

**Summer Internship Report**  
**at**  
**MAX SMART SUPER SPECIALITY HOSPITAL,**  
**SAKET**

**(April 22<sup>th</sup> to June 22<sup>th</sup>, 20224)**

**A Report**

**By**  
**Mr. JUNAIT MALHOTRA**

**PGDM (Hospital and Health Management)**

**2022-2024**



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

(Completion of Summer Internship from MAX  
HEALTHCARE)

The certificate is awarded to

**JUNAIT MALHOTRA**

In recognition of having successfully completed his  
Internship in the department of

**HOSPITAL OPERATIONS**

and has successfully completed his Project on

**“Streamlining Discharge TAT for Insured Patients “**

**21 JUNE ,2024**

**MAX SMART SUPER SPECIALITY HOSPITAL, SAKET**

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

We wish him all the best for future endeavors



Organization Supervisor

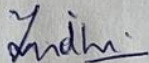


Head-HR/Department Head



### Certificate of Approval

The Summer Internship Project of titled "**STREAMLINING DISCHARGE TAT FOR INSURED PATIENTS**" at "**MAX SMART SUPERSPECIALITY HOSPITAL SAKET, DELHI**" 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.



**Dr. Nidhi Yadav**

**Associate Professor**

**IIHMR, Delhi**

FEEDBACK FORM  
(Organization Supervisor)

Name of the Student: Tunait Malhotra

Summer Internship Institution: MAX . Smart Super Speciality  
Hospital, Saket

Area of Summer Internship: Hospital Operation

Attendance:

Objectives met: ① Self leasured and disaiplned student.

② Took IP deapartment & worked hard to understand

Deliverables: ① Independantly working in IPD TPA dept. <sup>proces</sup>

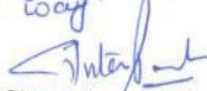
② ~~very~~ self motivated to understand all process

Strengths:

① Self discipline ② Patient handling good.

Suggestions for Improvement:

① To be more focus on develeping skill for understanding  
hospital operation on wider way.

  
Signature of the Officer-in-Charge (Internship)

Date:

Place:



FEEDBACK FORM

(IIHMR MENTOR)

Name of the Student: JUNAIT MALHOTRA

Summer Internship Institution: MAX SMART SUPER SPECIALITY  
HOSPITAL SAKET ,DELHI

Area of Summer Internship: HOSPITAL OPERATION

Attendance: Perfect adherence to internship norms

Objectives met: All objectives are met.

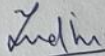
Deliverables: Met.

Strengths: Punctual, Hard working, disciplined.

Suggestions for improvement:

Date: 11/12/24

Place: New Delhi

  
Signature of the Officer in charge  
(Internship)

Certificate No – 2024/16800

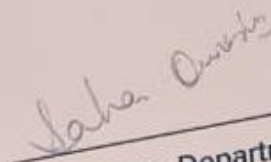


# CERTIFICATE OF ACHIEVEMENT

Max Institute of Medical Education  
Certifies that

**Junait Malhotra**

has completed Internship in the department of  
**Hospital Operation**  
at Max Smart Super Speciality Hospital, Saket, New Delhi  
from 22<sup>nd</sup> April 2024 to 21<sup>st</sup> June 2024

  
Head of the Department

  
**Dr Vinitaa Jha**  
Director - Research & Academics  
Max Healthcare Institute Ltd

## **ACKNOWLEDGEMENT**

I would like to express our sincere gratitude to the following individuals and organizations for their valuable contributions to this report:

Dr NUTEAN (Assistant General Manager MAX), for their expertise and guidance throughout the research process. for providing access to essential resources and data.

Dr. NIDHI YADAV, for their insightful feedback and suggestions on the draft versions of this report.

MAX SMART SUPER SPECIALITY HOSPITAL, and Medical Research Center, for their support and resources that made this Report possible.

I am deeply thankful for the support and encouragement we received from everyone involved in this project.

