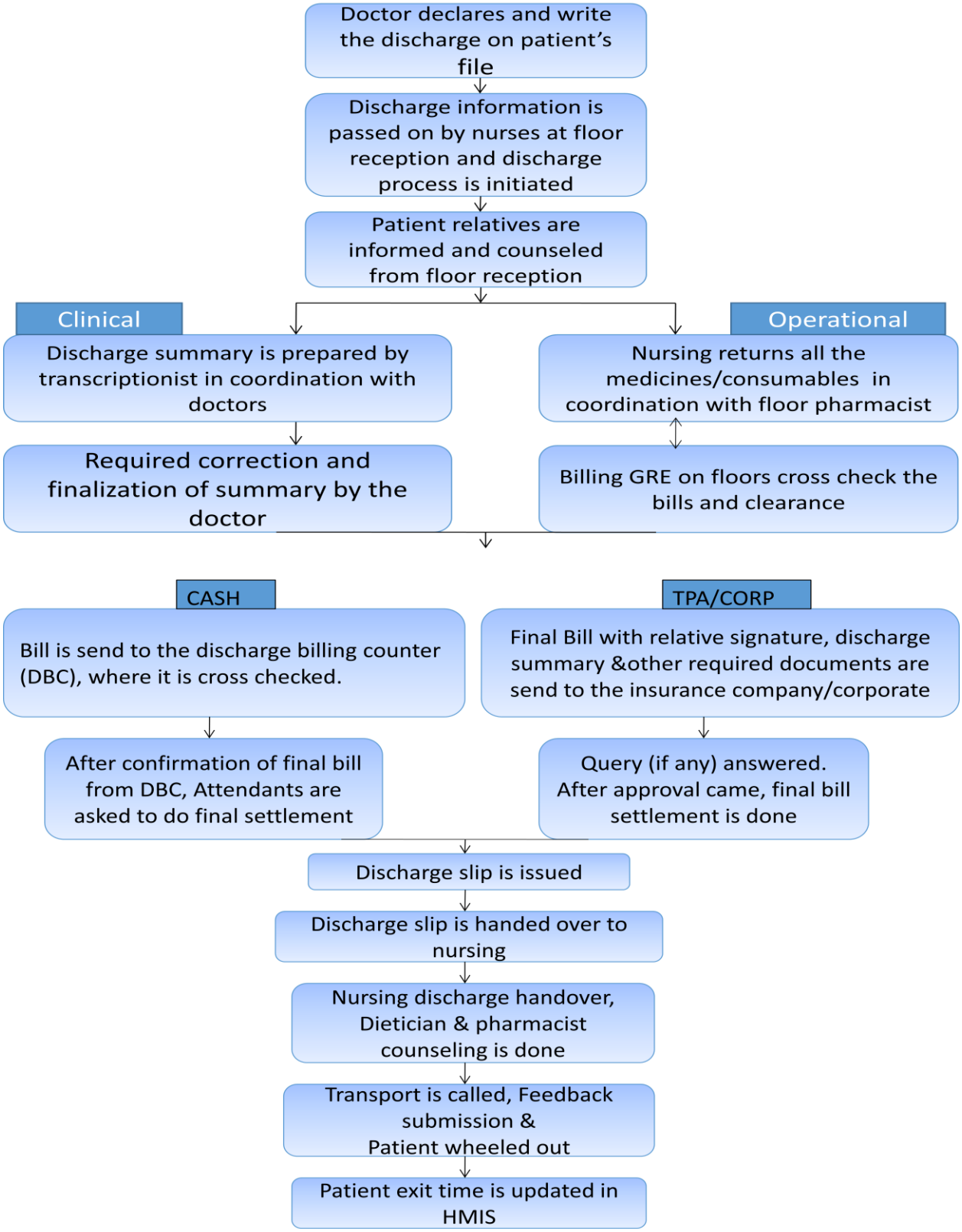
TRANSPORTATION ROLE

- After the entire handover, nurse calls/place request on hospicare to the transport department and inform them to bring the stretcher or wheelchair as per the patient's requirement.
- Transport staff takes the patient from the ward to the exit gate.

