

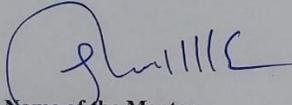
**Summer Internship Report**  
**at**  
**MAX SMART HOSPITAL, SAKET**  
**(April 22nd**  
**to June 21st**  
**, 2024)**  
**A Report**  
**By**  
**Dr.JAYESH BALYAN**  
**PGDM (Hospital and Health Management)**  
**2023-2025**



**International Institute of Health Management**  
**Research, New Delhi**

Certificate of Approval

The Summer Internship Project of titled “**TURN AROUND TIME IN DISCHARGE** ” at “**MAX SMART SAKET HOSPITAL**” is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the report only for the purpose it is submitted.



**Name of the Mentor**  
**Designation**  
**IIHMR, Delhi**

## FEEDBACK FORM

(IHMR MENTOR)

Name of the Student: DR. JAYESH BALYAN

Summer Internship Institution:  
MAX HOSPITAL, SAKET

Area of Summer Internship:  
OPERATIONS

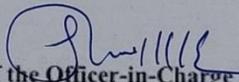
Attendance:

Objectives met: Yes

Deliverables: Yes

Strengths:

Suggestions for Improvement: Should work on research skills

  
Signature of the Officer-in-Charge (Internship)

Date:

Place:

(Completion of Summer Internship from respective organization)

The certificate is Awarded to

Dr.Jayesh Balyan

In recognition of having successfully completed his  
internship in the department

Hospital Operations

And has successfully completed his project on

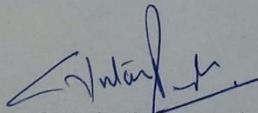
**To Study The Turn Around Time in Discharge Process**

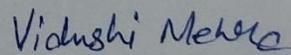
(22-4-2024 to 21-6-2024)

Organisation- Max Smart Super Speciality Saket Hospital

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

We wish Him all the best for future endeavors

  
Organization Supervisor

  
Head-HR/Department Head



**FEEDBACK FORM**  
(Organization Supervisor)

Name of the Student: Jayesh Balyan

Summer Internship Institution:

Area of Summer Internship:

Attendance:

Objectives met: ① worked to understand discharge process and patient satisfaction

Deliverables: ① worked in <sup>improving</sup> patient satisfaction of 3<sup>rd</sup> floor patient  
② worked on discharge process

Strengths:

① ~~to~~ follows instructions by supervisor on floor

Suggestions for Improvement: ②

① To improve on self discipline & self urgency to improve on learning curve.

Signature of the Officer-in-Charge (Internship)

Date: 20/6/24  
Place:

## **Acknowledgement**

This report is an outstanding prospect to convey my gratefulness to those many people whose timely help and guidance went a long way in finishing this project.

I would like to express my sincere thanks Max Smart Hospital for giving me an opportunity to explore the practical knowledge practiced by the Hospital.

This project could not be completed without the able guidance and support of my mentor Dr. Sumesh Kumar , Dean, IHMR Delhi.

I am very glad to work with the institute as an intern. I am grateful to the Operations Department of Max Smart Hospital for helping me to get the information and an invaluable experience.

Last but not the least I would like to thank my friends, family members and all those people who helped me for the completion of my project.

Working on this project has proved to be an enlightening experience for me.

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## **Abbreviations**

NABH – National Accreditation Board for Hospital

TAT - Turn around Time

TPA - Third Party Administrator

CGHS - Central Government Health Scheme

LAMA - Leave Against Medical Advice

ESI - Employee State Insurance

MLC - Medico Legal Case

HIS -Hospital Information System

OPD -Out Patient Department

IPD - In Patient Department

SOP - Standard Operating Procedure

# INTRODUCTION

The Max Smart Super Speciality Hospital in Saket is located in south Delhi and is a reputed multi- speciality hospital that has set its quality standards within the medical regime. It is a unit of Gujarmal Modi Hospital and Research Centre for Medical Sciences and has around 250 beds for patient support. The hospital has twelve high-tech modular OTs (operation theatres) and an advanced emergency & observation unit. The Max smart super speciality hospital at Saket is well-equipped with around seventy-two critical care beds, an advanced dialysis unit, and a dedicated endoscopy unit. The hospital is a tertiary healthcare centre that is equipped with around 256 Slice CT Angio, Cath Labs with electrophysiology navigation, 3.0 Tesla digital broadband MRI, and a flat panel C-Arm detector. This hospital at Saket offers specialized services in the medical field of Orthopedics, Cardiac Sciences, Pediatrics, Neurology, Urology, Gynecology, and Obstetrics.

# VISION

To be the most well recognized healthcare provider in India committed to the highest standards of clinical excellence and patient care, supported by the latest technology and cutting edge research.

## Purpose

To serve with commitment and compassion in our heart, We deliver the highest standard of patient-centered care to those we serve.

## Aim

From a dream team of doctors and specialties to support staff that goes the extra mile to deliver quality care, excellence is our DNA.

Hospital services include:

- Inpatient services
- Services provided by outpatients
- Diagnostic services; Endoscopy; Day care services
- Radiology services; emergency services; and laboratory services

The hospital's departments include anesthesiology; pediatrics; dentistry; dermatology; diabetes and endocrinology; ENT; fertility services; general surgery; gastroenterology; internal medicine; laboratory; nephrology; obstetrics and gynecology; orthopedics; pediatrics; psychiatry and psychology; radiology; ultrasounds.

#### ANESTHESIOLOGY

Anesthesiologists are on site around-the-clock to provide coverage. In addition to helping to ensure safe surgical procedures, they also manage patient care in the intensive care unit and recovery area, treat pain following surgery, and administer epidural analgesia in the labor area

#### Dental

They offer a variety of dental services that result in safe and high-quality oral care. Commonly treated conditions include dental implants, gum surgery, bone grafting, smile makeovers, and cosmetic dental fillings, dental tattoos and studs, diastema closure, teeth whitening, sialolithotomy, painless RCTs, tooth extraction using surgical or non-surgical means, etc.

#### ENDOCRINOLOGY AND DIABETES

It is among the first facilities in the city to provide all-encompassing care and places a strong emphasis on patient self-management. They support each individual in determining their treatment objectives, selecting a course of action, and acquiring the information and abilities required for day-to-day self-management. They offer computerized 72-hour blood sugar monitoring, diabetes education, nutrition counseling, foot care, and auxiliary services in addition to clinical care delivered by a diabetes educator and specialist.

#### ENT

A comprehensive spectrum of outpatient and inpatient services pertaining to problems of the ear, nose, and throat are provided by the ENT department. They provide audiometry and nasal endoscopic services. They offer endoscopic laryngoscopy, audiometry, tympanometry, and removal of foreign bodies from the throat, nose, and ears. They also offer nasal endoscopy treatments. Adenoidectomy, tonsillectomy, tympanoplasty, mastoid surgery, sinus and polyp surgery, septoplasty, and cochlear implant surgery are among the many surgical treatments provided.

## NEPHROLOGY

The hospital includes a dedicated outpatient nephrology department (OPD) where patients with kidney-related issues, including infections, acute and chronic renal failure, diabetic kidney disease, and renal hypertension, are evaluated thoroughly. Advice on nutrition and lifestyle, medicine when needed, and occasionally dialysis are all part of their therapy. Along with scheduled dialysis services, such as hemodialysis and peritoneal dialysis, the facility also offers emergency care around-the-clock.

## FITNESS AND OBSTETRICS

the largest specialization is obstetrics and gynecology. They offer care to female patients from puberty through the postmenopausal period. De-medicalizing delivery and lowering the rate of C-sections to procedures that are medically justified are two of the department's main goals. Treatment for fibroids, endometriosis, ovarian cysts, infertility, and uterine/ovarian cancer is provided by gynecological services. The department is capable of performing colposcopy, hysterectomies, hysteroscopy, and laproscopic procedures.

## PHYSIOLOGY AND PSYCHIATRY

Adults and senior citizens can receive outpatient consultation services from the psychiatry department. Conversely, the psychology department offers special education and therapeutic programs for kids, therapy sessions for kids with special needs, and psychological exams for kids, adults, and corporate workers.

## RADIOLOGY

Modern imaging facilities are available in the imaging services section to offer complete care. Both a regular 8 AM–5 PM service and emergency radiology services are available around-the-clock. The regulatory body AERB has planned and approved it for radiation safety and radiation monitoring. To guarantee radiation safety, a radiation monitoring facility covers the personnel. Employees receive a yearly health examination as part of occupational safety. The department complies with established protocols and is registered with the PC and PNDT authorities. It is furnished with two ultrasound scanners with color Doppler capabilities for vascular, cardiac, transvaginal, trans rectal, and small parts examinations, as well as traditional X-ray machines, an automated radiography system, a dedicated mammography unit, and a dexta scan unit.

## UROLOGY

Prostate enlargement, stone disorders, male infertility, andrology, reconstructive urology, and various types of urologic malignancy are all treated by the urology department.

Additionally, it offers Gender Re-assignment Surgery (GRS), commonly referred to as a sex-change procedure.

## **Objectives:**

- **Locate bottlenecks:** Find particular instances in the patient care process where delays happen, as when a patient is transferred between departments, has diagnostic testing done, or is starting therapy.
- **Optimize Operational Efficiency:** Create plans to cut down on needless delays, optimize workflows, and raise hospital operations' general effectiveness.

**Enhance Patient Outcomes:** Examine how turnaround times affect patient outcomes with the goal of lowering rates of morbidity and death by acting quickly.

**Improve patient experience:**

- Investigate the relationship between turnaround times and patient outcomes, aiming to reduce morbidity and mortality rates through timely interventions.

## Literature Review-

By the end of 2025, India will need as many as 17.5 crore additional beds according to a combined study by an industry body and Ernst & Young. According to World Bank, data on Bed per population in India was found to be 0.53 Beds per 1000 people in 2017. India is among the favourite choice for medical tourism that contributes to the loading the healthcare system along with the disease burden in the country. The healthcare market in the country is growing with a tremendous rate with great opportunities. The Government is aiming to increase the healthcare spending to 3% of the GDP by 2024. In Union Budget 2023, Government allocated a huge amount for COVID and is supporting the healthcare and hospitals by all means. As per data published by Statista committee, India had an estimated 714 thousand hospital beds spread out over 69 thousand hospitals in 2019. Of these around 1.1 million beds were in private sector, outnumbering the public hospitals. There is a strong competition and the healthcare sector being a service sector is driven by customer satisfaction, meeting & exceeding the customer expectations. Patient discharge is one of the most important part of the patient journey in the hospital. Various departments including Nursing, Billing, TPA, Pharmacy, Dietetics, Physiotherapy and a number of individuals including Consultants, Duty Doctor, Medical Transcriptionists, Nursing staff, Billing executive, General duty assistant staff, etc. are involved in the process. Being a Hospital Manager, it is important to understand the overall process and its operations in order to effectively and efficiently managing the operations.

