"A Study on the Discharge Process Turn Around Time (TAT) of

MAX SUPER SPECIALITY HOSPITAL, SHALIMAR BAGH, DELHI"

A dissertation submitted in partial fulfilment of the requirement

For the award of

Post-Graduate Diploma in Health and Hospital Management

By

DR. KRITIKA GAUR

ENROLLMENT NO: PG/22/046

International Institute of Health Management Research, New Delhi

2022-2024

Internship Training

at

MAX Super speciality Hospital, Shalimar Bagh, New Delhi

"A Study on Discharge Process Turn around time (TAT) "

By

Dr. Kritika Gaur

(PG/22/046)

Under the guidance of

Dr. Preetha G.S

PGDM (Hospital and Health Management)

2022-24

International Institute of Health Management Research New Delhi

CERTIFICATE

Certificate No – 2024/14034

CERTIFICATE

OF ACHIEVEMENT

MAX Healthcare

Max Institute of Medical Excellence

Certifies that

Kritika Gaur

has completed Internship in the department of

Medical Administration

at Max Super Speciality Hospital, Shalimar Bagh, New Delhi

from 18th March 2024 to 17th June 2024

Head of the Department

Dr Vinitaa Jha
EVP Research & Education
Max Healthcare Institute Ltd

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dr. Kritika Gaur student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at Max super speciality Hospital, Shalimar Bagh, Delhi from 18-03-2024 to 17-06-2024.

The Candidate has successfully carried out the study designated to him during internship training and his/her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.

Dr. Sumesh Kumar

Associate Dean, Academic and Student Affairs

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The following dissertation titled "A Study on Discharge Process Turn Around Time (TAT) " at "Max Super specialty Hospital, Shalimar Bagh, 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 PGDM (Hospital & Health 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 dissertation only for the purpose it is submitted.

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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "A Study on the Discharge Process Turn Around Time (TAT) **"** and submitted by Dr. Kritika Gaur.

Enrollment No.PG/22/046 under the supervision of Dr.Preetha G.S for award

of PGDM (Hospital & Health Management) of the Institute carried out during the period from 18/03/2024 to 17/06/2024

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This is to certify that Dr. Kritika Gaur, a graduate student of the PGDM (Hospital & Health Management) has worked under our guidance and supervision. She is submitting this dissertation titled " DISCHARGE PROCESS TURN AROUND TIME" at "MAX SUPER SPECIALITY HOSPITAL,SHALIMAR BAGH" in partial fulfilment of the requirements for the award of the PGDM (Hospital & Health Management). This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Aihatram Khan 20/6/24

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FEEDBACK FORM

Name of the Student: Dr. Kritika Gaur

Name of the Organisation: Max Super specialty Hospital, Shalimar Bagh, Delhi.

Area of Dissertation: Medical Administration

Attendance: Regular

Objectives achieved: Study on the process of discharge in a private sector super specialty hospital and analyzed the gap and make recommendations in the discharge process

Deliverables:

Strengths:

Suggestions for Improvement:

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

20/6/24

Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

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Hard work guidance and perseverance are the requisite for achieving success. Support from an enlightening or the successful completion source helps us to tread the path of it. I would like to render my sincere thanks to MAX SUPER SPECIALITY HOSPITAL, SHALIMAR BAGH for providing me with such a unique experience.

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I wish to extend my warmest thanks to my college mentor DR. PREETHA G.S for her constant support and guidance throughout the project.

ABSTRACT

Background: Discharge Turnaround Time is one of the vital indicators and is the time interval from the time a consultant approves discharge to the time when all formalities for the same have been completed. Timely hospital discharge is one of the major problems and also one of the lengthy procedures. Admission and discharge processes act as bottleneck and adversely affect the efficiency of hospitals. Delay in discharge process leads to hospital bed demand exceeding the capacity, further leading to delays in admission of new patients, transfers and cancellation of planned surgical procedures. The present study was conducted to understand the discharge process, evaluate the time utilized at various steps of discharge process and also analyze the complete discharge turnaround time of cash, credit and TPA patients. Efficient discharge processes are crucial for both patient satisfaction and hospital resource management. Reduced TAT leads to improved patient experience, increased bed turnover, and potentially higher hospital revenue. The time can vary depending on elements like discharge summary completion, billing finalization, insurance approval (if applicable), and patient handoff procedures. Studies suggest TAT can be impacted by factors such as insurance involvement, length of stay, and hospital size.

Methodology: A cross-sectional study was carried out for a period of 2 month from April 2024 to May 2024 in inpatient department of Max Super speciality Hospital, Shalimar Bagh, New Delhi. This study was a time and motion study; the total sample size 420 patients was collected. The sampling method / technique used was purposive sampling.

Result: The study was able to map the whole process of discharge and identify the gaps and various predictor variables (various TAT's) that caused delay in achieving turnaround time for discharge process. In 82% nursing clearance TAT was compliant according to the hospital guideline (till 10:00 am) and 18% was not compliant,88% pharmacy clearance TAT was compliant according to the hospital guideline (till 10:10 am) and 12% was not compliant. 83% bill preparation TAT was compliant according to the hospital guideline (till 10:30 am) and 17% was not compliant. 76% bill settlement TAT was compliant according to the hospital guideline (till 11:00 am) and 24% was not compliant.79% bed release TAT was compliant according to the hospital guideline and 21% was not compliant. Out of all the subprocesses of discharge TAT that were observed, it was found that bill settlement TAT and bed release TAT are the most time consuming subprocess among all and pharmacy clearance TAT was the least time consuming process. In overall discharge process it was observed that 79% samples are compliant within 2 hours and 21% samples are not compliant.

TABLE OF CONTENTS

ABBREVIATION LIST

PCC :	**Patient Care Coordinator**
CPRS :	**Computerized Patient Record System**
PSU :	**Public Sector Undertakings**
TPA :	**Third Party Administrator**
IPD :	**Inpatient Department**
TAT :	**Turn Around Time**
HMIS :	**Hospital Management Information System**

MAX SUPER SPECIALITY HOSPITAL, SHALIMAR BAGH

INTRODUCTION:

Max Hospital, Shalimar Bagh is a 402+ bedded Super Speciality Hospital, provides services in the following medical specialities: orthopaedics, nephrology, renal transplant, urology, general and laparoscopic surgery, neurosciences, cancer, and minimal access, bariatric surgery. It has treated more than 400,000 patients and is equipped with cutting-edge technology and a team of knowledgeable staff, the IQ PET CT, 16-slice CT scanner, the Phillip ECO machine, the neurosurgical microscope and the holmium laser are examples of cutting-edge technology. The most recent development radiation therapy has been implemented at there Max Institute of Cancer Care including quick and precise radiation therapy techniques using a true beam linear accelerator capable of Intensity modulated RT etc. The facility also has Multi Channel HDR Brachytherapy in Dedicated OT with capability of Intra-cavitary, Interstitial, Intraoperative (IORT) brachytherapy. The institute also offers Laparoscopic cancer surgeries, Breast Conservation Surgeries (BCS), Sphincter Preservation Surgery, Cosmetic Reconstructive Surgery, and Hyper-thermic Intraoperative Peritoneal Chemotherapy (HIPEC). This is why we are considered the best hospital in India.