METHODOLOGY

Study design: Observational Descriptive study
Study time: April 25th 2017 to May 24th2017
Sample size: 388
Sampling technique: Convenience sampling
Department: In-patient department
Tools for Data collection: Direct observation, using checklist for discussion with different stakeholders involved in discharge process and interviewing patients on the reasons of delay
Place of study: MedicaSuperspecialty Hospital, Kolkata

PROCESS FLOW OF DISCHARGE PROCESS



TARGET TIME FOR DISCHARGES

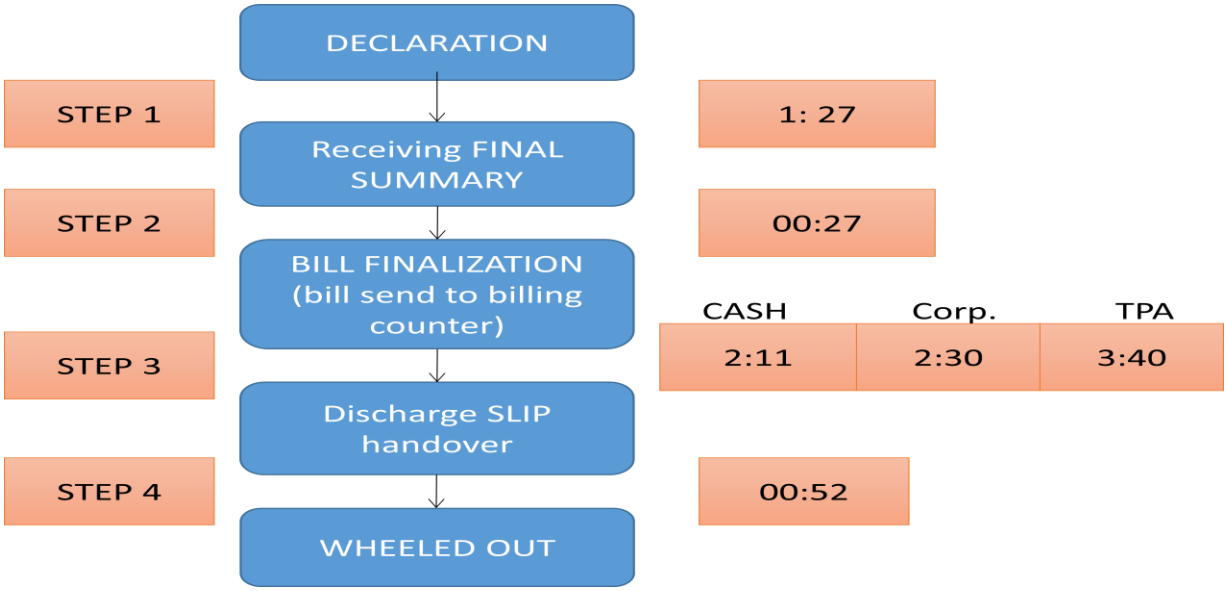
- **Cash discharges**: 2 – 3 hours from time of declaration
- **Cash corporate discharges**:2 – 3 hours from time of declaration
- **Credit Corporate discharges**: 3 – 4 hours from time of declaration
- **TPA discharges**: 5 – 6 hours from time of declaration

Steps divided for study:

STEPS	Description	Ideal time
Step 1	**Time taken from discharge declaration to the receiving of final summary**	**1 hour**
Step 2	**Time taken from receiving final summary and bill ready**	**30 minutes**
Step 3	**Time taken from final bill ready and bill clearance**	**45 minutes**
Step 4	**Time taken from discharge slip handover to floor reception to the physical discharge of patient**	**30 minutes**

For the better supervision of discharge process the MedicaSuperspecialty Hospital has set the TAT for the major four steps of discharge process so that the overall TAT for the process could be maintained.