For my Literature Review, I have used the following keywords:

1. Discharge process
2. Patient Discharge
3. Patient Discharge AND Hospital
4. TAT for Discharge AND Study
5. Average time and delay in discharge

The following published papers were review

Silva Ajami et al.(2007) conducted a study to analyze the time for discharge. and The data collection means were questionnaires, checklists, observations from the team, and analysis was done using SPSS software .The queuing model was employed by the researchers average Time was 4.93 Hours and lack of guidance of staff was seenof discharge summary, no HIS was used as the findings made by author.

In 2012 study was done by Janita Vinaya Kumari et al. in a tertiary care healthcare upon patient discharge. Author says that Discharge and billing are the areas of activity that are more remembered by the Patient/attendant. Objective of the study was to compute the mean waiting time for patient discharge. The research was customised and designed by the researchers in the team and was kept in the wards and the billing department. Of the 2205 patients included in the full sample was analysed. 2 hour 22 minutes was the average wait time

Swapnil Kumar et al. conducted a time motion study in a hospital in 2013, to observe the delay in the discharge of all category of patients i.e. insured patients, cash payments, DAMA etc. in the hospital. The average time was compared with the standard time suggested by NABH taken as the patient leave the institute. For Insured patients and self-payments IAMA figured 5 hour 13 minutes, 6 hour 2 minutes and 5 hour 29 minutes respectively. The author moreover administered a survey to determine satisfaction, and documented seventy out of 69.80% patients denoted process is lengthy and remaining 30.20% patient felt that were discharged from the hospital in the usual time frame. A total of 61.53% patients recommended that the discharge process should be expedited.

In 2014, Dr Silva et al. studied - . conducted a study to find out the main reason behind delay in the process of patient discharge from two teaching hospitals was conducted with the purpose to improve the appropriate findings. Admission and discharge record of patients leaving from ward of internal medicine were reviewed. Author conducted a pilot study to determine the sample size. They found that among both of the teaching hospitals, there is a delay of 60% in hospital A and 50.7% delay in the discharge of hospital B. Investigation reports were not available timely, delay in making decision regarding the patient clinical health and discharge 26 & specialized consultation provision were found to be the main source of the delay & specialized consultation provision were found to be the main source of the delay in the discharge process.

This study was carried out to analyze the TAT in the process of discharge and costs at Asian Heart Institute. in order to evaluate the voids in the SOPs. This was a cross-sectional study 45-day review analysis both for quantities and quality. Sampling methodology-Non-probability purposive sampling was the methods employed. So Data was Collected By Primary Sources For data collection, sources were include Observations, Interactions with staff, as well as secondary sources including Reasons which were responsible for the delay were retrieved from the HIS, Patient file. The reasons were Delayed could be categorized as delay by patient, TPA Approval delay and staff delay and due to health status of the patient, etc. The primary reason they found for the hold up in discharge was gap in information and improper intercommunication between departments.

Mr Khanna et al (2016) conducted a study in a tertiary care hospital was carried out to find out the timeliness of the discharge process and its impact on crowding and the flow performance. The study was to identify the optimal time for discharge a and the objective

target was for the discharge portion of the was eliminate the over burden and crowding and also to improve the inpatient flow. The A retrospective study using patient records over 15 consecutive months to identify the patient and work on the case. both the front and the back ends of the patient journey i.e. admission to discharge from the hospital. For understanding the flow status Discrete event stimulation was used. They discovered that 80% of the discharges were largely been done by 12 p.m. that opened up nine additional beds for Monday. The average time for bed, time to occupy, length of stay, etc. and the bed occupancy was aimed and decreased. This study verified that any discharge carried out by prior to the noon i.e. through 11 AM improves patient flow and productivity.

Dr.Soundara Raja (2017) conducted a study in a tertiary care hospital to determine the causes delaying patient admission to the wards. Identifying the Root Cause with providing guidelines for the same. Using the information and rectifying the problem. Action items Time taken for preparation of Discharge Summary, Pharmacy clearance, Support service delay and Nursing staff are the reasons why patients were dissatisfied.

# PROJECT REPORT

## Study on turnaround time in discharge

First of all,

In the field of medicine, patient outcomes and the entire delivery of healthcare are significantly impacted by the efficacy and efficiency of hospital operations. Hospital discharge procedures and turnaround times are two essential components of these operations. The interval between a patient's admittance and the point at which they are diagnosed and start treatment is referred to as the turnaround time. Reducing patient wait times, increasing resource efficiency, and improving the patient experience overall all depend on efficient turnaround times.

The discharge procedure, on the other hand, signifies the end of a patient's hospital stay and makes sure they depart in a prompt, secure, and organized manner. In addition to maximizing bed availability, a well-run discharge procedure guarantees that patients receive the information and assistance they need to continue recovering after leaving the hospital. The purpose of this introduction is to discuss the importance of discharge procedures and turnaround times, how they affect hospital performance, and the tactics used to improve these vital areas of patient care. Discharge-turnaround time and turn around time are important.

1. Improved Patient Experience: Prompt diagnosis and start of treatment lower anxiety and increase satisfaction.

- o People's opinions of hospital services are more favorable when waiting periods are less.

2. Better utilization of Resources: Effective utilization of medical personnel, tools, and infrastructure.

- Lessens bottlenecks, enabling hospitals to efficiently serve a greater number of patients.

3. Better Clinical Outcomes: Early diagnosis and intervention can result in reduced complication rates and a quicker rate of recovery.

- o In circumstances that are critical or emergency, early intervention is essential.

4. Operational Efficiency: Simplifies workflow and healthcare operations.

- Lowers operating expenses by cutting down on wasteful use of resources and delays.

5. Enhanced Throughput: Allows medical facilities to handle more patients.

- Reduces crowded conditions.

## HOSPITAL DISCHARGE

Optimal Bed Availability: Patients who are discharged on time make beds available for new patients.

Crucial for controlling patient flow, particularly at times of high demand.

2. Improved Patient Safety and Continuity of treatment: o Guarantees that patients are released from the hospital with the proper instructions and plans for follow-up treatment.

· Lowers the possibility of readmission as a result of insufficient care after release.

3. Lower Hospital Expenses: Minimizes needless prolonged hospital stays.

o Reduces duration of stay and resource usage, which contributes to healthcare cost reduction.

4. Better Patient Outcomes: Guarantees that patients obtain the resources and assistance they need to recuperate at home.

· Lowers the risk of problems and readmissions following discharge.

5. Patient and Family Satisfaction: Confidence is increased in patients and families by clear discharge instructions and supportive services.

6. Compliance and Reimbursement: Adherence to healthcare regulations is contingent upon the completion of appropriate discharge documentation.

· Has an impact on the hospital's financial performance and reimbursement rates.

These arguments emphasize how crucial discharge procedures and turnaround times are to maintaining hospitals' smooth operations, enhancing patient care, and maximizing the provision of healthcare.

## TURN AROUND TIME IN DISCHARGE

Hospital discharge turnaround time, in this scenario, means the number of hours between a hospital discharge decision and when the patient walks into his clinical settings. This phase is the complete set of steps and procedures that need to be done before a patient can be discharged legally with safety. Its elements typically encompass:

**Medical Review and Documentation:** The attending physician or medical team performs a final review of the patient's course to confirm that discharge medical criteria will be satisfied. They also record the discharge orders and instructions.

**Medication reconciliation,** i.e. that the correct medications are sent with the patient on discharge both reviewed and reconciled (by a trained person) in potentially new or ongoing prescriptions

**Patient Education:** Informing the patient and caregivers about what needs to be done post discharge - medications, follow-up appointments, other instructions for home care.

**Post-Discharge Services Planning:** Coordination of all required post-discharge services (e.g. home health care, rehabilitation or follow up visits)

**Administrative:** Completing administrative work as needed such as paperwork, insurance processing, and discharge summaries.

**Transportation Coordination:** Coordinating a ride for your way up if the patients needs help getting there.

The speed of each of these can add to the time elapsed for discharge. This time is crucial to decrease for better patient flow, hospital budget utilization, and higher patient satisfaction. The hospital might want to make these processes as fast and as seamless as they can to ensure timely and safe discharges.

TURN AROUND TIME HAS A important role in hospitals for patients flow and bed availability, proper bed utilization and patient experience

As hospital needs to maintain patients flow effectively as further it vacate bed for next patients ( admission) and helps generate more revenue

Efficient turn around time ensures patients that require admission hospitalization can be accommodate in time which enhance bed availability and reduce overcrowding and increase patient satisfaction and improve feedback thus in turn enhance patient retention

As hospital have limited number of staff and resources equipments so proper utilization is necessary so efficient discharge helps hospital to allocate resources more effectively in turn resulting in cost savings and improved patient care

A smooth discharge results in positive impact on patient satisfaction as minimal waiting time , clear communication , makes services better

Discharge with proper procedure and without delay enhance overall experience and and reduces anxiety of patients

Hospital gain benefits from reduce operational cost , when patients are discharged within time as it reduce resource consumption

#### RISK REDUCTION

Prolonged hospital stays increases the risk of hospital infections and complications and medical error

Financial impact

If hospital stays is prolonged it increases the expence of patients and expence of hospital  
Efficient discharge reduce this burden

<b>Step Number</b>	<b>Step Description</b>
1	Doctor Intimation
2	Summary Signed by Doctor
3	Nursing Clearance
4	Pharmacy Clearance
5	Bill Prepared
6	Discharge Slip to Patient
7	Summary Explained to Patient
8	Room Vacated
9	Housekeeping of Vacated Room
10	Room Ready for Next Patient .

## **Discharge 1: Doctors intimation**

Informing the attending or the PCP that the patient is dischargeable is getting the first part of the hospital discharge piece being solved. This is done to start the discharge process and thus ensure a safe and seamless transfer of the patient from hospital to home health.

A Physician's Communication: Essentials in Assessing the Patient

Clinical Judgment: The decision to discharge a patient is ultimately made by a full clinical review with the attending physician to determine improved flow to justify a discharge //

Comment: Different clinical signs may or may not be relevant to improve the care process

// Sum: CLINICAL ASSESSMENT(dp, in, judgment, discharge, by, attending, diagnosis, review). This includes checking vital signs, laboratory or imaging results, and overall health condition.