With over 34 clinical specialities, Max Super Specialty Hospital, Shalimar Bagh offers the advantage of integrated medical care in a multidisciplinary setting provided by a faculty of highly qualified doctors, nurses, & healthcare professionals. Comprehensive specialist services are provided with advanced medical technology, making it a regional hub for complex procedures such as neurovascular

interventional procedures, targeted cancer treatments, heart surgeries, orthopaedic surgeries, and kidney transplant programs, making it the best hospital in India. Max Super Specialty Hospital, Shalimar Bagh is an established leader among healthcare providers with multiple awards and industry accreditations to its name for world-class infrastructure, advanced technology, and health and safety standards.

ABOUT HOSPITAL

402 +

Beds Facility

482+

Trained Staff

348+

Doctors

34+

Specialities

ACCREDITATION AND QUALITY

Quality Policy

- Providing high quality care according to the health needs of the patients.
- Facilitating patient satisfaction by exceptional service and ensuring the dignity and rights of patients.
- Providing a safe and conducive work environment for staff.
- Ensuring accountable, consultative and transparent management process.
- Providing basic and continuing education for staff.

Accreditations

Our **NABH** accredited hospitals offer **best in class services to our patients**

NABL accredited Labs.

EWS Compliance (ECONOMICALLY WEAKER SECTION)

-Provision for Economically Weaker Section (EWS)

-Eligibility criteria for patients to avail free treatment are patients with family income up to Rs. 17,497/- per month (Matter Sub – Judices with Hon'ble High Court)

-40 beds allocated for EWS patients: 24 Non Critical and 16 Critical.

-A dedicated desk has been made to cater to EWS patients.

-Nodal Officer, Shri. Nitesh Vaish, can be contacted at 8448974009 or mail him at nitesh.vaish@maxhealthcare.com.

-Daily availability of beds is mentioned on the notice board kept at Admission Counter as well as updated on the Govt. website.

Chairman's Message

Our level of care and attention to detail in everything we do at Max Super Speciality Hospital truly set us apart and make us the healthcare provider of choice for millions of patients. The institution's foundations are quality, medical and service excellence, and attention.

VISION, MISSION & VALUES

VISION

To establish a facility dedicated to the greatest standards of medical & service excellence, patient care, scientific knowledge, and medical education in order to provide world-class healthcare with a total service focus.

MISSION

-Excellence in Professionalism in the Provision of Quality Care.

- Assure care with ethics and integrity.

- Follow national and international standards for healthcare.

- Offer top-notch medical care to all societal segments.

- Expand the boundaries of care through research.

VALUES

COMPASSION: We are always sympathetic to our patients' concerns and have a deeper grasp of patients than most. This promotes a culture of care that is patient-centred respect one another and our patients, making sure their needs are handled in a way that maintains their dignity. Every time, we rise to the challenge because we recognise the favourable societal influence we can have.

EXCELLENCE: We continually push ourselves to raise the bar for medical knowledge and patient care, and we are passionate about doing so. We are aware that attaining the top status requires daily improvement.

EFFICIENCY: We foster a supportive environment for healing by being quick to respond to our patient's needs and providing the care they require precisely on time. We provide our patients with the precise care they need while being focused, quick, practical, advanced, and seamless.

CONSTENCY: Every time, we follow through on our promises and make sure the highest standards of patient care are reached. We think that maintaining consistency is the only way to win the patient's trust and accomplish our objectives.

SPECIALITIES

-Cancer Care/Oncology

-Kidney Transplant

-Neurosciences

-Obstetric & Gynaecology

-Nephrology

-Cardiac Sciences

-Internal Medicine

-Orthopaedics & Joint Replacement

PROJECT

A Study on the Discharge Process Turn Around Time (TAT) of Max Super Speciality Hospital, Shalimar Bagh, Delhi

INTRODUCTION:

Discharge process:

The term "hospital discharge process" refers to the set of procedures wherein a team of professionals from different disciplines collaborate with the patient to ease their transition from one setting to another. Length of time it takes to be discharged from the hospital is a crucial sign of patient satisfaction and care quality. In order to maintain high standards of patient care, bed availability, and patient satisfaction, on depends on effective discharge management is essential. Considering the importance of the discharge process from the viewpoints of hospitals and patients. Numerous studies have been conducted to find methods for shortening the hospital discharge process's duration.

Hospital admission procedures are also lengthened by discharge delays. In additional to increasing patient satisfaction and bills, any unnecessary services cause delays in the patient's overall discharge. Rapid and efficient discharge procedure can guarantee the availability of new patients early on, which can cut down on hospital admission waiting times or even lower the number of patients who are turned to away because there aren't enough beds. The discharge process is the final interaction a patient has with the medical staff. Patient assessment, diagnosis, planning, execution and evaluation are all parts of the discharge process.

Discharge Planning:

Discharge planning aims to decrease length of stay in the hospital, prevent unplanned readmissions and enhance service coordination after hospital discharge. The creation of a customized plan for each patient leaving the hospital with the intention of reducing expenses and raising patient satisfaction. Discharge planning should guarantee that patients are discharged from the hospital at the right time for their care and that post discharge services will be arranged with enough notice. Regular reviews and updates of care plan will ensure that the individuals in question and their caregivers are kept fully informed and involved at every step of the process. A continuous process that should begin before admission and as soon as feasible for all subsequent admissions include planning for hospital discharge. Discharge

planning involves two ends: the front end and the back end. Front end members include physicians, nurses, patients and their relative. Back end have a billing division, TPA and insurance department, pharmacy and diagnostics and medical records. Every front-end and back-end representative involved in the patient representatives are fully involved during the discharge process.

To understand the flow process of discharge monitoring was done how long actually took for each step from the notification of discharge to the actual vacancy of room, including the time it took for handover, billing submission, pharmacy clearance, final bill intimation, final bill clearance, final summary and the time taken for room preparation for the next time.

Cash, Panel & Insurance/TPA

The hospital releases the cash, Panel and insurance/TPA group of patients, which includes cash, credit and insured/TPA patients.

- A cash patient is one who, at the time of discharge, pays the full amount due with cash, credit/debit cards, UPI payments, local currency.
- Patients who are enrolled in panels pays a discounted rate for services, alternatively, the patient pays and gets reimbursed, or the relevant panel pays the full cost. CGHS, DGHS, POLICE, ONGC, NDRF were few of the panels that were examined in the study.
- An insurance policy is a legal agreement that offers a person or organisation financial protection or reimbursement from an insurance company against losses. The company pools the risks of its clients, for which insured pays a premium, in order to make payments to the insurer more manageable.

The insurance provider than reimburses the insured for medical costs under the following guideline:

-The insured must be admitted to hospital or nursing home.
-Treatment of the diseases not be excluded under the policy
-The maximum amount of compensation can only be paid out of the total amount insured under the policy.