Average time taken in the steps (hours: minutes) -



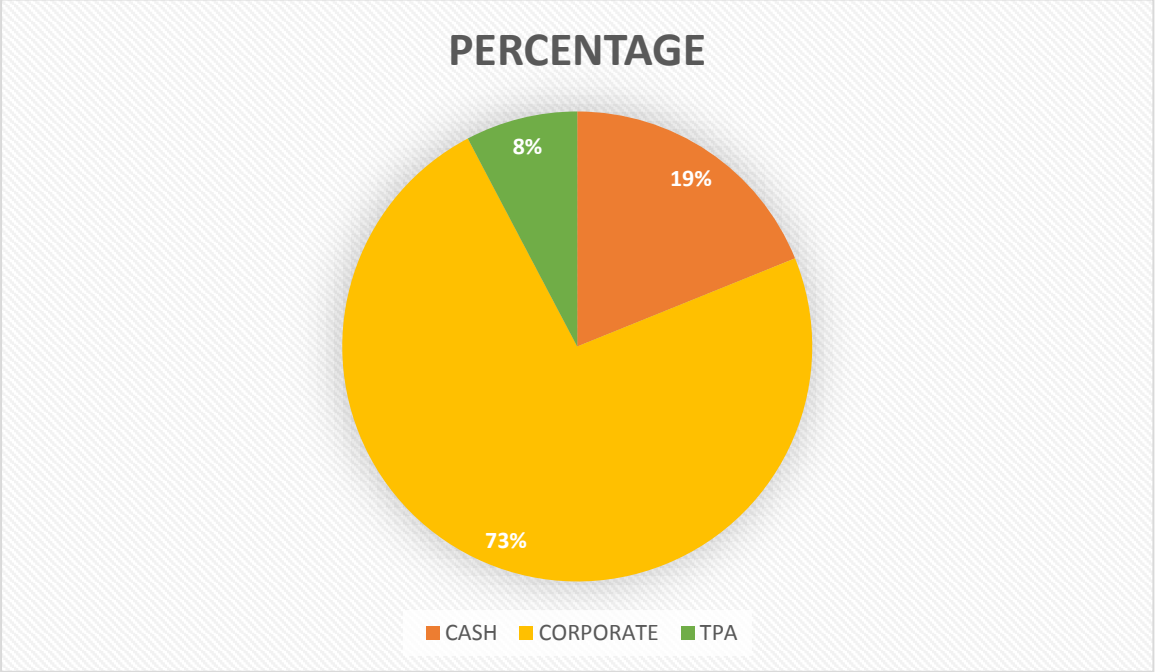
The above flow chart showing the average waiting time of the steps used for the study by which we can compare the delay we are facing in step wise manner, which will help to focus more on the steps where it is required.

METHODS

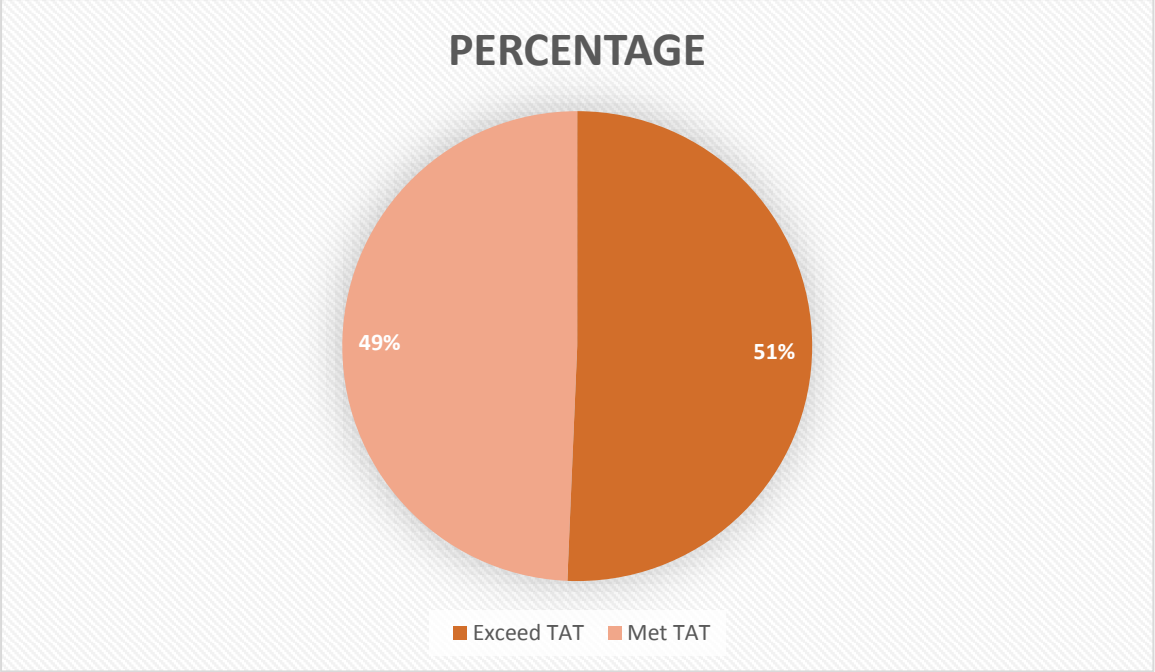
This observation was carried out in tertiary care 500 bedded hospitals in MedicaSuperspecialty Hospital, Mukundapur, Kolkata, West Bengal. The time taken for the discharge process starting from the consulting doctor writing the discharge on the progress report to getting the discharge slip issued after clearing the bill was observed for General Ward and HDU located on the 5th floor of the hospital. The data of the discharge process was collected for the time period of one month and analysis was done.