Recovery Territory: The doctor advises the patient if the patient is at a period in their recovery where it is safe for the patient to be treated for anything acute that the patient may have at home.

Consultation with a Multidisciplinary Team:

An Interdisciplinary Examination: Physicians may consult with other attending physicians, nurses, and physical therapists, who are also contributors to the patient's care to gain a well-rounded understanding of the patient's discharge readiness.

Reaching Agreements: With a common strategy, all facets of the health and recovery wishes of a patient are met, thereby producing an agreed-upon discharging plan.

Mailing/Preparing the Discharge Summary

Documentation (generally considered a report): The doctor prepares an extensive discharge report, which include a patient's past medical history, current medications, prior treatments and follow-up instructions.

Medical orders: The hospital will record the instructions for care after discharge from the doctor in detail, including prescription food restriction, activity restriction, follow-up schedule, etc.

Mailing/Preparing the Discharge Summary

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Liaise with Discharge Planning Team;

Alert: Nurses, and case managers are made aware of the future discharge to begin soliciting next steps.

Care Coordination: The physician meets regularly with the discharge planning team to ensure all aspects of the discharge process, e.g., home-health services, durable-medical equipment, are established.

#### Importance of Doctor Intimation

#### The Reason Doctor Notification Is Such An Important Part Of Patient Safety

Sharing Care and Readiness: Here, in the physician has been blocked from discharging somebody too soon, but because they have done a coordinated review of the patient's readiness for discharge and confirmed the patient is clinically stable

Prompt Follow-up: The discharge summary and orders reduce post-discharge difficulties through conveying better information.

#### Promotes Good Communication Skills

Physician, pt, family (if desired by pt), discharge planning team shall attend for discharge plan discussing discharge plan and participant roles for post discharge care.

Discharge and home care responsibilities: Families and the patient will be less overwhelmed knowing what needs to be done in order to care for the patient at home

#### The Reason Doctor Notification Is Such An Important Part Of Patient Safety

Prompt Follow-up: The discharge summary and orders reduce post-discharge difficulties through conveying better information.

#### Promotes Good Communication Skill

#### Step 2 Summary Signed by Doctor

In this process the summary is signed by doctor it is a complete record of ` hospital stay , treatment and post discharge instruction and what a patient should take care as it provide clear guidance to patient

Patient discharge summary include details about the patient like patient name , medical record or hospital id, contact information, provide the hospital stay time

#### Medical History

Medical history of patient in brief is written, and significant past medical information , hronic condition is also written

TEST and results – details of medical tests information is also written during hospital stay like lab reports , imaging studies , etc.

Information about any surgeries done and medication given to patient , medication dosage and frequency details is given .

Information on any changes to pre existing medications , like discontinuation or dose changes

Follow-up Appointment – information about further follow ups and information is also written Contact information of health provider.

Home care instructions like medications , physical activity restrictions, dietary planning

Documentation of that patients and family have been educated about the discharge instructions and plan care

Importance of the signed discharge summary-

Comprehensive Record- The discharge serve as a comprehensive record of patients hospital stay

Clear communication- it provides detail information about to the physician

Patients safety – proper documentation gives error free information about the patient

Boosts Health Service Integration:

Inter-Departmental Communication: A summary will then help the different health care sets up that is the first care physician, that expert, the house health providers and the like talk among themselves and give an absolutely clear and co-ordinate patient care.

The discharge summary ensures that all essential information is neatly delivered, eliminating the need for repeating the same details over and over again and thus saving time and reducing the levels of frustration and dissatisfaction on both sides.

Health Service Integration: Improved

Inter-Departmental Communication: A synopsis will eventually help the different health care set ups that is the primary care physician, the specialist, the home health providers and the like communicate with each other and provide a beautifully clear and co-ordinate patient care.

The discharge summary makes sure that all the key information is provided at one place and of course the resident need not ask the same set of questions repeatedly, hence saving time and reducing the frustration, disappointment and dissatisfaction on either end.

### **Step 3: Nursing Clearance**

The third process in the hospital discharge process is Nursing clearance, where nurses play a pivotal role in making sure that patients are truly ready to leave the hospital. It includes a comprehensive assessment, education, and coordination to ensure all the requirements of the care of that patient are met before he/she is discharged.

#### **Nursing Clearance Key Components**

##### **Patient Assessment:**

**Assessment: Physically** — A final examination to ensure they are able to go home, by the nurse. This includes vital status, wound, mobility and general appearance.

**Symptom care:** Making sure that every symptom or effect on the patient is taken care of and that she is able to manage and take the patient safely home.

##### **Discharge Instructions Reviewed:**

**Reviewing medications with the nurse:** Nurses go through the list of medications provided in the discharge summary with the patient, discussing things like dosing, timing, and possible side effects.

**Care Instructions:** Detailed home care instructions including wound care, activity restrictions, dietary advice, and how to monitor symptoms.

##### **Patient and Family Education:**

**Teaching Sessions:** Leading the teaching sessions to take them through each of the post-discharge care details for the patient and the carers. An example would be showing how to give injections or change dressings.

**Written materials -** Offering written instructions and educational materials that the patient and family can review at home.

##### **Coordination of Care:**

**Follow-Up Appointments** Checking if all follow-up appointments have been scheduled if the patient knows when and where to go for follow-up care.

Home care: Coordinating with services at home, such as physical therapy, to manage nursing visits, and home medical machinery as needed.

Discharge Checklist:

Checklist Completion: A discharge checklist ensures that nurses do not miss any crucial steps as they discharge a patient. This includes making sure every chart is filled out, medications are sent, and the patient gets all her stuff together.

Patient comprehension (includes confirming understanding of the discharge plan by the patient and family and that the patient is comfortable caring for themselves at home)

Therapy is frowned upon. Emotional and psychological support - that is another matter entirely.

Concerns: Offering a concern to take care of any worries or concerns they patient or family may have about returning home.

Reassurance to both the patient and the family with an offer to have any questions they have answered, Ensuring that the patient and family feel supported and informed.

Nursing clearance need:

Helps ensure that patients are as prepared as possible.

Comprehensive Assessment: Nursing clearance is a comprehensive site to evaluate the patient's readiness for discharge, including physical, emotional family needs, and education

Enhances Patient Safety:

Avoids Complications: With a detailed follow up for medications, counselling and complications, nursing clearance precludes discharge issues and readmissions.

Medication : Ensuring clear instructions and education on medications can result in patients taking their medications appropriately, which in turn decreases the likelihood of an adverse event taking place.

Helps Efficient Communication:

Easy to follow directions: Nurses offer easy to follow directions to reduce the risk of confusion or mistakes twice home care

Coordinating with Other Members of the Health Care Team: It is very crucial to communicate and coordinate with other healthcare professionals to exchange information and guarantee continuous care.

## **Step 4: Pharmacy Clearance**

The fourth stage of hospital discharge, pharmacy clearance ensures the safe medication carrying out of the hospital by a patient, while establishing an appropriate management plan. It is an important step to ensure patient safety, adherence to medication and care continuity after discharge.

### Fundamental Elements For Pharmacy Clearance

#### Medication Reconciliation:

Medication review and verification: The pharmacy team examines all the medications the patient is currently using, new prescriptions written during hospitalization, and changes to existing medications. This helps be more accurate and avoid accidental drug interactions.

Medication History: Examining the patient's medication record to identify and resolve differences in the medications the patient was taking before being admitted and came in with compared to the new ones prescribed during admission.

#### Prescription Processing:

Prescription e hospital's pharmacy fills all discharge medications and ensures everything is labeled properly so the patient will have all their medications ready to take home with them once discharged.

Administration Instructions: Description of specific instructions on how to use medication (eg, dose, number of times per day, scheduling, directions for specific behaviors) especially for complex regimens.

#### Patient Education and Counseling

Example: Counseling Session - Pharmacists provide a walkthrough on what each medication is for and how it is used for the patient and their caregivers. This involves what the drug is for, how to take it correctly, side effects, and what to do if a dose is missed.

Written materials: Giving the patient informational handouts and medication lists to reinforce verbal instructions and furnish the patient with a reference at home.

#### Coordinating Healthcare Team

---

**Communication:** Pharmacists communicate essential information in the patient's medicines to the health care team, thus all professional assisting the patient can be made aware of the medicine changes.

**Documentation:** Placing all medications and instructions in the medical record to keep an accurate, current record of all medications.

**Ensuring Medication Access:**

This includes **Immediate Supply:** issuing a small quantity of a medicine (or all the medicines) prescribed for a patient for a period of time immediately following their discharge so that they have sufficient medicine(s) to take until they can get more from their community pharmacy.

**Help with your bills:** Make sure your insurance covers the medications you need or that you have access to programs that help you pay for your medications if you can't afford them.

**Why is it important Pharmacy clearance**

**Enhances Patient Safety:**

**Reduces Errors:** The most common causes of hospital readmissions and adverse events are medication errors. Medication reconciliation is completed along with the comprehensive patient education to help reduce medication errors.

**Lowers Risks:** Explaining the medication plan to the patient lowers the hazards of its improper use and side effects.

**Increases Medication Adherence**

**Instead, give them clear instructions:** When you use simple, clear instructions, patients have a much higher likelihood of taking their medications as prescribe

**Supports Continuity of Care:**

**In Pharmacy Clearance:** Robust pharmacy clearance allows patients to make a safe transition from hospital to home care, while ensuring that the patients are adequately prepared to handle their medications on their own.

**Follow-up coordination** through communication of medication-related information to the patient's primary care provider or specialist for management.

## **Step 5: Bill Preparation**

It is the 5th step of the hospital discharge process but the most important as it determines the patient's final responsibility and outgoing communication with due. This step then guarantees that all services conducted during the hospital admission period are well-documented and rightfully billed, making it easier for the patient to financially move on.

Essential aspects of Bill preparation:

**Service Charges:** The billing is done by the billing department, which is for all the medical services given during the hospitalization like consultation, procedures, diagnostic tests, treatments, and stay in the hospital.

**Room and Board –** The charges for the patients room, that includes all other amenities and special care services are calculated and finally added up with the bill.

**Medications and Supplies:** The costs are for all medications given and all medical supplies that were used.

**Insurance Coordination:**

**Validation:** The billing team then validates this information with the patient's informant as the patient gets checked in. The billing team reviews the info from the patient and the informant to make sure it is accurate.

**Pre Authorizations –** pt should make sure to include pre-authorizations or approvals from the insurance company in writing.

**Claim Submission** First comes the bill preparation according to the insurance company's laws to get the money/repossession form them.