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## **ABBREVIATIONS**

**NABH                National Accreditation Board for Hospitals**

**IT                    Information Technology**

**HIS                 Hospital Information System**

**TPA                 Third-Party Administrator**

**TAT                 Turnaround Time**

**EB.                 Emergency Department**

**ER                  Emergency Room**

**CHAPTER 1: OBSERVATIONAL LEARNING**  
**OVERVIEW OF HOSPITAL**  
**INTRODUCTION TO MAX SMART SUPER-SPECIALITY HOSPITAL**





## **ABOUT:**

Max Smart Super Speciality Hospital, Saket, a unit of Gujarmal Modi Hospital & Research Centre for Medical Sciences, is a prominent healthcare facility located in South Delhi. It boasts a 250-bed capacity with state-of-the-art infrastructure including:

- 12 high-end modular Operation Theatres
- Emergency Resuscitation and Observation units
- 72 critical care beds
- 18 High Dependency Unit (HDU) beds
- Dedicated units such as Endoscopy and Dialysis

### Our Story

Max Healthcare Institute Limited is among India's largest healthcare organizations, operating 19 healthcare facilities with over 4000 beds across NCR Delhi, Haryana, Punjab, Uttarakhand, and Maharashtra. Led by Chairman and Managing Director Abhay Soi, Max Healthcare also includes Max@Home and Max Labs, offering homecare and pathology services respectively.

### Specialties in Hospital

Max Smart Super Speciality Hospital offers specialized care in:

- Cardiology
- Oncology
- Neurology
- Orthopaedics
- Kidney and Liver Transplantation
- Ophthalmology
- Robotic Surgery, among others

## Facilities in Hospital

### *Comfort During Stay*

- Private rooms with TV and free WiFi
- Mobility accessible rooms
- Family accommodation
- Laundry services

### *Money Matters*

- Health insurance coordination
- Medical travel insurance
- Foreign currency exchange
- ATM, Credit/Debit card, Net banking facilities

### *Treatment Related*

- Online doctor consultation
- Rehabilitation services
- Comprehensive pharmacy and post-operative follow-up

### *Language and Transportation Services*

- Interpreter and translation services
- Airport pickup, local transportation booking, and air ambulance services

## Max Research Centre

The Office of Research (OOR) at Max Healthcare supports a robust research enterprise focusing on clinical trials and academic advancements since 2005. It facilitates operational and technological support for researchers aiming to improve clinical care through research.

## Vision and Values

**Vision:** To be India's most respected healthcare provider, known for clinical excellence, patient care, and cutting-edge research.

**Values:** Commitment to highest standards of clinical care, patient-centric approach, and continuous improvement through innovation and research.

## Purpose

Max Smart Super Speciality Hospital aims to provide integrated medical care with the highest standards of excellence, supported by advanced technology and ongoing research initiatives

## **SECTION-2**

### **Mode of Data Collection**

- Observation (In this; visiting and observing the professionals and their working, work load was being done)
- Surveys (Asking professionals and staff of each department, about the functioning of their respective department.)
- HIS (Hospital information system )



## **SECTION-3**

### **Department's Observation and Findings**

- Department: Radiology

#### **Observations:**

The Radiology Department uses X-rays and Ultrasound scans to provide a high-quality diagnostic service to in-patients, out-patients, day care, and emergency patients. These radiological services produce images that can help with patient diagnosis and therapy

Implementation of token system in billing processes to reduce TAT.

- Department: Patient Access / Call Center

#### **Observations:**

Observing how patient queries are being resolved through telephonic website / app methods using proclivity calling module

- Department: Emergency

#### **Observations:**

An emergency department (ED), also known as an accident and emergency department (A&E), emergency room (ER), or casualty department, is a medical treatment facility that specializes in emergency medicine, or the acute care of patients who arrive without an appointment, either on their own or via ambulance.

Observing how patients are treated under observation according to their level of urgency, following triage protocols.

Department: Bed Management

Observations:

in bed management, the process starts with recording the receipt of a bed request, noting the time and requester. The status of the desired bed (available, occupied, under cleaning) is checked and documented. The allotted bed's category (e.g., general, semi-private, private) is matched to the patient's needs. Communication with internal staff regarding bed preparation and interactions with the patient or their representative to manage expectations are observed and recorded. Finally, the patient's admission to the allotted bed is confirmed, noting the time and any issues encountered.

Department: Financial Counseling

Observations:

in financial counselling, the process begins with advice provided by the admission consultant. The patient is instructed to bring the prescription or doctor's input form. Once prepared, the prescription or doctor's input form is handed over to the patient, and the receipt of this form is documented.

Department: **Insurance Management**

Observations:

The insurance management process at Max Healthcare begins with receiving the Third Party Administrator (TPA) customer and sending a pre-authorization form. Follow-up is conducted to resolve any queries, and the customer is notified upon initial approval. The final bill is prepared upon discharge intimation, and then sent along with the discharge summary to the TPA for final approval. The final approval is received, and the approval status is communicated to the patient or attendant, addressing any remaining queries to ensure resolution within defined timelines. Efficient communication, timely follow-ups, and accurate documentation are essential for smooth processing and final approval.