DATA ANALYSIS

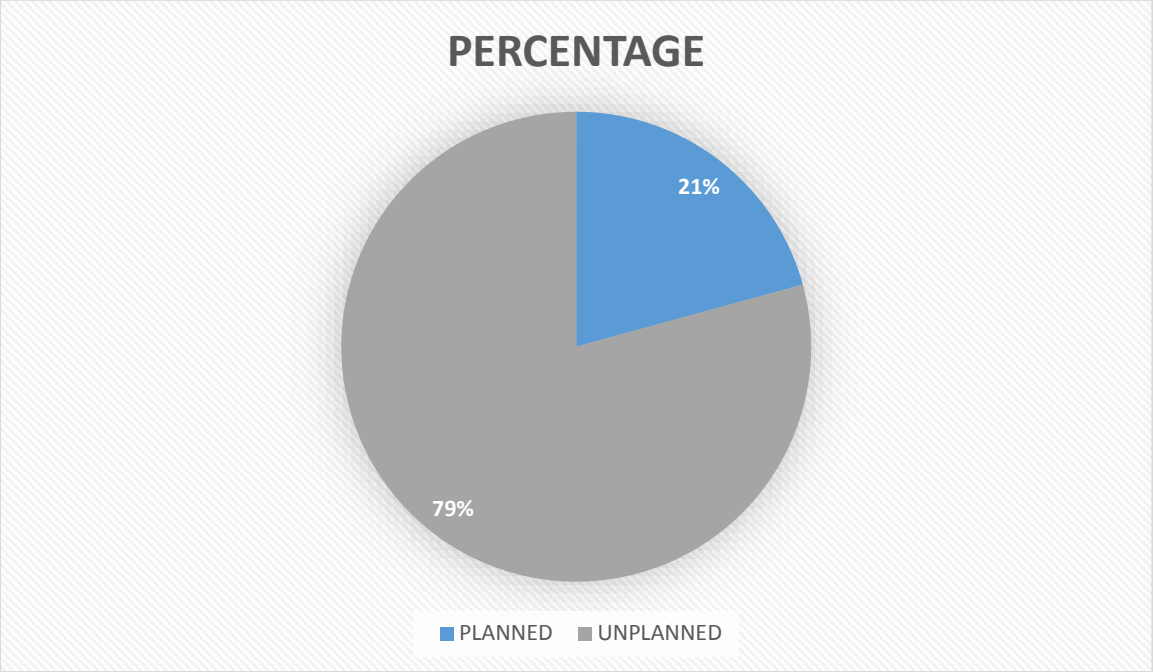
TYPES OF DISCHARGES AS PER SCHEDULE



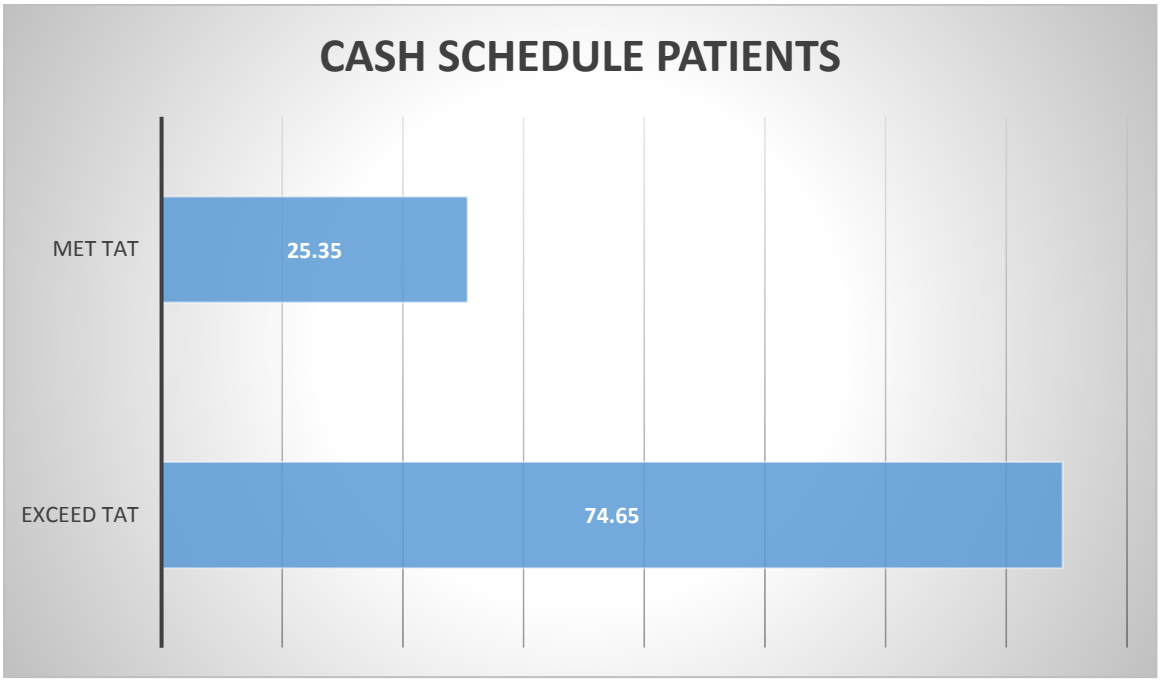
OVERALL DELAY IN DISCHARGE

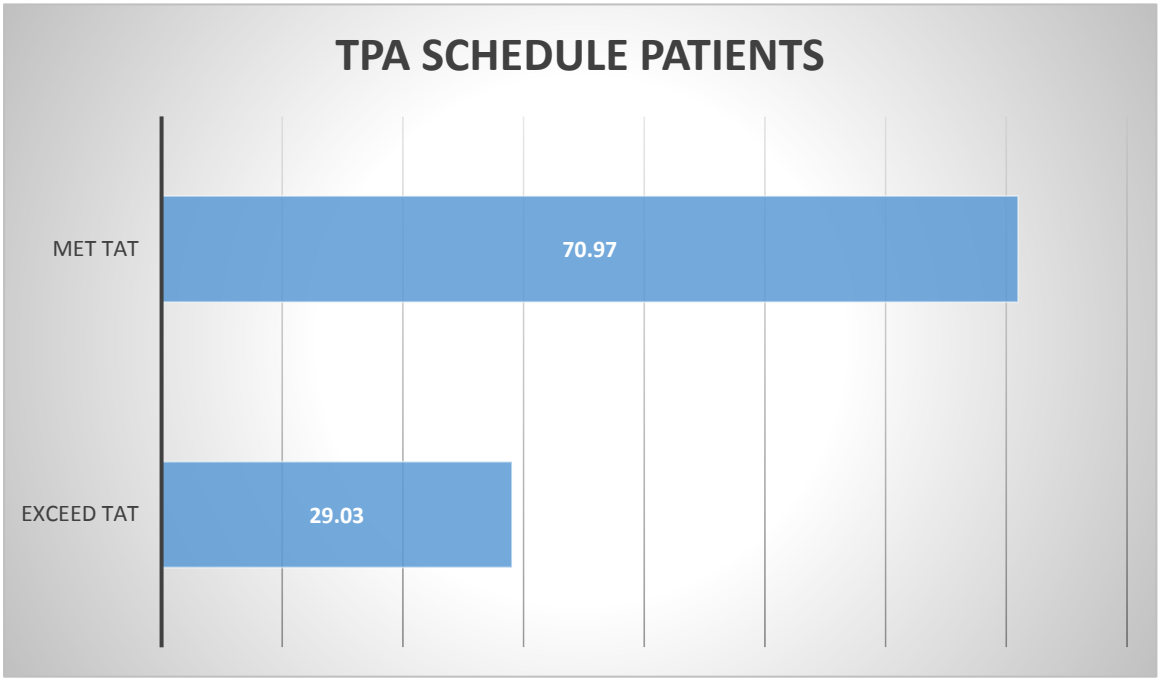