**Discounts and Adjustments:**

**Negotiated Rates -** Application of negotiated rates or discounts pursuant to the terms of the Hospital's insurance agreements or financial assistance

**Audit Maintenance:** This involves checking the bill is correct, and there are no errors in the billing.

**Patient Communication:**

**The PROCEDURE :** The detail of charges and a consent is provided to the patient and family.

How to Pay: Listing several acceptable payment methods, such as installment plans, online payment links, and in-person payments

Insurance Coverage Clarification: Addressing any insurance coverage and out-of-pocket expense questions so the patient is aware of their financial obligations.

Clearance for Finalization & Release disc:-

Issuance of Final Bill: Providing final bill to the patient containing all services, adjustments and patient liabilities

Discharge Clearance: Furnishing the patient with a clearance note permitting the patient to be discharged so long as all financial responsibilities are cleared up or payment plans have been made.

Why Is It Important to Prepare the Bill?

Maintains Financial Accuracy and Transparency:

Comprehensive Billing: Recording each and every service is the prime need to ensure detailed billing and be able to claim bills from insurance thus building utmost trust between patients and hospitals.

Recommend a transparent bill : A detailed list of a bill is transparency that allows patients to know what they are paying for, and why.

Boosts in Patient Satisfaction

Clear Communication - Increasing patient satisfaction through effective communication about the bill and payment options reduces the anxiety and confusion surrounding hospital charges.

Support and Assistance: Providing patients with financial counseling as well as assistance services to manage financial responsibilities allows them to have a positive experience.

Compliance with Regulatory Guidelines:

Regulatory Compliance: Good billing practices help you meet laws specific to your top specialty and insurance requirements, thus lessening the chances of an inspection and imposition of fines.

Documentation: Lists all the charges bill and billing activities helping to report accurately and confidently.

Reduces Financial Disputes:

Fewer Errors: Correct billing decreases the risk of financial disputes and grievances, helping to foster a good hospital-patient relationship.

Transparent: Inculcating well-defined financial expectations will avoid misconceptions and makes the patient well-informed about the payable obligations.

## **Step 6: Discharge Slip**

Latest to leave the hospital is the discharge slip, step six of the hospital discharge process. It is a formal legal document that states that the patient's stay in the hospital has been over and contains important insights of what the treatment done on right from the admission to follow-up care etc in addition to conducting instructions if any to be followed still. It is essential to provide a discharge slip to the patient to have all the information that can help him/her in their next care, also, for certain administrative purposes in the hospital.

Discharge Slip Key Features

Patient Information:

Demographics (patient): Name, age, sex, full address including postal code, and telephone number

Hospital Identification: Hospital ID and Room number for the patient.

Hospital Stay Details:

Date of Admission: The day on which the patient was admitted into the hospital

Discharge Date: A glimpse of light at the end of the tunnel, discharged from the dreadful cage of hospitals.

Principal physician: Name of the doctor primarily responsible for the care of the patient during the hospitalization.

Medical Summary:

Diagnosis: Summarize your first and second diagnoses for the patient.

Treatment Summary: Explanation of the treatment or procedures the patient has undergone during their hospital stay.

**Discharge Condition:** How the patient is doing at the time of discharge and whether there is an improvement since admission

**Medication Instructions:**

**Drug list with Dosages:** A list of current medications with doses and frequency, as well as any special instructions given the patient.

**Medications Discontinued:** The medications which were discontinued during the hospitalization

**Follow-Up Care:**

**Appointments:** Dates and times of follow-up appointments with PCP or specialists

**Discharge Instructions:** Customized care at home, including wound care techniques, dietary requirements, restrictions on physical activity, and overall changes that may be necessary.

**Emergency Instructions:**

**Sun or symptoms:** Symptoms that warrant an urgent visit to the patient, with a possible hospitalization - or what to look for.

**Emergency Dept:** Phone number for hospitals emergency department

**Administrative Information:**

**Summary of Charge:** What the patient owes and instructions on how to pay.

**Insurance Information:** Insurance coverage and claims information if available.

## **Step7: Summary Explanation**

Hospital discharge process : Step 6 (Summary explanation) This is where the healthcare team, often under the guidance of a nurse or discharge coordinator, will go over the discharge summary and explain it to the patient and their family members. It may be a requirement for discharge and is essential for the patient to be able to outline his post-discharge care plan which includes his medications, follow-up appointments, lifestyle modification, and any other further instructions that may be necessary.

## Summary Explanation Structure: Important Points

### Review of Discharge Summary:

**Summary:** A health summary of the patient, detailing their medical history, the care they had provided during their stay in hospital, and detailing the reason for discharge.

**Procedures and Treatments Explain** what procedures or treatments the person experienced, how he or she responded to them, and any follow-up care needed.

### Medication Instructions:

**Medications:** Review of each medication prescribed (why we gave it, what is the dose, how often and what are the potential side effects)

**Medication Changes:** Point out new medication, medication dis-continuations or dosage change in pre-existing medications.

### Follow-Up Appointments:

**Schedule Review:** Follow up appointments with primary care physicians, specialists or any other health care providers.

**Details of appointment:** the when, where, and what to expect from each of these visits.

### Home Care Instructions:

**Post-Hospitalization Care Procedures:** Wound care instructions, medical device usage, physiotherapy exercises, dietary limitations and activity restrictions.

**Monitoring of Symptoms:** Teaching patient and caregivers the symptoms they need to be mindful of and when to escalate this to medical care.

### Lifestyle Modifications:

**Nutritional Resources:** Diet recommendations to assist recovery and help manage health complications

**Activity Recommendations:** Prescriptions on levels of physical activity (functional, exercise and recreational activities), dosages of exercises normally performed, and limits of various activity levels most appropriate for restoration.

Everyone's name, address and telephone number - including emergency contact information.

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Also providing contact information for healthcare providers, emergency services, and support resources.

Emergency instructions — simple steps that you need to take and who to call in case something goes wrong or the patient gets worse.

Patient & Caregiver Education:

Teaching sessions: perform teaching sessions so that patients and caregivers can understand the discharge instructions

Handouts: Formatted pamphlets or booklets which outline the key points can be given to clients to take away.

So... What have I learned?

Feedback and Questions: Prompting the patient and caregivers to ask questions and Provide feedback, if they have any- this is merely as way to ensure that the patient fully understands the discharge plan.

Teach-back Teaching patients the teach-back method (asking patients to repeat the instructions in their own words) to ensure understanding.

Step 8: Room Vacate (Last Step of the Hospital Discharge Process) This refers to the time when the patient has been discharged from the hospital and is out of the hospital room. Efficiently managing this transition is key to hospital throughput and quickly freeing up rooms for incoming patients.

Room Vacate Key Components

Final Checks and Clearance:

Belongings Check - To make sure the patient collected his belongings and nothing was missed on room.

MORE: Medical Equipment - Making sure the facility gets any medical equipment provided by the hospital (IV poles, monitors, etc...) back and that it works properly.

Transportation Arrangements:

Hospital to Home or LTAC Patient Transport This can include enlisting the help of family members, setting up medical transportation, and making sure the hospital knows to provide medical transportation services.

Help: Help the patient be safely and comfortably discharged from the hospital and to transition with assistance.

#### Prepare and Sanitize Room

Housekeeping staff disinfects the room to get it ready for the next patient. This involves replacing sheets, wiping down surfaces, and leaving the room up to health and safety standards.

Replenishment of material: Replenishing ever things which were used i.e., gloves, masks, and other medical Consumables

#### Documentation and System Optimization

But it also something that impacts efficiency to a huge extent like the patient has been discharge; therefore, the hospital electronic health records should be updated that will show the room is vacant.

Room Status Update (Admissions/Bed Management): Informing the admissions or bed management team that the status of the room is now updated and it can be utilized for new admissions or as transfer room.

#### Contact with healthcare providers

Notification: Provider services to hospitalists, the attending physician, the floor nursing staff and the discharge coordinator that the patient has left the room.

Handoff to Next Team: If need be, a quick handoff to the Housekeeping and Maintenance teams so they know how to prepare the rooms.

Discharge is of two type planned and unplanned discharge

#### Planned Discharge

A process in which the hospital coordinates the discharge before it is supposed to happens is called a planned discharge. This discharge typically follows after his/her treatment goals have been met, and he is considered well enough and stable that he can continue his recovery in a non-hospital setting.

Key Characteristics:

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### Preparation and Coordination:

**Pre-Discharge Planning:** Started early in the hospitalization, with the healthcare team, patient and family having in-depth conversations.

**Multidisciplinary involvement:** Drawing from insights from doctors, nurses, social workers, and other relevant healthcare providers to constitute a comprehensive plan.

### Medical Stability:

**Ready for Discharge-**The patient meets clinical recovery criteria and is well enough to be released.

**Follow-Up: After Surgery -** Plans are made for follow-up care either at home or in another facility, such as home health services or outpatient therapies if necessary.

### Documentation and Communication

**Discharge Summary:** A full discharge summary is created detailing the patient's status, treatments which they have administered, prescribed medications and follow-up instructions.

**Patient Instruction:** Provides detailed instructions to the patient and family members regarding things like what to do when they head home, warning signs and what follow-up care they need to take.

### Risk Mitigation:

**Risk Evaluation:** Identifying potential post-discharge risks and making plans to address them. They give a clear idea of what should be done in the event of an emergency and health emergencies.

### Unplanned Discharge

An unplanned discharge is the one that happens unexpectedly and without the full quote of the prepare and work associated to a planned discharge. Any one of a number of unexpected events such as patient-driven choice or sudden shift in status might result in this nature of discharge.

### Key Characteristics:

**Lack of Preparation:**

**Abrupt Determination:** An unannounced discharge that is amicably accomplished because perhaps the affected person is displeased, cash is tight, wants money development, particular instances just like an emergency happening and so forth.

**A Lack of Coordination:** There is limited time for the health care team to adequately ready the patient and family for post-discharge care (10).

**Medical Instability:**

**Patient May Not Have Filled Medication:** Unfortunately, the patient might not have followed up on their treatment or health problems have not been resolved and complications are high.

**Greater Probability of Readmission** Lowered probability of a subsequent admission due to incomplete discharge planning and lack of continuity of care.

**Lack of Documentation and Communication:**

**Transcribed Discharge Summary:** The discharge summary may be lacking important information, be incomplete or hurriedly dictated to quickly get a patient out and not contain much about how a patient is being treated as an outpatient or how a medication is being managed.

**Poor Patient Education:** The patients or caregivers may not be given enough knowledge or proper education of the care plan which leads to non-compliance and mistakes.