Third Party Administrator (TPAs): TPAs are the link in the chain that connects all the parties involved in the delivery of healthcare, including physicians, hospitals, patients, insured and the insurers. For example MAX BUPA.

The discharge procedure denotes the point at which patients moves from a medical facility back to their residences or the next phase of care. Discharge though necessary, can be drawn out and unpleasant process for both patients and staff. Extended discharge TAT (Turnaround time) can have detrimental effect on:

- Patient Experience: Prolonged wait periods can cause tension, frustration, neglect, anxiety can result from prolonged wait time.

Numerous factors, according to research, may contribute to extended TAT such as:

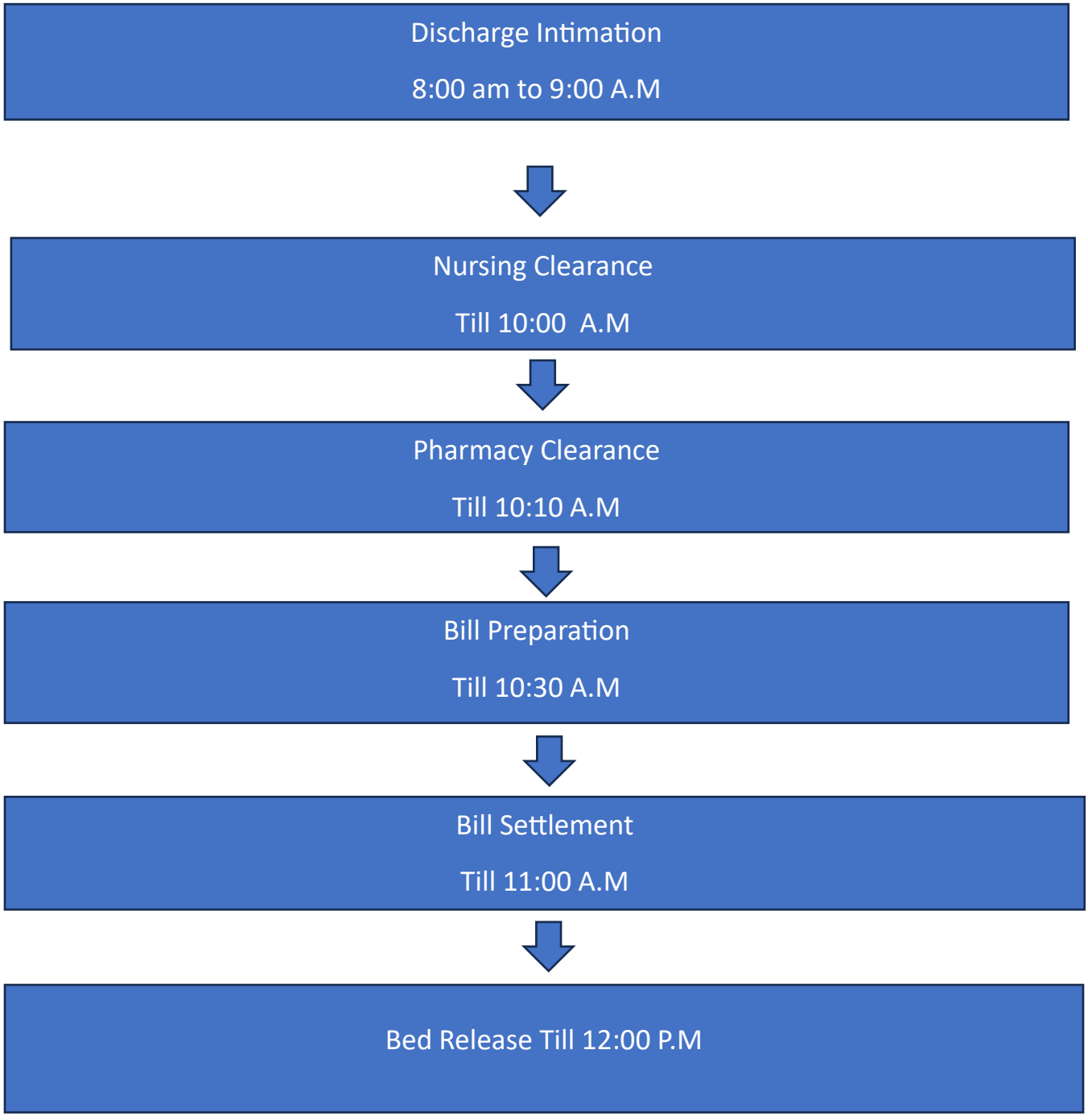
❑ Communication gaps: Poor communication among departments such as social services, case management, and medical staff can result in missing or delayed information or delays in approvals.

❑ Documentation for discharge: Difficult and time -consuming paperwork procedures can cause delays in the discharge process.

❑ Patient complexity: It may take longer to plan and coordinate a patient's discharge, when they have complicated medical issues

❑ Employee levels: A shortage of workers may make it more difficult to finish discharge task on time.

Discharge process TAT mapping of Max Hospital, Shalimar Bagh:



OBJECTIVE OF THE STUDY

- To assess the TAT of discharge process in a private sector super specialty hospital.
- Analyze gap and make recommendations in the discharge process.

LITERATURE REVIEW

- According to Mr. Raj Kumar Sharma*, Dr. Nipul Kapadia, Mr. Sachin Raval, Mr. Sanket Shah, Mr. Amit Patel,2022 examined a study of discharge process with strategy to reduce the turn around time in tertiary care hospital. The data available in concerned areas are gathered on day to day basis for study include the discharge summaries on regular basis feedback from patient and staff of various departments and ward through pre tested question is obtained. • The discharge process was observed for one week to find out the working pattern and the process in the inpatient services department and to identify the time delay by discussing with the staff of the department questionnaire method.

  Before intervention, author analysed that patients overall experience about discharge process 58% opined as excellent, 21% as very good, 14% opined as good, 5% average, 2% opined as poor. • But after intervention and after applying above method significant patient satisfactory result obtained. After intervention 72% patients opined as excellent, 17% very good, 9% good, 2% average and none patient opined discharge process as poor.

- According to Kumar, Jatin,2022 done a study of the Causes of Delay in Patient Discharge Process in a Large Multi-Specialty Hospital with Recommendations to Improve the Turn around Time. Interdisciplinary team of clinicians, nursing and hospital administrators including experts in process improvement to examine the problems in discharge process were created. Only the cash and insurance patients of these wards were included under the present study and various schemes such as ECHS, Corporate tie ups, and Government schemes were excluded. The total of 100 inpatients for discharges was considered for analysis. Discharges that took place after 6:00 pm were not recorded.

  It was found out that much time is needed for patient settlement of billing and patient seeing off from hospital because of varied reasons and solution to which were suggested in solution of discharge process issues. • 80% delays in Turn Around Time of discharge process, i.e., from “file

sent to billing-bill preparation" to "finance clearance-discharge clearance slip receives to the patient." So these are the factors where the improvement needs to be done.