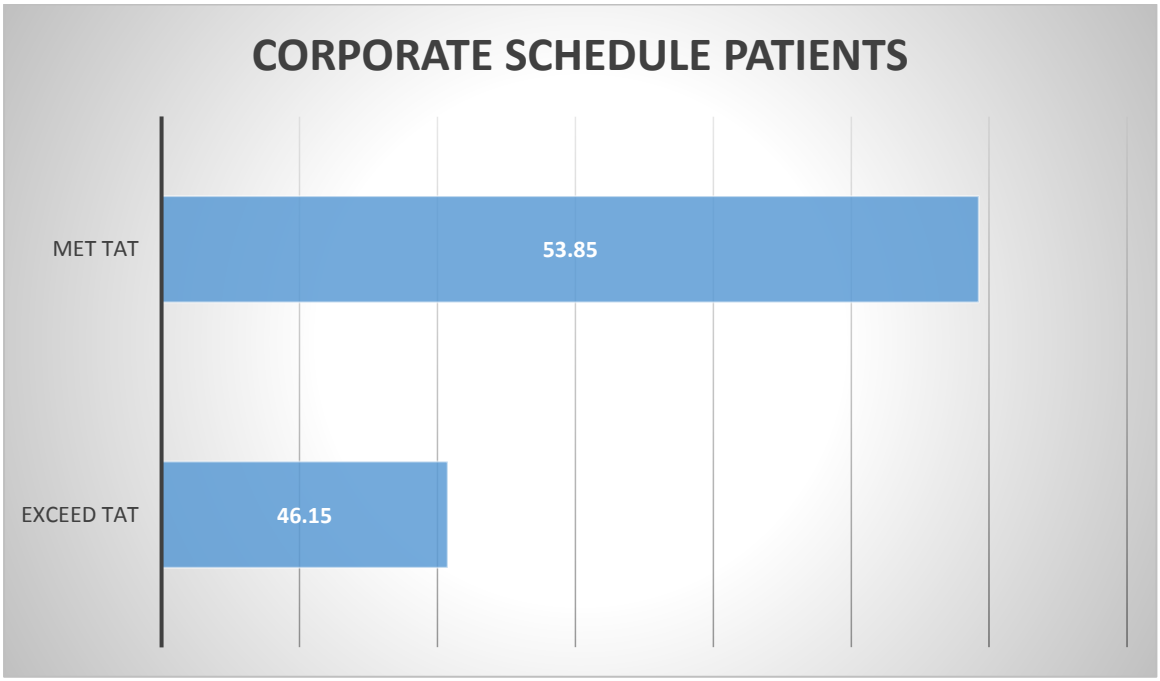
PLANNED ANDUNPLANNED DISCHARGES



BIFURCATION OF TAT TIME




TPA SCHEDULE PATIENTS
MET TAT
70.97
EXCEED TAT
29.03


CORPORATE SCHEDULE PATIENTS
MET TAT
53.85
EXCEED TAT
46.15

TAT for different schedules

Schedule	Average waiting time	
Cash	Planned	Unplanned
	3 hours 20 minutes	4 hours 45 minutes
TPA	Planned	Unplanned
	4 hours 28 minutes	7 hours 19 minutes
Corporate	Planned	Unplanned
	4hours 12 minutes	4 hours 40 minutes