**Patient Safety Concerns:**

**Greater Risk of Complications -** Getting discharged from the hospital too early will mean that many unresolved health problems could escalate to medical emergencies.

**Emergencies:** Patients can experience more hazards of discharged if they do not receive the proper guidance and support.

## SECTION – II

### TYPE OF STUDY

#### TYPE OF SAMPLING

Convenience Sampling

#### SAMPLE SIZE

169

- n = Sample Size Determination: Utilizing a sample size formula, as shown below, to determine the required number of respondents for adequate statistical power, keeping error of 5% or Confidence Interval of 95%.

$$n = [Z^2 * p * (1-p)] / E^2$$

where,

n = required sample size

Z = Z-value (1.96 for 95% Confidence Interval)

p = estimated proportion (For this research, 50%, as it is the maximum variability)

E = margin of error (0.05 for 5%)

Therefore, Sample Size calculated for this study –

STEP 1

$$n = [(1.96)^2 * 0.5 * (1-0.5)] / (0.05)^2$$

$$n = 384.16$$

$$n \sim 385$$

STEP 2

since, we are calculating for a finite population,

the number of discharges on third floor, at Max Hospital, Saket is approximately 300 in a month

thus, applying the finite population correction factor-

$$n = n / (1 + n - 1 / N)$$

where, n = initial sample size

N = total population size

$$\begin{aligned}n &= 385/1 + 385-1/300 \\ &= 168.86 = 169 \\ \text{Thus, sample size} &= 169\end{aligned}$$

## MODE OF DATA COLLECTION

Gather quantitative data on discharge time and TAT by-

### 1. HMIS (Health Management Information System)

- Description: Gather information about TAT and discharge dates by using the hospital's electronic health records system. EHRs often include comprehensive data on patient admissions, care, and releases.

- Data Points: Patient demographics, treatment specifics, department, admission and discharge times, and any delays or problems noticed.

Benefits: Complete and accurate data; huge datasets are easily accessible; integration with other hospital information systems is possible.

### 2. Manual Chart Review

- Description: Compile information on turnaround times and procedures for patient discharge by manually reviewing patient charts.

- Data Points: Admission and discharge schedules, causes of delays, discharge procedures, and any problems or difficulties.

Benefits: Capable of capturing qualitative and in-depth data that might not be documented in EHRs; beneficial for specialized instances or small-scale research.

### 3. Direct Observation

- Description: Track delays, inefficiencies, and potential improvement areas by monitoring the discharge process in real-time.

- Data Points: The amount of time spent on each stage of the discharge procedure, staff-patient interactions, and any delays that were seen.

Benefits: Offers direct knowledge of the discharge procedure; able to pinpoint real-world problems not noted in documents or surveys.

### 4. Administrative Data

- Description: To put discharge dates and TAT in context, use administrative data from the hospital, such as bed occupancy rates, staffing levels, and departmental workloads.

Data Points: The availability of resources, departmental workloads, staff-to-patient ratios, and bed turnover rates.

- Benefits: Can be connected with patient and process data; offers context for analyzing variances in discharge times and TAT.

## Observation learning-

Hospital discharge delays have been associated with patient dissatisfaction, inefficient use of hospital beds and increased costs. Observing these delays in differentiation — cash, panel, and TPA (Third-Party Administrator) patients — uncovers their unique bottlenecks and potential room for improvement. This is a comprehensive review of the observations on the studies of above kind and identifies few areas where there is room for improvement and new features for enhancement.

### Cash Patients

#### Administrative Delays:

##### Invoicing and Collection Processing:

Self-pay patients may often face a CRA due to processing and finalizing hospital bills. This involved checking every charge, disputing any discrepancies, and then double-checking the bill was correct.

Cashless payment methods can also slow down payment processing when patients are constrained financially or face several payment providers. Since there are no insurance companies or third parties in the equation, you typically get paid upfront, rather than after the fact for insured patients.

#### Documentation:

Although the knowledge of medical records, discharge summaries, and prescription documentation needs to be comprehensive and on-point, it is intensive and arduous.

If those processes included manual documentation, physical handling and verification add to the delay.

#### Clinical Delays:

##### Pending Medical Procedures:

If the person has a medical or diagnostic test pending that is important to make a determination about his or her discharge, the discharge can be delayed.

Schedule effectively and provide faster processing of these tests can help to alleviate some of these delays.

### Medical Complications:

Incidence of Unexpected Complication: If the patient develops any unforeseen medical concern near the time of planned discharge, it can prolong the hospital stay. These require rapid clinical intervention.

### Logistical Delays:

#### Transportation Arrangements:

Cash patients with complicated transport needs or who live far away may need to be transported, which can delay discharges.

Have a small amount of planning and coordination with your transportation would prevent most of these hold-ups.

### Panel Patients

Panel patients are enrolled under corporate health plans, or employer sponsored insurance schemes which in turn introduces layers of coordination and administrative complexity in the discharge process.

### Administrative Delays:

#### Authorization and Approvals:

The single biggest delay for panel patients is getting the prior approval from the corporate health panel or the employer-sponsored insurance. This can be a multi-step process that involves a number of documents.

If a queue is tight or the approval chain is long (e.g. multiple layers of bureaucracy), there are more delays.

#### Coordination with Employer:

The turnaround time may rise a bit higher, for op/ed completion, all the necessary paper works releases at the employee/insurance company give a faster turnover period.

Most approvals require regular communication and follow up to expedite the approvals.

### Clinical Delays:

#### Scheduled Follow-Ups:

They may require scheduled routine consultations, and relapse meetings or panel patients in sync with their corporate health plans. Scheduling these follow-ups prior to discharge can be a hassle.

This process can be facilitated through proper scheduling systems and open communication with the patient regarding follow up needs.

#### Health Assessments:

Employers or insurances may require a full health assessment and prevent their patients from being discharged. These assessments might comprise further examinations or assessments to confirm the patient is appropriate to go back to work or standard activities.

#### Logistical Delays:

#### Post-Discharge Care:

Scheduling post-discharge care like physical therapy or home nursing services, may cause delays if are not properly planned before discharge.

If all the required services that need to be put in place to support the patient at home are booked and confirmed in advance of the Discharge Date, it significantly decreases these delays.

#### TPA Patients

TPA patients have their insurance claims taken care of by Third-Party Administrators, which causes complexity in the discharge process and increases the numbers of stakeholders.

#### Administrative Delays:

#### Claim Processing:

The bulk of TPA patients experience major delays in even claim processing. It includes validating treatment information, sanctioning medical bills, and interpreting between TPA and the insurance company.

Discrepancies related to the coverage or medical necessity or disputed can only add more to the total time taken to discharge.

#### Discrepancies and Disputes:

Sorting out claims and wrangles with insurers to rectify differences in opinion can be a long process. In many cases this leads to complex documentation and communication between the hospital, TPA and insurer.

Clinical Delays:

Medical Justifications:

Before paying for any expensive treatments or extended days of hospital stays, TPAs may also ask for a detailed medical justification and sometimes more documentation causing delay.

You can speed up the approval process by putting in all relevant info and documentation as soon as you can.

Follow-Up Requirements:

TPA patients always require further follow care that needs to be coordinated before discharge. Symptomatic cases require follow-up which could contribute to the turn around time directly and indirectly as the hence the follow-ups and coverage of the same by the insurance needs to be made proper.

Logistical Delays:

Acceptance for Outgoing etc Bushings:

Getting TPA approval for post-discharge services like home care, medical equipment, or outpatient follow-ups can further delay.

By getting all of the required documentation up front, it can cut down on these delays and simplify the approval for these services.

Factors Common to All Patient Type

Instructions and Communication:

Documentation that is incomplete and/or incorrect

Poor / Inaccurate documentation- Affecting TAT for all patient type. Reducing delays through completion of all notes, discharge summaries, and prescriptions as soon as the encounter occurs

Use of electronic health records (EHR) can facilitate less cumbersome documentation with less likelihood of errors.

### Communication Breakdowns:

Communication between departments (such as nursing, pharmacy, and billing) is essential for success. Problems happen typically due to miscoordination of information or the information is channeled to other parties too late.

Regular meetings across disciplines, robust communication platforms, and community integration can facilitate alignment and reduce delays.

### Coordination and Approvals:

#### Efficient Coordination:

It is critical to have effective coordination among hospital departments and with external entities such as insurance providers, employers, etc. One of the other major contributors to increased TAT is Procuring Required Approvals and Authorizations.

This can be helped by setting clear protocols outlining who to liaise with and when, and who the designated liaison officers are to deal with communications from outside.

#### Efficient Online Approval Processes:

The simplification and streamlining of insurance claims, TAP authorization, and corporate health plan approval process will help reduce delays.

Efficiency can be also improved by utilizing technology to speed up approval and communicate with other parties

### What to Educate and Prepare the Patient on:

#### Patients are Taught Everything:

Educating patients and families about discharge prepares them and decreases delays Includes communication of clear discharge instructions, follow-up care plans and medication regimens.

The development of such patient education programs may better prepare patients for discharge as has been increasingly advocated.

#### Case Managers or Discharge Planners

Leveraging discharge planners or case managers to orchestrate a smooth discharge process for patients will trigger the necessary triggers a few weeks or days prior.

They can also help to arrange any post-discharge services and appointments.

Resource Management:

Adequate Staffing Levels:

An important measure to decrease delays is to secure enough staffing, especially at the time of discharge peak. Short staffing can lead to an increase in TAT.

Improving Efficiency: Businesses can maintain staff levels to meet with demand and regularly adjust schedules to ensure coverage requirements are met.

Optimized Pharmacy Procedures:

The slowest turnaround for discharge medications involves pharmacy processing and delivery. When staff work to guarantee that the pharmacy is operating efficiently and medication planning prior to discharge, it can make a significant difference when it comes to these delays.

The use of automated systems for the dispensing and tracking of medication is another efficiency increasing step.

Suggestions for Enhancing the Process of Discharge & Saving TAT

Go for Electronic Health Records (EHR):

EHR: Employing EHR will facilitate clinical documentation, interdepartmental communication, workflow efficiency and task optimization.

Better communication and coordination:

Create recurring cross-functional meetings and communicate via common platforms in order to enable better departmental alignment.

Appoint liaison officers to deal with external entities, including TPAs and corporate health plans-Suggestive Imperial Orchid Sugar Sheets Variant

Streamline Billing and Payment Processes

Introduce On-Arrival Billing, install quick billing systems and train billing staff for faster and accurate payment processing.

It will also help in managing discrepancies on billing and take actions faster on the same.

