

To study the discharge process and the causes of discharge delays

Dissertation submitted to



The IIHMR University, Jaipur

For the partial fulfillment for the award of the degree of

Master of Business Administration (MBA)

In

Hospital and Health Management

by

Ms. Shruti Singh

Under the supervision and guidance of

Dr. Dhirendra Kumar

(Professor)

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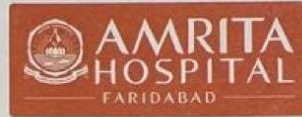
(Professor)

DECLARATION BY STUDENT

I hereby declare that this dissertation titled “**To study the discharge process and the causes of discharge delays**” is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Shruti Singh
(Signature)

Date :



Embrace Good Health

20 May 2023

To Whomsoever It May Concern

This is to certify Ms Shruti Singh, has successfully completed her internship with Amrita Institute of Medical Sciences and Research Centre, Faridabad under the Quality Department in Medical Administration from 20 February 2023 to 20 May 2023. This internship was part of her Masters of Business Administration, Healthcare Management from IIHMR, Jaipur and enrolment No. IIHMR – U/01/2021-23/1405. She went through an experiential learning on the job.

During her course of internship, we found her sincere and hardworking.

We wish her success in his future endeavours.



Jayakesh Nair
(Chief People Officer)

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CERTIFICATE

This is to certify that dissertation titled “To study the discharge process and the causes of discharge delays” is a record of the research work undertaken by Ms. Shruti Singh in partial fulfilment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide
IIHMR University, Jaipur

School Dean
IIHMR University, Jaipur

Date

Date:

Abstract

This dissertation lists and explains the main causes of the inpatient discharge process delay at Amrita Hospital. Lastly, suggesting that the ideas be put into practice in order to shorten the discharge time. One of the key reasons why patient dissatisfaction at Amrita Hospital significantly decreased and average length of stay for in-patients increased—both of which were detrimental to the hospital—was the discharge process. As a result, a 30-day observational analytical study was carried out, with a sample size of 259 in-patients based on the primary data acquired. The nurses, Patient Affairs Department, and concerned Pharmacy personnel created a Discharge Tracking Tool and daily collected the data. The nursing staff at IPD received training on how to use the instrument prior to data collection. After 30 days, after a sizable amount of data had been gathered, data gathering was halted.

An evidence based extensive analysis gave valid and crucial results. The two variables taken for data analysis were Time and Number of cases. Analysis was done keeping the confidentiality aspect and ethical considerations in purview with respect to the patient details. An overall analysis was done and further, the analysis was narrowed down by analyzing data between various information exchange points. With the help of evidence-based analysis, results gave the actual gaps/reasons for the discharge delay. Results of the study were found out to be; prolonged discharge time, for Self-Payment patients- 7 hours 50 minutes and for Insurance Patients- 8 hours 6 minutes. Maximum time delay was found out to be in Signature and Approval by physicians, in medication delivery of discharge drugs to the nursing station. The implications of combined delay results in loss in terms of Revenue and Time.

Acknowledgement

The structure and content of this project have been deeply influenced by many people for whom I wish to express my gratitude.

I am deeply beholden to the Dr. Sanjeev Singh (Medical Director, Amrita Hospital) and the management of the Amrita hospital, for providing me an opportunity to be the part of their organization.

I would like to express my intellectual debt of gratitude to Dr Pawan Kumar Gupta (Chief Quality Officer) for being my guide along with her team for giving me such an interesting project which gave me profound knowledge of the subject. He has devoted his precious time in the project from starting to completion of the project.

I am very thankful to Dr. (Col) Mahender Kumar (Dean IIHMR & Proctor), IIHMR University, Jaipur, Rajasthan, for being my academic dean.

I would like to extend my sincere gratitude to the department heads and personnel at Amrita Hospital for their unwavering support and direction throughout my actions. I sincerely appreciate each and every one of you.

Finally, I want to thank my parents and friends for their encouragement and kindness in helping me finish my job on time. I am grateful to God for enabling all these excellent people to finish this effort.