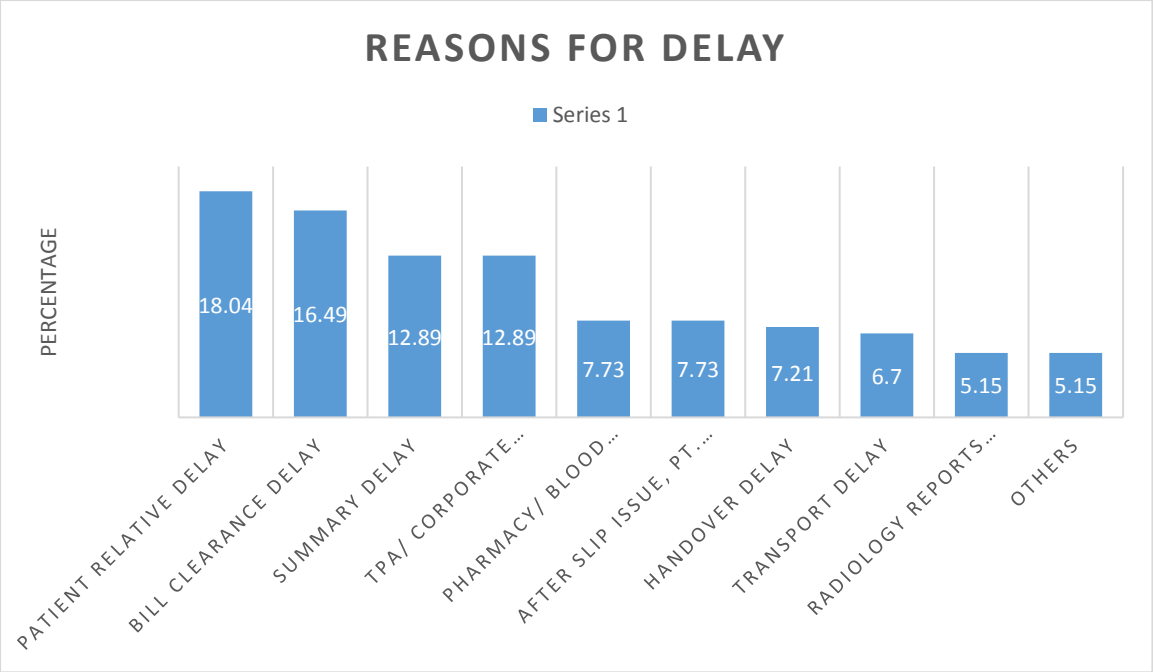
From the observation, the average waiting time for different schedules are comes out to be as showing in above table. The average waiting time for planned and unplanned cases are calculated separately.

MAJOR REASONS FOR DELAY

- Patient relatives came late, arranging money or roaming for discount.
- Waiting for the bill clearance (long queue)/ Billing staff is not available at times.
- Discharge summary went for correction multiple times/ Delay in getting discharge summary.
- Waiting for corporate/ TPA approval.
- Delay in physiotherapist or pharmacist or dietician or nursing handover.
- After slip issue, patient relatives went to meet consulting doctor.
- Delay in Pharmacy/blood bank clearance or MLC clearance.
- Waiting for transport (wheelchair/ stretcher)/ private ambulance.
- Radiology test/ reports are pending.

OTHER REASONS

- Delay in pharmacy return/ indent.
- Doctor round is late for unplanned discharges.
- Discharge medicines came late from OP pharmacy.
- Conversion of schedule at the time of discharge.
- Delay in informing the patient relatives as they didn't pick the call.
- Patient relatives have not submitted some corporate documents.
- Patient relatives have not submitted the TPA documents.
- HMIS is not working (system server is down).



SUGGESTIONS TO OVERCOME THE DELAY IN DISCHARGE PROCESS

- Summary & bill could be prioritized, first preference should be given to cash patient (number of cash patient is less), this prioritization can be done by transcriptionists or floor GRE.
- Spell check/ formulary in summary format could be added.
- Transcriptionist should keep a track of declared discharges so that discharge summary is prepared on time.
- Floor billing and discharge staff should be allotted according to the peak hours and their lunch timings should be different.
- Bills of the TPA schedule patients should be checked and sent to their mediclaim immediately after getting discharge summary and supervision should be done that the documents are sent to the TPAs by the hospital timely.
- Pharmacist, dietician and physiotherapist handover can be given after getting the discharge summary so that the patient gets physically out just after the nursing handover after slip issue.
- There could be a patient holding area for patients who got discharged and want to have lunch or want to meet the consulting doctor before getting discharge.
- Discharged patient medicines should be indented and returned first, so that pharmacy clearance can be done on time.
- Awareness should be created amongst the doctors to have their morning rounds before 11 am so that unplanned discharges can be processed timely.
- Discharge summary of the planned discharges should be given before the day of discharge and their billing card should also be ready.
- Ask the attendant to submitthe feedback form in the end by mentioning the reason of discharge delay or ask them verbally about the reason of delay in the discharge so that the required action could be taken.