## Enhance Patient Education and Exportation:

Create extensive patient education programs to guarantee that patients, as well as their families, comprehend release instructions and post-discharge care plans.

Discharge Planners/case managers to help in making necessary arrangements for discharge for patient

## Optimize Approval Workflows

Simplify and accelerate insurance claim approvals, TPA authorizations or corporate health plan approvals.

Employ technology to speed up the approval and communication with frontliners.

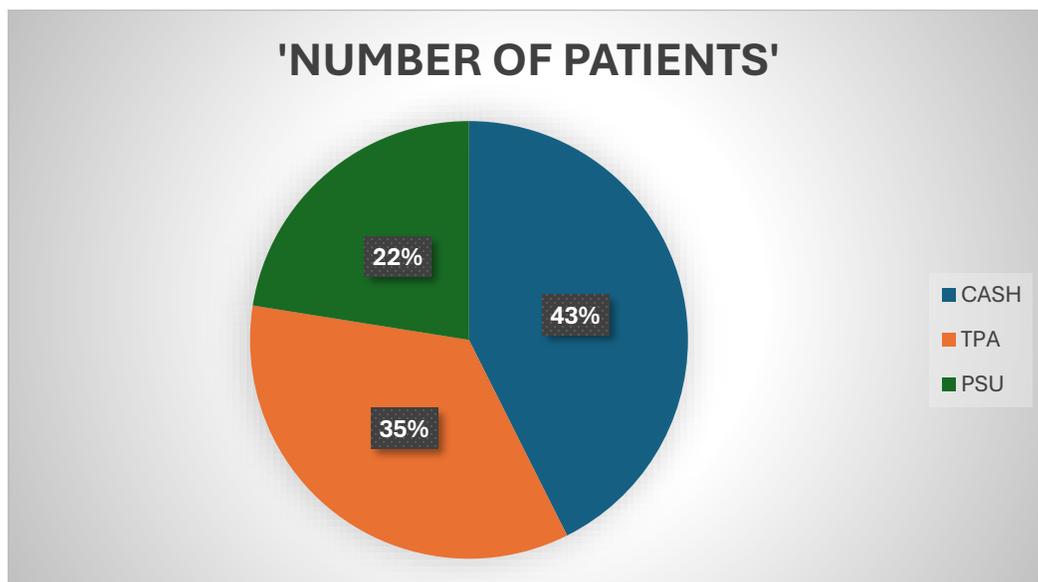
## Patients Post-Discharge Care Plan

Arrange needed post-discharge care services (transportation, home care, follow-up appointments, etc.) far in advance of the discharge date.

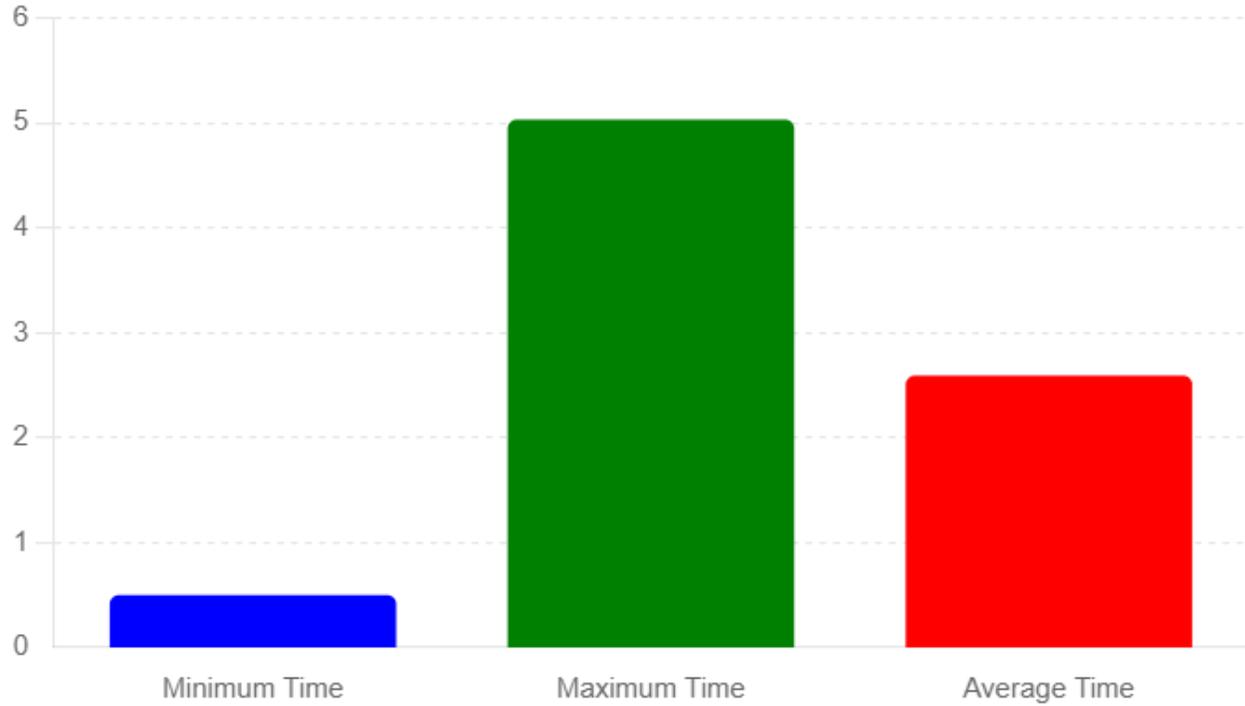
Remember no patient leaves the hospital without the proper follow up arrangements in place.

## DATA ANALYSIS

S.NO	CATEGORY	NUMBER OF PATIENTS
1	CASH	72
2	TPA	59
3	PSU	38
TOTAL		169



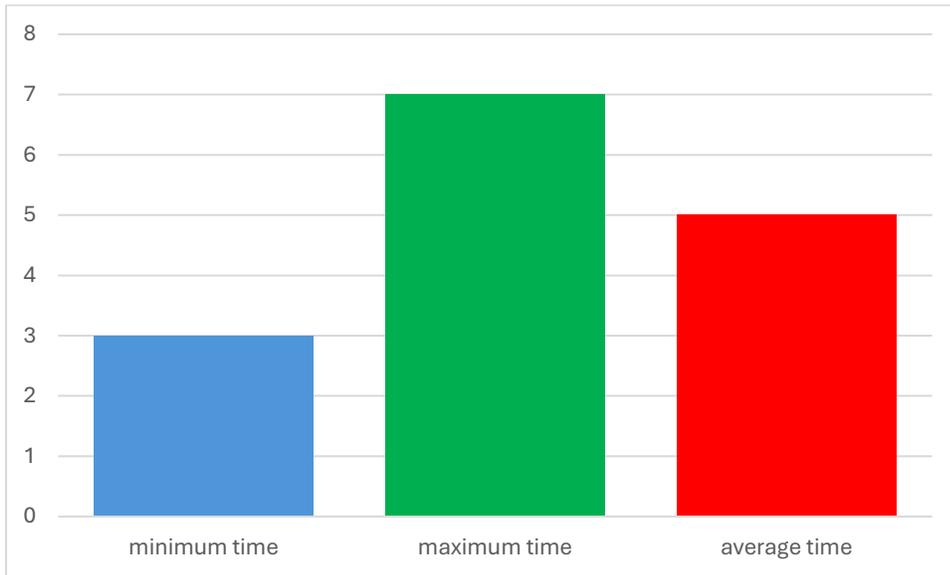
## DISCHARGE TIME FOR CASH PATIENTS



The calculated time differences for the "Cash" company are as follows:

- **Minimum Time Difference:** 30 minutes
- **Maximum Time Difference:** 5 hours and 2 minutes
- **Average Time Difference:** 2 hours, 35 minutes, and 33 seconds
- According to hospital policy – time should be 2 hours.
- The average delay is 35 minutes and 33 seconds.

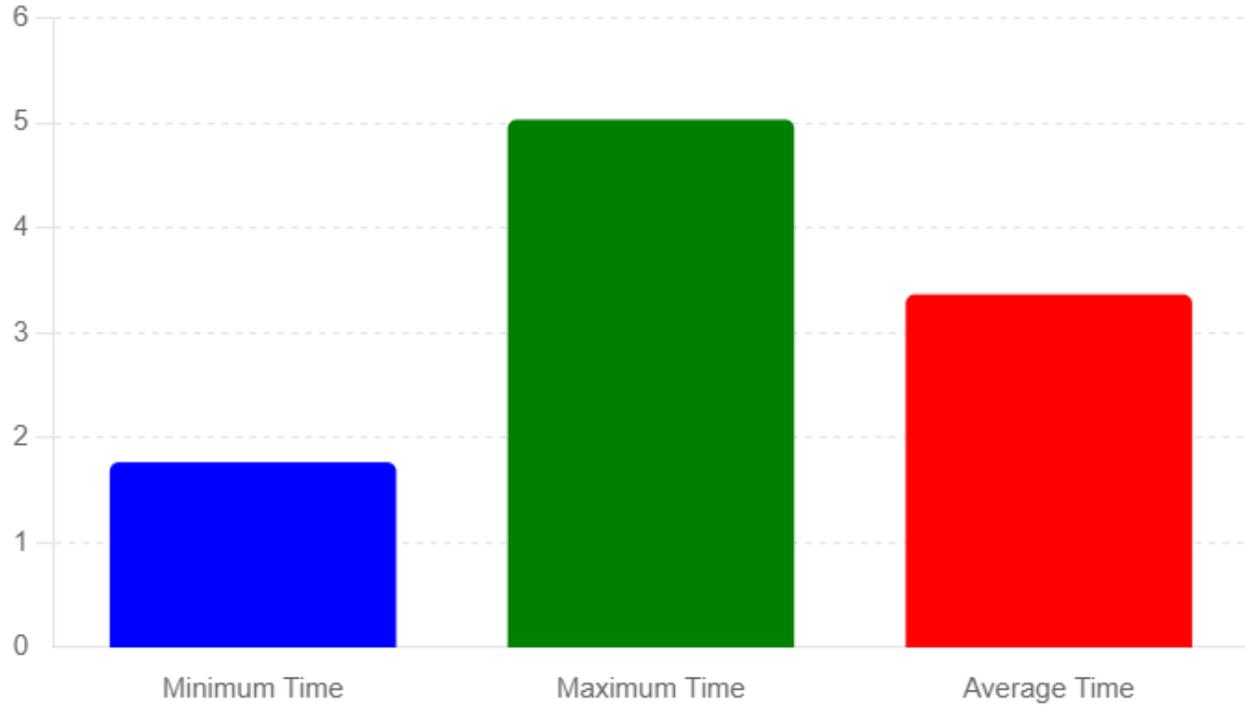
## TIME DIFFERENCE FOR TPA PATIENTS



the calculated time differences for the "TPA" company:

- **Minimum Time Difference:** 3 hours 1 minute
- **Maximum Time Difference:** 7hours, and 8 minutes
- **Average Time Difference:** 5 hours
- According to hospital policy – time should be 3 hours.
- The average delay is 2 hour.