Department: **Front Office Discharge**

Observations:

**The discharge process at Max Healthcare involves several steps to ensure a smooth and efficient transition for patients. It begins with the HIS (Hospital Information System) updation, followed by the collection of any interim advances. Once these steps are completed, discharge intimation is sent and acknowledged. This acknowledgement triggers bill preparation, which is followed by bill settlement. Concurrently, there are processes for TPA (Third Party Administrator) involvement, including BTM (Bedside Terminal Machine) follow-up, TPA coordination, TPA approval, and TPA bill payment. After the payment receipt and the generation of the discharge slip, the final step is scroll settlement, concluding the discharge process. The turnaround time (TAT) for discharge starts as soon as the discharge intimation is alerted by nursing and acknowledged by the IP (Inpatient) billing. All patient bills are checked and updated at night as per the activity sheet sent by nurses from the ward to facilitate the discharge process efficiently.**

Department: **Front Office** Department: **Front Office**

Observations:

**Max Healthcare's admission process involves multiple steps to ensure smooth patient intake and allocation. Initially, an admission request is received and checked for doctor's signatures before determining the type of admission—routine or urgent. The cost estimate is then provided to the patient or attendant, and the room allocation is discussed. Checks are also made to determine whether the room required is a ward or ICU.**

**For surgical cases, a written cost estimate is given. An IP number and face sheet are generated, and general consent is obtained from the patient or attendant. Coordination for escorting the patient to the ward follows. The patient or attendant is then handed an advance receipt, information, and a briefing sheet. Finally, the advance amount is collected as per policy.**

## PROJECT REPORT

### **BACKGROUND**

The discharge process in hospitals is a critical component of patient care and hospital operations. Efficient discharge procedures ensure that patients transition smoothly from hospital care to home or another care setting, thereby enhancing patient satisfaction, optimizing bed utilization, and reducing healthcare costs. However, the discharge process for insured patients often involves additional steps, such as insurance claims and approvals, which can prolong the turnaround time (TAT). At Max Smart Saket, understanding the factors influencing discharge TAT for insured patients is crucial for improving operational efficiency and patient experiences.

### **AIM:**

This study aims to identify and analyse the factors that most significantly influence the turnaround time (TAT) of the discharge process for insured patients at Max Smart Saket and to propose effective strategies for reducing the discharge TAT for these patients.

### **RESEARCH QUESTION**

**What factors most significantly influence the turnaround time of the discharge process for insured patients at Max Smart Saket, and how can we reduce the discharge TAT of insured patients**

## RATIONALE OF STUDY

Lengthy discharge times for insured patients at Max Smart Saket create a cascade of problems. Patients grow frustrated, the hospital loses efficiency (beds and staff time), and revenue suffers from denied claims. This research is crucial to identify the biggest bottlenecks and craft targeted solutions to streamline the process. By reducing discharge TAT, Max Smart Saket can create a win-win for patients and the hospital's bottom line

## OBJECTIVES

- **Identify root causes of long discharge times:** The project will analyze data and hospital records to pinpoint the factors that are significantly contributing to extended discharge turnaround times (TAT) for insured patients at MAX Smart Saket.
- **Improve the discharge process:** Based on the identified root causes, the project aims to design and implement solutions that streamline the discharge process for insured patients.
- **Reduce discharge TAT:** By implementing effective solutions, the project seeks to significantly decrease the wait times associated with discharging insured patients.
- **Enhance patient satisfaction:** A more efficient discharge process is expected to lead to a more positive experience for patients, thereby improving overall satisfaction.
- **Boost hospital efficiency:** Streamlining the discharge process can free up staff time and resources, leading to increased operational efficiency for MAX Smart Saket.



## Methodology :

- **Study setting**—MAX Smart Hospital Saket New Delhi
- **Study population** — Insurance patients discharge at MAX Smart Hospital
- **Time frame** - 30th of April 2024 to 15th of June 2024.
- **Sampling method**- convenience sampling technique
- **Study design**- Observational study
- **Source of data** - HIS and Observation.
- **Sample size** - 70. (The average time taken from the hospital information system (HIS) between the final bill and discharge is calculated).
- **Data analysis**- using bar chart in Microsoft Excel.

## DATA COLLECTION AND COMPILING

### Data Collection:

Utilise the HIS to extract relevant data points, including:

- Discharge TAT for insured patients over a specific period.
- Time stamps for key discharge process steps (e.g., physician discharge order, insurance pre-authorization, medication reconciliation, billing completion).
- Communication logs between departments involved in discharge (nursing, billing, pharmacy).