Ms. Shruti Singh

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1. List of Symbols and Abbreviations

S. No.	Symbol/Abbreviation	Full Form
1	DHC	Discharge Hospitality Centre
2	EMR	Electronic Medical Records
3	ED	Emergency Department
4	GP	General Practitioner
5	AHRC	Amrita Hospital and Research Center
6	HIMS	Hospital Information Management System
7	IPD	In Patient Department
8	MO	Medical Orderly
9	OPD	Outpatient Department
10	OBGY	Obstetrics& Gynecology
11	PACU	Pediatric Acute Care Unit
12	PAD	Patient Affair Department
13	NABH	National Accreditation Board of hospital
14	DPTS	Discharge Patient Tracking Sheet

2. INTRODUCTION

Through Amma's unique vision and wisdom, we open the doors to India's largest private hospital—an institution that will be an icon for compassionate care combined with affordable, advanced medical services. Spread across 130 acres, it will have 2,600 beds, 81 specialties, 64 fully-networked modular operation theatres, and smart ICUs with 534 critical-care beds that are digitally monitored round-the-clock.

The hospital fosters Centers of Excellence, which include radiation oncology, cardiac sciences, neurosciences, gastro-sciences, bone diseases and trauma, transplants, and mother-and-child care. The hospital's multidisciplinary children's hospital will be home to maternal and fetal medicine and all pediatric subspecialties. This is a feature that many private hospitals in India lack as they do not see maternal care as financially sustainable.

Advanced technology will support this large spectrum of practice, including state-of-the-art fully-automated smart laboratories, the most advanced medical-imaging services in the country, and the latest in cardiac and interventional cath labs for clinical services. The hospital will also run India's largest facilities for infectious diseases.

Hospitals and treatment are not contradictory to or incompatible with spirituality.

All those are helpful in maintaining the body, which is an instrument to reach a higher purpose of life. There are both Westerners and Indians who stay at the Ashram. Among them, there are doctors. They want to stay with Amma. And Amma wants to give them an opportunity to engage in selfless service. Their service will benefit the

whole world as well as them. If we have love and compassion in our hearts, we will wholeheartedly serve and help those without food, clothing and shelter. Children, real worship of the Lord is the compassion we extend towards the suffering.

3. SCOPE OF SERVICES – Clinical Diagnostic/Treatment Services

• Aesthetic & Plastic Surgery • Anesthesia & Pain Management • Bariatric Surgery • Blood Centre • Cardiology & Cardiothoracic Surgery • Dental • Dermatology & Venereology • Emergency & Trauma care • Endocrinology • ENT/Audiology • Fetal Medicine • Gastroenterology (including interventional) • Medical • Surgical • General & Laparoscopic surgery	• Oncology • Medical Oncology • Bone Marrow Transplant • Gynae Oncology • Surgical Oncology • Uro-Oncology • Gastro Oncology • Neuro Oncology • Head and Neck Oncology • Ortho Oncology • Radiation Oncology • Ophthalmology • Orthopedics & Joint Replacement • Podiatry • Pediatrics • Pediatric Cardio-thoracic vascular surgery
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|---|---|
| <ul style="list-style-type: none"> • Geriatrics • Hepatology • Internal Medicine • Immunology • Intensive Care • Medical • Surgical • Laboratory Services • Clinical Biochemistry • Clinical Microbiology and serology • Clinical Pathology • Cytopathology • Cyto-genetics • Hematology • Histopathology • Metabolic Lab • Molecular Biology (including sequencing) • Toxicology • Virology • Maxillofacial & Oral Surgery | <ul style="list-style-type: none"> • Pediatric Cardiology including interventional cardiology • Pediatric Gastroenterology • Pediatric Genetics • Pediatric Neurosurgery • Pediatric Neurology • Pediatric Orthopedics • Pediatric Rheumatology • Pediatric Surgery • Pediatric Endocrinology • Pediatric Urology • Psychiatry & Clinical Psychology • Palliative Medicine • Pulmonology • Respiratory Medicine including Interventional Respiratory Medicine, Extracorporeal membrane oxygenation (ECMO), Endobronchial Ultrasound Diagnosis (EBUS) • Rheumatology • Radiology & Imaging Services |
|---|---|