## TIME DIFFERENCE FOR PSU PATIENTS



The calculated time differences for the "PSU" company are as follows:

- **Minimum Time Difference:** 1 hour and 46 minutes
- **Maximum Time Difference:** 5 hours and 2 minutes
- **Average Time Difference:** 3 hours, 21 minutes, and 58 seconds

According to hospital policy – Average delay is 3 hours 21 minutes

-

## TIME TAKEN TO COMPLETE MAJOR ACTIVITIES

### CASH PATIENTS

S.NO	ACTIVITIES	AVERAGE TIME
1	File Received at Billing from time of Consultants Advice	63 Minutes
2	Preparation of Final Discharge Summary	43 Minutes
3	Preparation of Final Bill	25 Minutes
4	Final Payment	24 Minutes
	TOTAL	2 Hour 35 Minutes

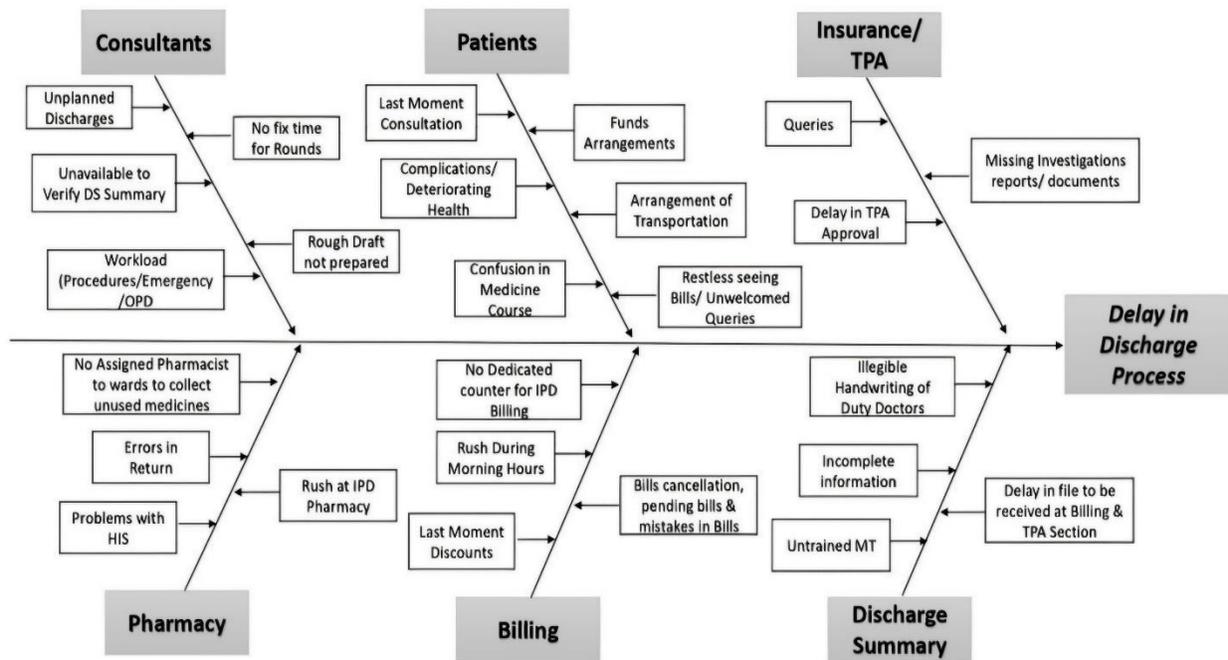
### PSU PATIENTS

SNO	ACTIVITIES	AVERAGE TIME
1	File Received at Billing from the time of Consultants Advice	86 Minutes
2	Preparation of Final Discharge Summary	59 Minutes
3	Preparation of final bill	25 Minutes
4	Patient/Attendant signs receiving of Discharge summary and given gate pass	28 Minutes
	TOTAL	3 Hours 21 Minutes

## TPA PATIENTS

SNO	ACTIVITIES	AVERAGE TIME
1	File Received at billing from the time of Consultants Advice	55 Minutes
2	Preparation of final Bill Discharge	59 Minutes
3	Preparation of Final bill	18 Minutes
4	TPA claim submission	23 Minutes
5	TPA claim approval	1 Hour 38 Minutes
6	Patient/Attendant sign receiving of discharge summary	45 Minutes
	TOTAL	5 hours

## Cause and Effect Diagram



Other Reasons for the Delay in Discharge Process

Staff unaware of the discharge process or criteria

Typing errors and Discharge summary errors by Medical Transcriptionist.

Patients likely really cannot afford to pay the enormous invoice sometimes. The

The Hospital makes an attempt to provide the discount on a humanitarian basis to which comes a bunch of certain

approval and consultation.

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♣ Lock of coordination between departments because sometimes the patient's status unknown (Cash/ Panel/ TPA)

♣ Patient card is not used unless next time.

♣ For Nurse: Nurse has ordered too much medicine: The visit is returned longer.

o Not all reports reflect in HMS and which is need to send TPA for Cashless.

Photocopies & Printing of the reports/ discharge summary takes time.

Shortage/ unavailability of GDA: The GDA staff picks up this handful of unused medicines clearance to the pharmacy and billing department IPD patient The GDA are

also given a number of other responsibilities including helping patients, doctors, nurses, behind the scenes work for the administrative staff Morning hour has

A very high GDA to the (mm) max no the same -blocking number going for expressed as a way requires discharges activities. Non-availability of GDA or absence of them causes delay in the discharge process.

Another serious issue is the preparation of late DS summary and this it is done by many steps:

a) Doctors who had not participated in the treatment were requested to write a brief summary in the notes of the patient

file. This helps reduce delays, as they no longer need to scroll through their full notes.

b) At times DS is delayed, due to pending files with Medical Transcriptionist.

c) Sometimes all are set but still can't be given to patient extinct.

nursing staff is very busy they send after wards the files to Billing section.

d) Sometime staff is trying with 2 or 3 discharges together for so delay. done thru note completion, pharmacy clearance, sending down file Hundreds of miscellaneous reasons

delayed discharge. Patient comfort. A few patient might have availability to leave after lunch.. Patients with transport are some problems that prolong their visit Not many have immediately requested queries which they ask to a consult doctor before going home which takes time.

## CONCLUSION

Discharging patients in an appropriate way is complicated. Effective and well-timed discharge can be attained by interdepartmental coordination and proper communication between all involved in the process of discharge.

In this study, the time taken for Discharge of Cash, TPA and Panel patients at Max Hospital has been analysed. It has been found that the Time taken for DS of Cash patients is delayed by 35 Minutes compared to time mentioned in Hospital Policy.

For Panel patients, it is 21 minutes delay . And for TPA patients, delay of 2 hours has been found. The various reasons associated with the delay in the process have been identified and will be worked upon. Unplanned Discharges are the main reason for the chaos in the Discharge Process

## RECCOMENDATIONS

Discharge - Planned (Medications return, cross consultations, report collection & Discharge)

Summary preparation.

However, Specific slots/ Round time of the doctor can be attempted to be fixed, in the Morning.

The registered nurse needs to know when the patient is going to discharge on which they can finish up their notes.

Gather up the reports, & return leftover medicines to the Pharmacy.

Patient can not be discharged on request immediately. He could be planned for

night shift means is proper discharge should also it means is correct discharge release

If you wait for that day, then it is not only the case itself that is delayed, but also[worst of all] you shackle the power of

other planned discharges.

◦ Parallel workflow is observed.

Discharge coordinator/ nurse coordinate missing in most cases, to tell dietitian or physiotherapy, or have to be.

You will inform the housekeeping department for wheel-chair, transportation team for the pick-up drop, linen man for the linens, and many more.

Time lease she decided on the services of ambulance services(Defaulting treating physician)

puts all the wild DS in order.

The patients which are not avail cashless so documents which are collected with the time because the nurse

can take time in gathering reports and clearances.

– Patient teaches the patient the time of the entire matter and what is done step by step in it.

TPA patients file making discharge summary, Bill,

before submission of the claim since they usually have the longest wait for approval of any claim.

File folders in different colours.

Interdepartmental Coordination And Communication (Training, Sensitization, Meetings, communication channel).

Collect [reason reporting] & clearance from department in time Nurse Training  
DISCHARGE

## LIMITATIONS OF THE STUDY

- Limited duration
- Includes only In Patient Department patients.
- TAT for TPA patients is accessed through email.

## References

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- <https://www.nabh.co/images/Standards/NABH%205%20STD%20April%202020.pdf>
- ♣ <https://www.nabh.co/images/Standards/NABH%205%20STD%20April%202020.pdf>
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- ♣ Goel S.L and Kumar R. Hospital Administration and Planning, 1st edition, Jaypee Brothers, Medical Publishers Pvt Ltd: New Delhi
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- [https://www.researchgate.net/publication/273340797\\_Role\\_of\\_discharge\\_planning\\_and\\_o  
the\\_r\\_determinants\\_in\\_total\\_discharge\\_time\\_at\\_a\\_large\\_tertiary\\_care\\_hospital](https://www.researchgate.net/publication/273340797_Role_of_discharge_planning_and_o_the_r_determinants_in_total_discharge_time_at_a_large_tertiary_care_hospital)
- ♣ <https://pubmed.ncbi.nlm.nih.gov/26845068/>
- ♣ Sakharkar BM. Principles of Hospital Administration and Planning. 2nd ed. New Delhi: Jaypee Brother; 2009