### Observation:

- Conduct focused observations in specific departments involved in the discharge process. This could involve:
  - Observing workflow patterns and identifying potential bottlenecks (e.g., delays in communication, manual data entry, missing information).
  - Briefly shadowing staff (with their consent) to understand their workload and challenges.

## Data Analysis and Results:

To calculate the TAT of the discharge process for insured patients.  
The formula used is:

$$\text{TAT} = \text{Completion Time} - \text{Arrival Time}$$

- TAT 1 = Insurance Approval

Completion Time = A/L RCVD TIME

Arrival Time = FINAL BILL SENT TIME

TAT = A/L RCVD TIME - FINAL  
BILL SENT TIME

TAT = 5:22-1:37 = 3:45 HOUR

REST ON TABEL I.1

AVERAGE OF TAT = SUM OF HOUR / TOTAL NO OF  
PT

AVERAGE OF TAT = 162:21/ 49

**AVERAGE OF TAT = 3:18 HOUR**

The average TAT1 of 3.18 hours highlights significant delays in insurance approval processes. Issues include manual communication with TPAs and potential workload

issues. Recommendations include implementing digital submission systems and optimizing TPA workflows.

- TAT 2 = (Internal Processes)

Completion Time =	DISCHARGE TIME
Arrival Time =	A/L RCVD TIME

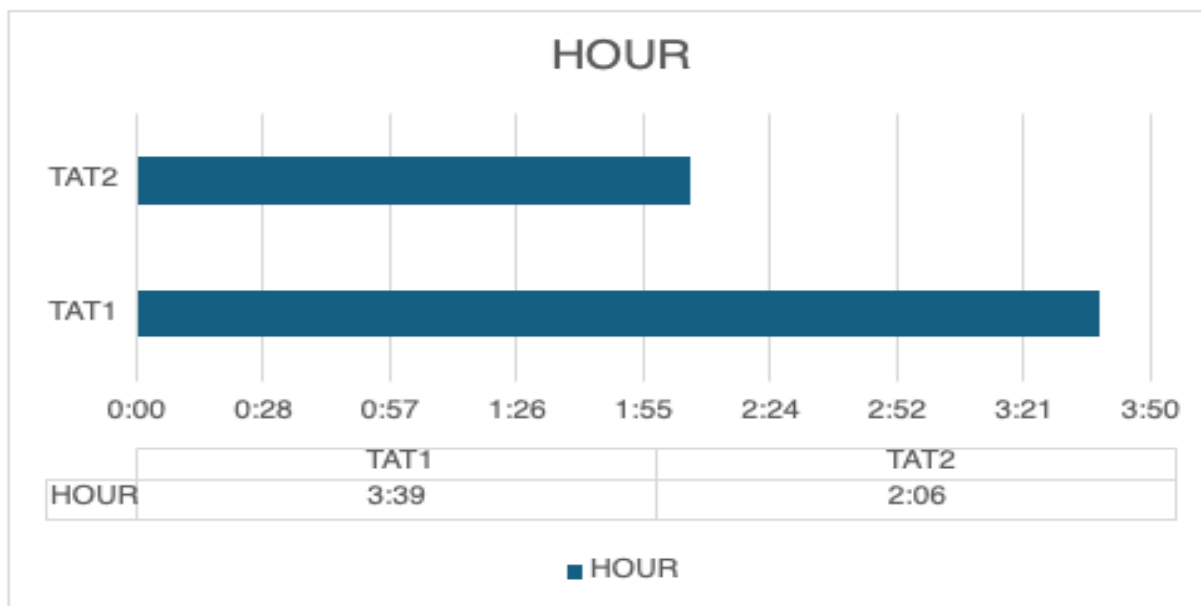
TAT =	DISCHARGE TIME-
	A/L RCVD TIME
TAT =	5:59-5:22. =37 MIN

REST ON TABEL I.1 ON TAT 2

AVERAGE OF TAT =	SUM OF HOUR / TOTAL NO OF
	PT
AVERAGE OF TAT =	103:09/49

AVERAGE OF TAT 2
= 2:06 HOUR

the average TAT2 of 2.06 hours indicates inefficient internal coordination post-insurance approval.



## INTERPRETATION

### Turnaround Time (TAT) Metrics:

**Significant Wait Time for Insurance Approval (TAT1):** The average TAT1 of 3.18 hours highlights a notable bottleneck in the discharge process at Max Smart Saket Hospital. This metric specifically measures the time taken from the initial request for insurance approval to its actual receipt. Several factors contribute to this delay, including inefficient communication channels, potentially manual processes for submitting bills to insurance companies (Third-Party Administrators or TPAs), and high workloads experienced by TPAs. These issues collectively indicate a need for streamlining communication protocols and possibly adopting digital solutions for bill submissions. Improving these processes could significantly reduce TAT1, leading to quicker insurance approvals and smoother patient discharges.