- According to Mr. Khanna et al. (2016) studied the timeliness of the discharge process and its impact on crowding and flow performance at a tertiary care hospital. .. The objectives of the study included figuring out when patients should be discharged from the hospital, minimizing workload and overcrowding and enhancing the flow of inpatients. Over a fifteen-month period, the patient journey—from admission to discharge from the hospital—was examined and enhanced with the use of the patient. Using discrete event stimulation, the flow performance was understood. Nine more beds were available for incoming inpatients since 80% of the discharges were finished by the afternoon. The length of stay, bed occupancy, and the average time it takes for a bed to become available for use were all targeted and decreased. The study found that discharges that are finished by 11 AM or before noon enhance patient performance and flow.

- According to Dr. Soundara Raja (2017) sought to determine the variables affecting patient admission delays by conducting study in a tertiary care hospital. The study's objectives were to determine the root cause and offer suggestions for fixing the problem with the use of relevant data. The patients' dissatisfaction stemmed from various factors, such as the extended duration required to create the discharge report, authorization from the pharmacy, postponements brought about by support services, and nursing staff.

- The study by Sunil et al. (2016) was conducted just at Bangalore's M.S. Ramaiah Hospital. The study included every patient who was admitted to the hospital and released in March of 2016. Every ward recorded the break time for discharge.The longest period of time needed for discharge was mostly accounted for by that billing period. Another factor contributing to the delay in patient discharge was the writing of discharge summaries. The researcher emphasized the necessity of ward-based management, pertinent policies for the employees engaged in the discharge procedure, and efficient departmental coordination.

Additionally, patient counselling regarding the significance of billing before the day of release was emphasized. The findings showed that the majority of patients—roughly 50% of those discharged—were taking longer than the 180 minutes that the NABH recommended. It was discovered through correlation and regression analysis that billing time made up the largest portion of the overall discharge time. Another factor contributing to the delay in patient discharge was the writing of discharge summaries. The researcher emphasized the necessity of ward-based management, pertinent policies for the employees engaged in the discharge procedure, and efficient departmental coordination.

- According to Priya Ravi and Ankit Singh As of October 20, 2019, the hospital's in-house Third Party Administrator (TPA) department is essential to providing patients with hassle-free, cashless insurance services. The goal of this study is to identify the factors that influence a patient's overall loyalty to the hospital when it comes to using private health insurance to pay for future medical services. Two discernible components, "Physical evidences" and "Professionalism," accounted for 57% of the overall variation. The hospital has experienced a notable and favourable increase in the patient loyalty of insured patients due to these two identified characteristics.

- According to Ankit Singh and Priya Ravi The hospital's internal Third Party Administrator (TPA) department is crucial to provide patients hassle-free, cashless insurance services as of October 20, 2019. The purpose of this research is to determine the variables that affect a patient's general hospital loyalty in terms of using private health insurance to cover future medical expenses. "Physical evidences" and "Professionalism," two distinguishable elements, accounted for 57% of the total variation. These two highlighted factors have led to a significant and positive increase in insured patient loyalty at the hospital.

- The 2021 study "A Study on Reducing the Discharge Turnaround Time of IPD Patients at AVBRH" by Chaudhari et al. looks into discharge delays in an Indian medical college hospital.

The study discovered that improved departmental cooperation, with a focus on discharge summaries, billing, and medication clearances, can shorten the average discharge turnaround time. The study observed that the discharge process involved unnecessary delays, impacting patient experience and hospital bed available. Although it wasn't mentioned specifically in the report, the emphasis on lowering it implies that the average discharge turnaround time was probably substantial. There were delays at several phases of the discharge procedure, such as: Discharge summaries that need to be revised are incomplete. Clarification is required on billing matters. The lengthier than anticipated clearance process for medications.

According to the study, these delays might be greatly decreased by better coordination and communication between the billing, pharmacy, medical, and nursing departments that are involved in discharge.

RATIONALE

In order to improve overall hospital efficiency, lower costs and improve patient satisfaction, it is imperative to optimize discharge time-to- admit. .In order to find ways to streamline the process. This study will look into the causes of discharge delays and pinpoint methods for expediting the procedures.

RESEARCH METHODOLOGY

- **Area of Study**: MAX Super Speciality Hospital, Shalimar Bagh, Delhi by the Medical administration department.

- **Study Design**: The study is cross-sectional on observation and on process mapping and quantitative research. It is quantitative research since it enumerates and analyses the percentage of discharge process TAT of patients.

- **Data Analysis:**

Subprocess Identification:

Review the Process Mapping: We'll utilize a flowchart or diagram to visually represent the process of discharge TAT according to MAX Hospital. Identify each individual step involved in the discharge process. The guidelines to be followed are-

Discharge Intimation starts when floor manager calls the doctor from (8:00 AM to 9:00 AM): To confirm the discharge and request them to sign the discharge summary of patient.

1. **Nursing Clearance (Till 10:00 AM):** The next step in discharge process is the nurse determines the patient is medically stable and ready for discharge. This includes final assessments, medication reconciliation, and discharge education. (Estimated Time: Until 10:00 AM).
2. **Pharmacy Clearance (Till 10:10 AM):** The pharmacist reviews and dispenses any medications the patient needs to take at home. Any outstanding medication charges are added to the final bill. (Estimated Time: 10 minutes).
3. **Bill Preparation (Till 10:30 AM):** The billing department finalizes the patient's bill, including charges for medications, tests, procedures, and room stay. (Estimated Time: 20 minutes).

4. **Bill Settlement (Till11:00 AM):** The patient or their representative reviews and settles the bill. This may involve cash payment, credit card processing, or insurance verification. (Estimated Time: 30 minutes).

5. **Bed Release (Till12:00 PM):** Once the bill is settled, the patient receives discharge instructions and a final check-up by the doctor (if necessary). Housekeeping staff prepares the room for the next patient. (Estimated Time: Up to 1 hour).

Total Estimated Time: This simplified process map suggests a discharge turnaround time (TAT) of approximately 2 hours, from nursing clearance to bed release.

- **Data Organisation:** Organising the data in a spreadsheet. Includes columns for Patient UHID, Age/Sex, Room no., Category, Subprocess name including time taken in minutes or hours.

- **Subprocess Duration Calculation:** For each subprocess, Will calculate the average time spent by all the patients in the sample size. This will represents the average time it takes to complete the particular step in the discharge process.

- **Bottleneck Identification:** Will analyse the average times to identify subprocesses with significantly longer duration than others. These are the potential bottlenecks that delays the entire discharge process TAT.

- **Variability Analysis**: Calculate the range for each subprocess duration. High variability might indicate inconsistencies in how the subprocess is performed by different staff members**.**

- **Sample Size**: 420 patients of hospital.
- **Sampling Method**: Purposive sampling.
- **Duration of Study:** 1st April 2024 to 10th June 2024.