# Annexure

A	B	C	D	E	F	G	H	I	J	K	
1	Company	Category	PROPOSED TIME	Doctor Name	Req Discharge Date	Nurse Clearance Info	Pharmacy Clearance info	Planned Vs Unplanned	DICHARGE IN SYSTEM	Walk Out Time	R
2	Cash	Category C	4/26/2024 6:01	Sonia Naik	4/25/2024 18:40	4/26/2024 9:37	4/26/2024 9:39	PLANNED	26-04-2024 10:30:AM	Apr 26 2024 10:47AM	
3	TPA	Category C	4/26/2024 7:30	Bela Makhija	4/25/2024 7:02	4/26/2024 7:33	4/26/2024 7:43	UNPLANNED	26-04-2024 11:32:AM	Apr 26 2024 11:48AM	
4	Cash	Category B	4/26/2024 8:00	Saswati Maiti	4/25/2024 21:15			PLANNED			
5	Cash	Category B	4/26/2024 8:26	Rajiv Agarwal	4/25/2024 10:14	4/26/2024 11:18	4/26/2024 11:21	PLANNED	26-04-2024 01:01:PM	Apr 26 2024 1:12PM	B
6	Cash	Category C	4/26/2024 9:00	Sandeep Arora(ENT)	4/25/2024 10:11	4/26/2024 9:25	4/26/2024 9:27	PLANNED	26-04-2024 09:47:AM	Apr 26 2024 10:41AM	
7	TPA	Category C	4/26/2024 9:00	Amrit Kapoor	4/25/2024 13:14	4/26/2024 9:01	4/26/2024 9:04	PLANNED	26-04-2024 11:57:AM	Apr 26 2024 11:58AM	
8	TPA	Category C	4/26/2024 10:00	Atul NC Peters	4/25/2024 13:22	4/26/2024 11:00	4/26/2024 11:03	PLANNED	26-04-2024 04:18:PM	Apr 26 2024 4:38PM	N
9	Cash	Category C	4/26/2024 10:00	Shashi Shekhar Singh	4/25/2024 14:33	4/26/2024 10:47	4/26/2024 10:49	PLANNED	26-04-2024 10:30:AM	Apr 26 2024 10:47AM	
10	TPA	Category C	4/26/2024 10:00	Harshvardhan Hegde	4/25/2024 17:23	4/26/2024 11:10	4/26/2024 11:21	PLANNED	26-04-2024 02:42:PM	Apr 26 2024 3:35PM	N
11	Corporate	Category C	4/26/2024 10:00	Vikas Gupta.	4/25/2024 16:20	4/26/2024 10:18	4/26/2024 10:23	PLANNED	26-04-2024 11:12:AM	Apr 26 2024 11:50AM	V
12	PSU	Category B	4/26/2024 10:00	Atul NC Peters	4/25/2024 13:20	4/26/2024 10:55	4/26/2024 10:59	PLANNED	26-04-2024 11:41:AM	Apr 26 2024 11:56AM	
13	Cash	Category B	4/26/2024 10:00	Arvind Bountra	4/25/2024 19:47	4/26/2024 11:15	4/26/2024 11:21	PLANNED	26-04-2024 11:46:AM	Apr 26 2024 11:50AM	N
14	Free	Category A	4/26/2024 10:00	Varun Vij	4/25/2024 17:56	4/26/2024 10:30	4/26/2024 10:32	PLANNED	26-04-2024 10:55:AM	Apr 26 2024 11:38AM	B
15	PSU	Category B	4/26/2024 10:00	Ramneek Mahajan	4/25/2024 16:18	4/26/2024 10:09	4/26/2024 10:11	PLANNED	26-04-2024 11:58:AM	Apr 26 2024 1:50PM	N
16	Free	Category A	4/26/2024 10:00	Bhaskar Saikia	4/25/2024 16:08	4/26/2024 10:29	4/26/2024 10:32	PLANNED	26-04-2024 11:20:AM	Apr 26 2024 11:47AM	B
17	Cash	Category B	4/26/2024 10:00	Ramneek Mahajan	4/25/2024 15:28	4/26/2024 10:29	4/26/2024 10:32	PLANNED	26-04-2024 11:20:AM	Apr 26 2024 11:47AM	
18	Corporate	Category C	4/26/2024 10:00	Ramneek Mahajan	4/25/2024 15:10	4/26/2024 10:36	4/26/2024 10:39	PLANNED	26-04-2024 10:50:AM	Apr 26 2024 11:50AM	
19	TPA	Category C	4/26/2024 10:00	Ramneek Mahajan	4/25/2024 15:07	4/26/2024 10:17	4/26/2024 10:21	PLANNED	26-04-2024 02:02:PM	Apr 26 2024 2:42PM	
20	PSU	Category B	4/26/2024 10:00	Atul NC Peters	4/25/2024 13:19	4/26/2024 10:17	4/26/2024 10:21	PLANNED	26-04-2024 02:02:PM	Apr 26 2024 2:42PM	
21	TPA	Category C	4/26/2024 10:00	Atul NC Peters	4/25/2024 13:07	4/26/2024 14:48	4/26/2024 14:49:00 PM	PLANNED	26-04-2024 02:02:PM	Apr 26 2024 2:42PM	
22	Free	Category A	5/1/2024 6:00	Rajiv Agarwal	4/30/2024 16:05	5/1/2024 9:16	5/1/2024 9:21	PLANNED	01-05-2024 10:40:AM	May 1 2024 11:26AM	
23	Free	Category A	5/1/2024 8:00	Manish Malik(NICG)	4/30/2024 16:33	5/1/2024 9:18	5/1/2024 9:21	PLANNED	01-05-2024 09:57:AM	May 1 2024 11:44AM	V
24	Cash	Category B	5/1/2024 8:00	Megha	4/30/2024 14:47	5/1/2024 8:05	5/1/2024 8:07	PLANNED	01-05-2024 08:46:AM	May 1 2024 10:06AM	V
25	TPA	Category C	5/1/2024 9:38	Rajiv Agarwal	4/30/2024 12:30	5/1/2024 10:48	5/1/2024 10:53	PLANNED	01-05-2024 01:57:PM	May 1 2024 2:32PM	
26	Cash	Category C	5/1/2024 10:00	Rajesh Bawari	4/30/2024 14:52	5/1/2024 10:18	5/1/2024 10:20	PLANNED	01-05-2024 10:27:AM	May 1 2024 11:44AM	
27	PSU	Category B	5/1/2024 10:00	Atul NC Peters	4/30/2024 10:04	5/1/2024 10:23	5/1/2024 10:26	PLANNED	01-05-2024 11:44:AM	May 1 2024 11:45AM	



## DISCHARGE CHECKLIST

PATIENT NAME \_\_\_\_\_

IP NO \_\_\_\_\_

CASH

CREDIT

COMPANY NAME \_\_\_\_\_

AMOUNT TO BE COLLECTED \_\_\_\_\_

REMARKS

DATE \_\_\_\_\_

BILL PREPARED BY

(sign)

BILL SETTLED BY

(sign)

## DISCHARGE CHECKLIST

PATIENT NAME \_\_\_\_\_

IP NO \_\_\_\_\_

CASH

CREDIT

COMPANY NAME \_\_\_\_\_

AMOUNT TO BE COLLECTED \_\_\_\_\_

REMARKS

DATE \_\_\_\_\_

BILL PREPARED BY

(sign)

BILL SETTLED BY

(sign)

**LEAVE AGAINST MEDICAL ADVICE: DECLARATION AND RELEASE FORM**

**Instruction:-**

1. This form should be signed by the patient himself / herself if he/ she is an adult and in sound frame of mind.
2. The form must be signed by parent or guardian or close relative ("Representative of Patient") in case the patient is a minor or unconscious or whenever patient lacks the ability to make informed decisions.
3. The contents of the form must be read over and explained to the patient / Representative of Patient (as the case may be) by his/her relatives / interpreter in the language known to them.
4. Do not sign the consent form unless you have read / understood it thoroughly.

**अनुदेश:**

1. इस सहमति पर मरीज द्वारा स्वयं हस्ताक्षर किए जाने चाहिए यदि वह वयस्क है और सही दिमागी हालत में है।
2. इस सहमति पर अभिभावक या संरक्षक या निकट संबंधी ("मरीज के प्रतिनिधि") द्वारा हस्ताक्षर किए जा सकते हैं यदि वह अवयस्क या अचेत हो या जब मरीज सूचित निर्णय लेने में अक्षम हो।
3. सहमति फॉर्म को विशेषकर पढ़कर मरीज/मरीज के प्रतिनिधि (जैसी भी स्थिति हो) को उसके संबंधियों/दुभाषिए द्वारा उनकी परिचित भाषा में स्पष्ट की जानी चाहिए।
4. सहमति फॉर्म पर तब तक हस्ताक्षर न करें जब तक आप इसे पूरी तरह पढ़/समझ न लें।

Name: / नाम		S/o / W/o / D/o: / सुपुत्र / पत्नी / पुत्री	
Age: / आयु	Gender: / लिंग. <input type="checkbox"/> Male/ पुरुष <input type="checkbox"/> Female/ महिला <input type="checkbox"/> Transgender / ट्रांसजेंडर Please (V) whichever is relevant. कृपया जो भी उचित हो उस पर (V) लगाएं	Registration No. / रजिस्ट्रेशन नं.	IP No: आई.पी. नं.
Address: / पता		Phone: / फोन:	
Date: / तारीख:	Time: / समय:	Interpreter Service: <input type="checkbox"/> Yes <input type="checkbox"/> No दुभाषिये की सेवा: <input type="checkbox"/> हां <input type="checkbox"/> नहीं	

This is to confirm that I am leaving at my will and own insistence from ..... hospital, ..... ("Hospital") without the authorization of and against the medical advice of Admitting Primary Physician(s).

I acknowledge that I have been explained in detail the medical risks and consequences of termination/withdrawal of the present treatment and have fully understood the same. I also understand there may be other risks and complications, serious injury, or even death from both known and unknown causes.

I understand that the Hospital does not hold any responsibility in case of any adverse medical happening to me/my patient. I hereby release and absolve the hospital, its administration, personnel, doctors and treating physicians of any and all responsibilities and liabilities from any consequences including any mental or physical sufferings that I may suffer due to termination of the present treatment advised by the physician(s) and/or leaving the Hospital under these circumstances.

यह पुष्टि की जाती है कि मैं भर्ती करने वाले प्राथमिक चिकित्सक(कों) के प्राधिकार के बिना और उनकी चिकित्सा सलाह के विरुद्ध ..... अपनी मर्जी और जिद पर अस्पताल, ..... ("अस्पताल") छोड़कर जा रहा हूँ।

मैं स्वीकार करता हूँ कि मुझे मीजूदा इलाज को बंद करने/वापस लेने के चिकित्सा जोखिमों और परिणामों के बारे में विस्तार से समझा दिया गया है और मैंने उन्हें पूरी तरह समझ लिया है। मैं यह भी समझता हूँ कि इसमें ज्ञात और अज्ञात दोनों कारणों से अन्य जोखिम और जटिलताएँ, गंभीर घोट, और मौत भी हो सकते हैं।

*(Handwritten signature)*