**Relatively Efficient Internal Processes (TAT2):** In contrast to TAT1, the average TAT2 of 2.06 hours suggests that once insurance approval is obtained, the internal discharge procedures within Max Smart Saket Hospital operate relatively smoothly. This metric evaluates the efficiency of internal departments involved in the discharge process, such as nursing, billing, and pharmacy. The lower TAT2 indicates effective coordination and streamlined workflows among these departments. This efficiency is crucial as it ensures that once patients receive insurance clearance, their discharge from the hospital proceeds efficiently without unnecessary delays.

### Root Causes Identified:

1. **Communication and Documentation Issues:**

- Significant delays in obtaining necessary documents (e.g., admission lists, clinical notes) from Third-Party Administrators (TPAs) due to ineffective communication channels and manual submission processes.
  - **Impact:** Impedes timely processing of patient information and treatment plans, leading to operational inefficiencies and potential errors in patient care.
2. **Manual Approval Processes:**
- The manual final approval process within the finance team contributes to delays in updating approval statuses in the Hospital Information System (HIS).
  - **Impact:** Increases Turnaround Time (TAT) for approvals, delaying patient discharge processes, and impacting revenue cycle management.

### **Impact on Patient Care and Operational Efficiency:**

- **Patient Care:**
  - **Prolonged TAT** adversely affects patient satisfaction by delaying critical treatments and discharge procedures.
  - **Inefficient resource utilization** due to delayed patient turnover and bed occupancy management.
- **Operational Efficiency:**
  - **Bed turnover rates** are affected, reducing hospital capacity utilization efficiency.
  - **Revenue cycle management** suffers from potential denied claims and delayed reimbursements.

## **Key Insights and Recommendations:**

1. **Streamline Communication and Documentation:**
  - **Implement Electronic Submission Systems:** Introduce digital platforms for submitting bills and documents to TPAs to replace manual processes. This will reduce delays caused by inefficient communication channels.
  - **Enhance Communication Protocols:** Establish clear communication protocols with TPAs to ensure timely retrieval of necessary documents like admission lists and clinical notes.
2. **Automate Approval Processes:**
  - **Upgrade Hospital Information System (HIS):** Implement automated approval workflows within the HIS to streamline the final approval process. This will reduce manual efforts and update approval statuses in real time, thereby decreasing TAT for approvals.
  - **Real-Time Tracking:** Introduce real-time tracking mechanisms for approval statuses to enhance transparency and accountability within the finance team.
3. **Optimise Internal Processes:**
  - **Staff Training:** Provide training to internal departments (e.g., nursing, billing, pharmacy) involved in the discharge process to optimize workflows and ensure efficient coordination.



- **Cross-Departmental Coordination:** Foster better collaboration among departments to minimize handover delays and streamline patient discharge procedures after insurance approvals are received.
- 4. **Monitor and Improve Patient Care:**
  - **Reduce TAT1:** Focus on reducing TAT1 by addressing communication and documentation issues. Quicker insurance approvals will lead to faster discharge processes, enhancing patient satisfaction and improving bed turnover rates.
  - **Enhance Resource Utilization:** Implement analytics tools to forecast patient demand and optimize resource allocation, thereby improving bed turnover rates and overall operational efficiency.
- 5. **Enhance Revenue Cycle Management:**
  - **Prevent Denied Claims:** Improve accuracy and timeliness in documentation and approvals to reduce the risk of denied claims. This will positively impact revenue cycle management and ensure timely reimbursements.

## conclusion :

- My study at Max Smart Saket has identified critical factors contributing to the prolonged Turnaround Time (TAT) of 5.24 hours for insured patient discharges, exceeding the NABH guideline of 3 hours. The primary issues include communication and documentation gaps between our hospital and Third Party Administrators (TPAs), as well as manual approval processes within our finance team.
- TAT1, averaging 3.18 hours, reflects delays from final billing to insurance approval, primarily due to communication inefficiencies and delays in document submission.
- TAT2, averaging 2.06 hours, covers the time from final approval to patient discharge, highlighting delays caused by manual approval processes within our finance operations.
- To improve discharge efficiency, we must streamline communication with TPAs, enhance documentation practices, and automate approval processes. Addressing these challenges will not only align us with NABH standards but also enhance patient care by ensuring timely and seamless discharges at Max Smart Saket.

Junait Malhotra ST

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