RESULTS

Average discharges per day from 5th floor (General Ward) are 13.

Out of 388 total discharges in 30 days, following are the results:

- 80 discharges (20.61%) were planned and 308 discharges (79.38%) were unplanned.
- 71 discharges were of Hospital Standard Schedule, 286 discharges were of corporate schedule and 31 discharges were of TPA schedule.

Delay in discharge as per schedules-

- 53 patients out of 71 (74.65%) were delayed in Hospital Standard Schedule.
- 9 patients out of 31 (29.03%) were delayed in TPA schedule
- 132 patients out of 286 (46.15%) were delayed in corporate schedule.

Out of 388 discharges in 30 days, 194 discharges were delayed due to some reasons:

- Patient relative delay- 18.04%
- Bill clearance delay- 16.49%
- Summary delay- 12.89%
- TPA/ Corporate approval delay- 12.89%
- Handover delay- 7.21%
- Transport delay- 6.70%
- Pharmacy/ blood bank clearance delay- 7.73%
- After slip issue, pt. relative went- 7.73%
- Radiology reports pending- 5.15%
- Others- 5.15%

Doctor's directly give the discharge summary without declaring the discharge time. They should inform the discharge time to the nurses and then give the discharge summary.

Maximum discharges are of corporate schedule on 5th floor as compared to cash and TPA schedule discharges. So, the required corporate documents should be submitted in advance to avoid delay in discharge.

CONCLUSION

A systematic approach to develop the structure and key processes of the discharge planning system is critical in ensuring the quality of care and maximizing organisation effectiveness.

In this study, important views on barriers experienced in hospital discharge were provided. Suggestions for building a comprehensive, system wise and policy driven discharge planning process with clearly identified staff roles were raised.

Communication and coordination across various healthcare parties and providers were also suggested to be a key focus.

REFERENCE

General information about the hospital was collected from the website http://www.medicahospitals.in

Information of the different departments was collected by interacting with the staff and referring their Standard Operating Procedure

Literature Review of the project topic was collected from http://www.hse.ie/eng/about/Who/clinical/natclinprog/palliativecareprogramme/Publications/Rapid_Discharge_Guidance_For_Patients_Who_Wish_To_Die_At_Home.pdf

http://www.gjmedph.com/uploads/O4-Vo2No3.pdf

Information collected by different stakeholders involved in the discharge process.

ANNEXURE

The SOP of the Discharge Process of the hospital is annexed below:

TYPES OF DISCHARGES AS PER THE HOSPITAL STANDARD OPERATING PROCEDURE:

- **Normal Discharge**
  Discharging patients from the hospital is a complex process that is fraught with challenges. As the patient is discharged, they expect a timely and quality discharge from their care providers. Discharge TAT thus forms an important quality indicator for continuous quality improvement.

- **Discharge against Medical Advice (DAMA) –**
  All the policies in case of normal discharge should be followed. In addition to that, following shall be considered:

  - The patient or patient family members sign the Discharge against Medical Advice consent form and the same is filed in patient's medical records.
  - The IP Coordinator immediately escalates the same to the higher authorities- GM operations/Medical Director/DMS and Deputy Manager Operations about the DAMA.
  - DMS and floor executives/Deputy Manager Operations meet the patient relatives and analyses the reason for DAMA and takes corrective action if in case the reasons are workable through mutual considerations.

- **Expiry of patient-**
  All the policies in case of normal discharge should be followed. In addition to that, following shall be considered:

  - As and when a patient is declared dead by the primary consultant the information shall be intimated by sister to the floor executive/In charge, GRE, Security supervisor and nursing supervisor/MOD.
  - Consultant or resident doctor/registrar shall declare the death of a patient to patients' family members. Death certificate is prepared by the RMO/Consultant and that a copy of the death summary is filed in the patient medical records.

- The body can be kept for a maximum period of 2 hours in the ward before sending it to the mortuary. Post two hours if for any reason the body has not been shifted, floor executive immediately escalate the same to the DMS/ GM operations/Deputy Manager Operations.
- GRE shall update the bill and send the billing card to the discharge counter