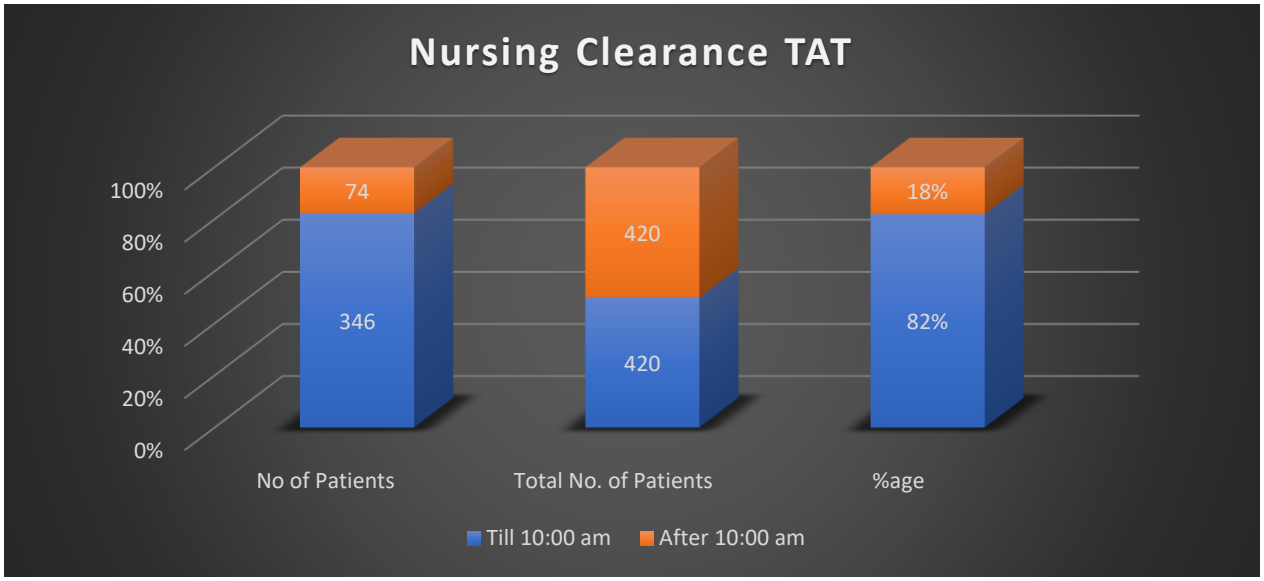
- **Source of Data:** We'll gather information from patient's electronic medical records through CPRS software used in max hospital.
- **Data collection Tool:** For the purpose of quantitative study, all the time intervals were noted on a track sheet, created, and input into an excel spreadsheet before being examined to achieve predetermined goals.

- Data was recorded in this sequence in the discharge process TAT checklist:
  - ✓ S No.
  - ✓ Date
  - ✓ UHID
  - ✓ Patient's Name
  - ✓ Age/Sex
  - ✓ Category
  - ✓ Doctor's Name
  - ✓ Bed Name
  - ✓ Floor
  - ✓ TAT for Discharge Intimation.
  - ✓ TAT for Nursing Clearance.
  - ✓ TAT for Pharmacy Clearance.
  - ✓ TAT for Bill Settlement.
  - ✓ TAT for Bill Preparation.
  - ✓ TAT for Bed Release.

OBSERVATIONS AND FINDINGS

Nursing Clearance TAT

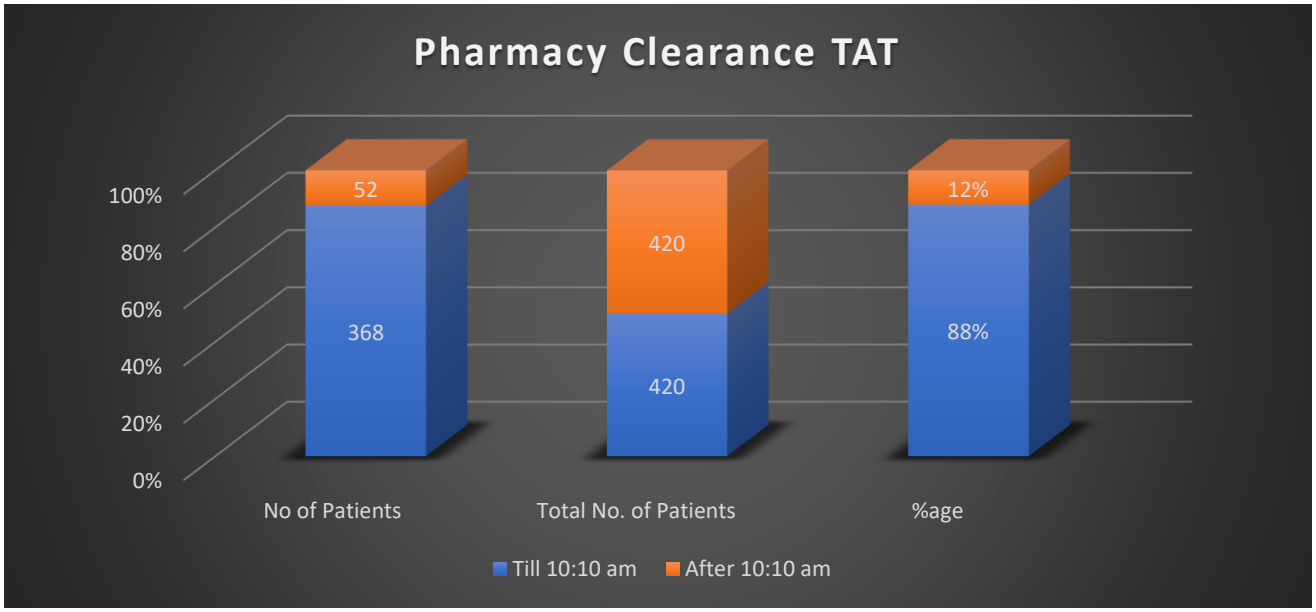
Time	No of Patients	Total No of Patients	Percentage
Till 10:00 am	346	420	82%
After 10:00 am	74	420	18%



Out of 420 samples that were observed, 346 samples were found to be compliant and 74 samples found to be non-compliant according to the given time frame.

Pharmacy Clearance TAT

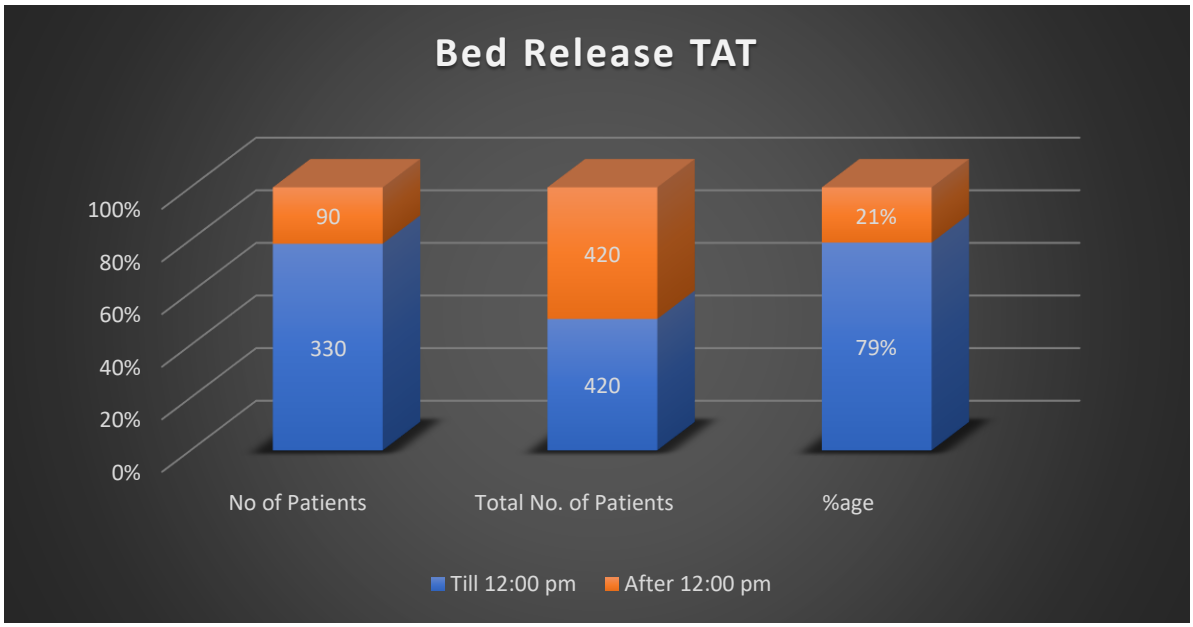
Time	No of Patients	Total No. of Patients	Percentage
Till 10:10 am	368	420	88%
After 10:10 am	52	420	12%



Out of 420 samples that were observed, 368 samples were found to be compliant and 52 samples found to be non-compliant according to the given time frame**.**

Bill Preparation TAT

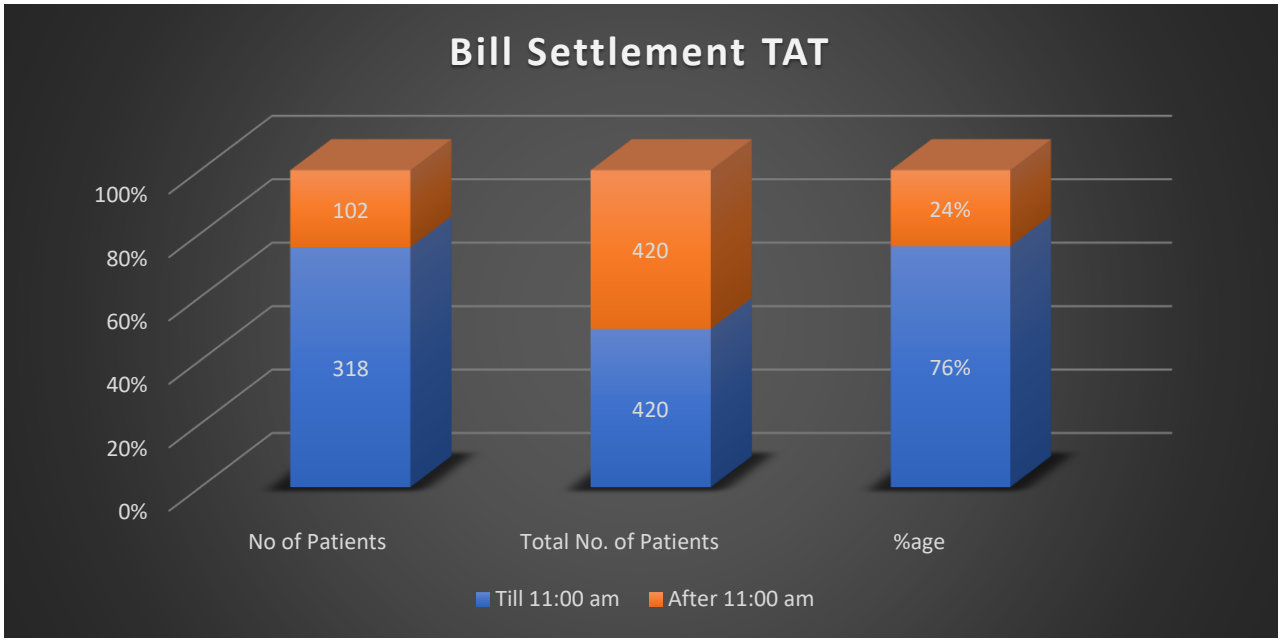
Time	No. of Patients	Total No. of Patients	Percentage
Till 10:30 am	330	420	79%
After 10:30am	90	420	21%



Out of 420 samples that were observed, 330 samples were found to be compliant and 90 samples found to be non-compliant according to the given time frame**.**

Bill Settlement TAT

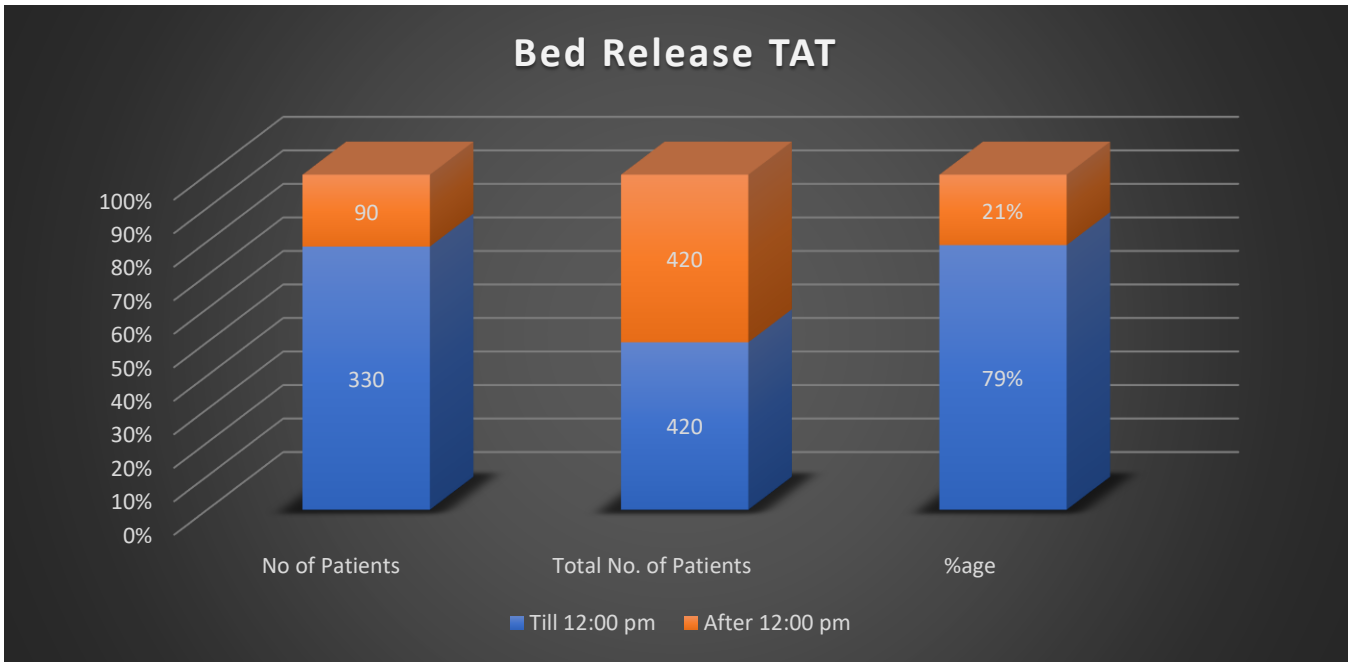
Time	No. of Patients	Total No. of Patients	Percentage
Till 11:00 am	318	420	76%
After 11:00 am	102	420	24%



Out of 420 samples that were observed, 318 samples were found to be compliant and 102 samples found to be non-compliant according to the given time frame**.**

Bed Release TAT

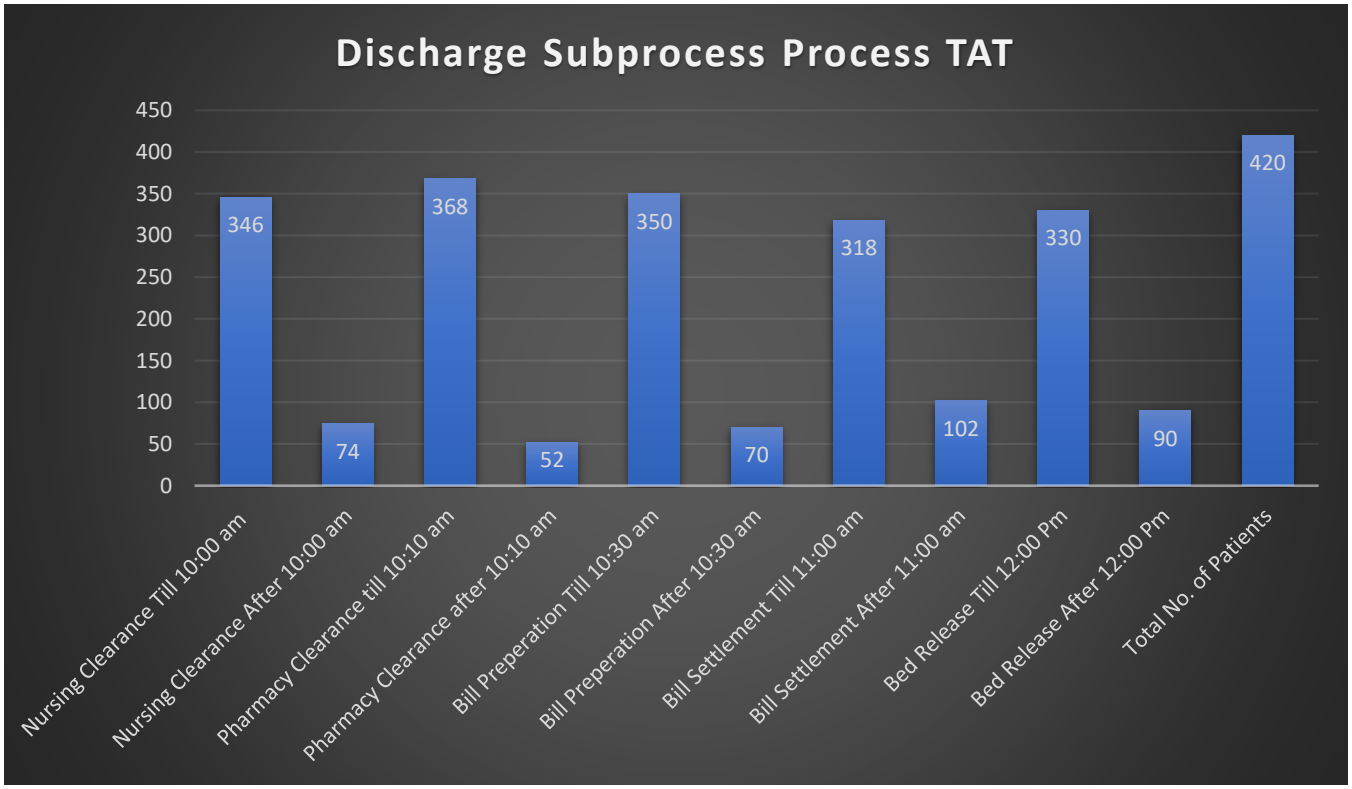
Time	No. of Patients	Total No. of Patients	Percentage
Till 12:00 pm	330	420	79%
After 12:00 pm	90	420	21%



Out of 420 samples that were observed, 330 samples were found to be compliant and 90 samples found to be non-compliant according to the given time frame.

Nursing Clearance Till 10:00 am	Nursing Clearance After 10:00 am	Pharmacy Clearance till 10:10 am	Pharmacy Clearance after 10:10 am	Bill Preperation Till 10:30 am	Bill Preperation After 10:30 am	Bill Settlement Till 11:00 am	Bill Settlement After 11:00 am	Bed Release Till 12:00 Pm	Bed Release After 12:00 Pm	Total No. of Patients
346	74	368	52	350	70	318	102	330	90	420

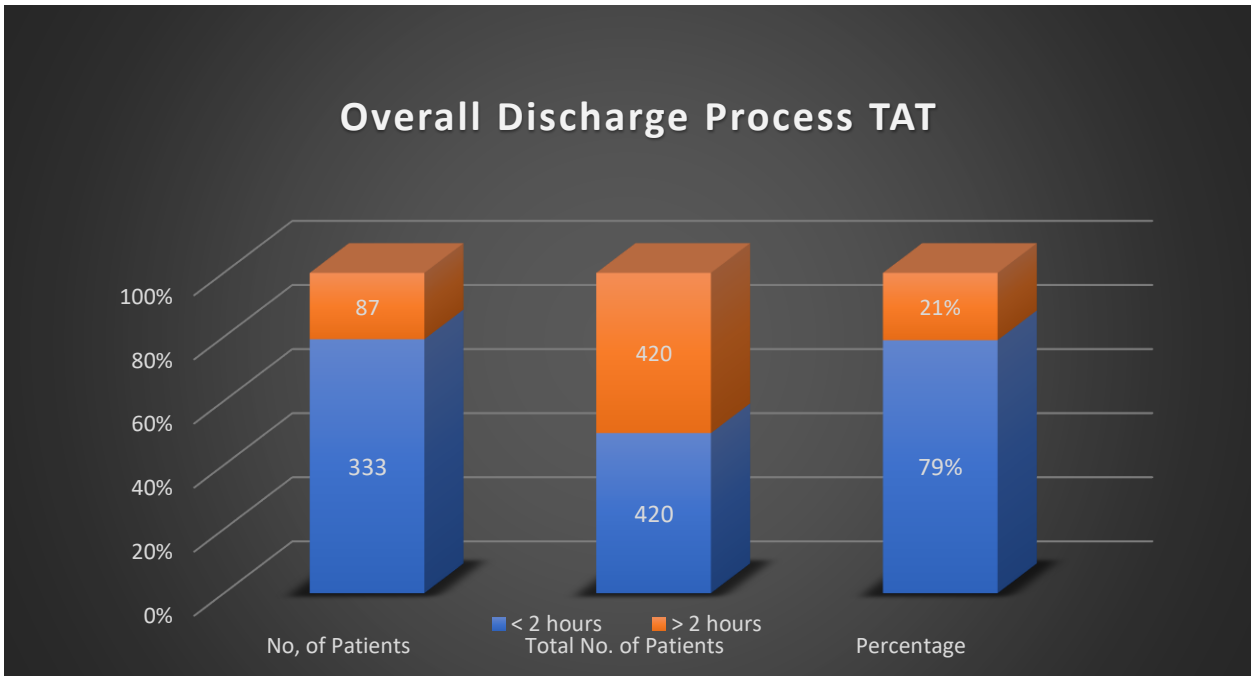
Discharge Subprocess TAT



Out of all the subprocesses of discharge TAT that were observed, it was found that bill settlement TAT and bed release TAT were the most time consuming subprocess among all and pharmacy clearance TAT was the least time consuming process.

Overall Discharge process TAT

Time	No, of Patients	Total No. of Patients	Percentage
< 2 hours	333	420	79%
> 2 hours	87	420	21%



Out of 420 samples that were observed, 333 samples were found to be compliant within 2 hours and 87 samples found to be non-compliant**.**

KEY GAPS/OBSERVATIONS:

- **Gaps in Nursing Clearance:**

-Shortage of staff can make it difficult for nurses to complete clearance on time.

-Missing or incomplete documentation from nurses can slow down the clearance process.

- **Gaps in Pharmacy Clearance:**

-Incomplete medication order by doctor with missing information, unclear instructions can require clarification from the prescriber, causing delays.

-Lack of communication between nurses and pharmacists.

-Patients not be adequately informed about discharge medications, leading to confusion and delays.

-Delays in receiving medications from suppliers hold up the dispensing process.

-Pharmacy staff is burdened with repetitive administrative tasks, taking away time from medication review and dispensing.

Gaps in Bill Preparation:

-Delays in updating patient information cause discrepancies.

-Lack of automation in generating bills or submitting claims.

-Delays in submitting claims to insurance companies.

-Limited staff struggle to keep up with the workload, causing delays.

-Technological glitches in software delays the bill preparation.

- **Gaps in Bill Settlement:**

-Inaccurate Bills lead to patient disputes and delays in payment.

-Slow Claim Submission to insurance companies extends the overall billing cycle.

-Insurance companies takes time to process claims and verify coverage.

-Inefficient processes for following up on unpaid bills causes delays in collecting payments.

- **Gaps in Bed Release:**

- Unresolved insurance issues, billing problems.

- Slow discharge paperwork processing including medication orders and post discharge instructions.

- Delays in arranging transportation services to take the patient home hold up their departure.

- Shortage of housekeeping staff.

RECOMMENDATIONS:

For improving nursing clearance gaps

- Enhanced nurse staffing to guarantee the timely completion of all necessary duties, such as clearances.

- Encourage transparent communication between nurses and clearance personnel. Nurses should be at ease when inquiring about any uncertainties and seeking further information on documentation required in order to prevent any potential delays**.**

For improving pharmacy clearance gaps:

- Utilize uniform medication order forms that include distinct sections for necessary details such as medication name, dosage, frequency, route, and duration. This helps minimize the chances of overlooking any crucial information.

- Create standardized protocols for communication between nurses and pharmacists. These protocols should encompass instructions on the necessary details such as seeking clarification on medication orders and the appropriate methods to document these exchanges.
- Develop a platform for pharmacists to electronically assess medication orders and identify any absent details or possible concerns that necessitate clarification from nurses.
- Pharmacy management software can be used to streamline processes like insurance verification, prior authorization requests, and prescription refills, allowing pharmacists to dedicate more time to important tasks such as medication review and interacting with patients.

For improving bill preparation gaps:

- Streamline patient registration and intake processes to minimize errors during data entry. This could involve implementing electronic health record (EHR) systems
- Implementing automated billing systems enables the generation of bills using pre-defined rules and precise patient information. This results in a reduction of errors and the streamlining of the billing process.
- Utilize the electronic submission of claims to insurance companies in order to expedite the processing of claims and minimize any delays in receiving payments.
- Evaluate the existing workload within the billing department in order to establish suitable levels of staffing. This assessment should take into account variables such as patient volume, complexity of bills, and types of insurance coverage.
- Develop a consistent maintenance schedule for the billing software system. This may include implementing preventative maintenance protocols and conducting regular data backups to reduce the risk of downtime and data loss resulting from software malfunctions.

For improving bill settlement gaps:

- Implement standardized coding practices for medical procedures and diagnoses to ensure accurate billing based on established guidelines.

- Implement an automated software for reviewing and editing claims to identify and correct any errors or missing information prior to submission to insurance companies reduces the delays.
- Patients should be given pre-service cost estimates whenever feasible. These estimates should take into account expected procedures, medications, and facility fees, while also considering their insurance coverage.

For improving bed release gaps:

- Implement a system for verifying insurance coverage and patient eligibility for benefits before admission. This can help identify potential coverage issues and resolve them proactively.

- Create effective and transparent lines of communication among the various departments responsible for patient discharge, including nursing, social work, case management, billing, and pharmacy. This may entail implementing dedicated communication platforms, conducting regular huddles, or establishing standardized workflows.

- Recommend the recruitment of more nurses based on the workload assessment to mitigate staffing deficiencies and maintain suitable nurse-to-patient ratios to promote safe and effective patient care.

- Consider investing in advanced cleaning equipment and technologies that can shorten cleaning times without compromising quality. This could include automated floor cleaners or disinfectant wipes specifically designed for hospital use.

CONCLUSION:

- 82% nursing clearance TAT was compliant according to the hospital guideline (till 10:00 am) and 18% was not compliant.

- 88% pharmacy clearance TAT was compliant according to the hospital guideline (till 10:10 am) and 12% was not compliant.
- 83% bill preparation TAT was compliant according to the hospital guideline (till 10:30 am) and 17% was not compliant.
- 76% bill settlement TAT was compliant according to the hospital guideline (till 11:00 am) and 24% was not compliant.
- 79% bed release TAT was compliant according to the hospital guideline and 21% was not compliant.
- Out of all the subprocesses of discharge TAT that were observed, it was found that bill settlement TAT and bed release TAT are the most time consuming subprocess among all and pharmacy clearance TAT was the least time consuming process.
- In overall discharge process it was observed that 79% samples are compliant within 2 hours and 21% samples are not compliant**.**

Ethical Consideration:

- Patient's consent was obtained before their data was collected.
- The collected data are stored securely to prevent to prevent unauthorized access or breaches.
- Transparency is maintained with staff about the purpose of the data collection and how the findings will be used.
- Streamline data collection to minimize disruption to patient care and staff workflow.

Limitations:

- Only comprises patients admitted for longer than 24 hours to the inpatient department.
- The sample size might be limited. This could affect the generalizability of findings.

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