• Master Health-checkup • Nephrology • Neonatology • Nuclear Medicine • Neurosciences • Neurosurgery • Neurology • Neuro-diagnostics • Neuro-interventions • Ophthalmology • Orthopedics & Joint Replacement • Obstetrics and Gynecology (including high risk cases)	• Robotic Surgery including Gastroenterology, Urology, Gynecology, Head and Neck and Cardiac • Rehabilitation Medicine & Physiotherapy • Sports Medicine • Spine Surgery • Transplant Anesthesia • Transplant Services (Hand, Heart, Liver, Pancreas, Cornea, Simultaneous Pancreas and Kidney, • Larynx, Trachea, Renal and small bowel)
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Support Services

- Administration
- Admissions
- Pharmacy&Materials
Management services
- Food services
- Human Resource Management
- Information Technology
- Engineering Maintenance
- Health Records Information
services
- Central sterile processing
department
- Education Services
- Quality Management Services
- Laundry services
- Security services
- Infection Prevention and
Control

Community Services

- Patient & Family
Information and Education
- Marketing/Community
Relations

Services Not Currently Provided

- IVF
- Burns
- IPD Psychiatry
- Organ Transplants

4. LITERATURE REVIEW -

S.NO.	TITLE	AUTHOR	YEAR	FINDINGS
1	A study on discharge process of discharged patients of a multispecialty hospital Ludhiana	Harman jot Kaur, Rajpoot Kochar	2017	The current study's findings showed that an average turnaround time of 5:07 hours was required from the time of the discharge notification and the time the patient was handed over, with a maximum turnaround time of 9:07 hours. It has been determined that 18 minutes is the minimal turnaround time between updating a billing card on the floor and receiving it at IP billing. An average turnaround time of 4:05 hours has been recorded between the time the patient is advised of his or her release and the time the room becomes available.

2	Predictive Modelling for Turn Around time (TAT) of Discharge process for insured patients in a corporate hospital of Pune City	Kasturi Shukla, Shrishti Upadhyay	Feb,2018	To look at the factors that cause discharge delays. According to this study, discharge delays for patients with insurance are a common occurrence. Additionally, timely completion of discharge summaries, required reports, and rapid responses to any inquiries are necessary to reduce hospital delays.
3	An analysis of the average waiting time during the patient discharge process at Kashani Hospital in Esfahan, Iran; a case study	Sima Ajami, Saedeh Ketabi	2004	The results show that it took patients 4.93 hours on average to complete the discharge procedure. The distance between different wards and patients' financial concerns are said to be the two factors that have the biggest impact on typical waiting times, according to the engaged medical professionals. The average length of stay on the Neurology ward was.7 days. The results show that there was a line at the nursing and medical equipment stations to fill out medical records.

4	Turn Around time- TAT for discharge process	Human Konnect	April,2017	The main obstacles in the discharge process are identified as follows in this article, which explains the discharge procedure and discusses satisfactory/unsatisfactory experiences: Delay in the discharge process's beginning.
5	Discharge, Referral and Admission Literature Review	eHealth Services Research Group (eHSRG) University of Tasmania	September 2010	The primary aim of the methodology was to ensure the production of structured evidence-based literature reviews identifying evidence about benefits, enablers, barriers and challenges related to the processes of discharge, referral and admission in Australian and International published literature.
6.	A study of Patient Discharge process in a multidisciplinary Hospital of tier 1 city of India	Dr. Ajai Kumar Jain, Dr. Hrishiraj Pawar	January 2014	It is an exploratory study done in organized industry of health care. Universe of study multi-specialty 149 Beds hospital of Navi Mumbai. The hospital has occupancy rate of appx 70%. The findings can be

				obtained by the following steps: construction of flow chart of discharge process, identification of matrix, collection of observations.
7.	Components of a good quality discharge summary: A systematic review	Jordon Wimsett, Peter Jones	October 2014	The present study aims to inform the use of discharge summaries as a marker of the quality of communication between ED and primary care; this systematic review aims to identify a consensus on the key components of a high-quality discharge summary

5. OBJECTIVE -

1. Aim: To determine the delay gaps and feasible practices in order to reduce variability in discharge cycle time at Amrita Hospital.

2. General Objective

To identify the reasons for delay in discharge at Amrita Hospital by process mapping of the whole discharge process, using appropriate tools.

3. Specific Objectives

1. To determine average time taken for the entire discharge process, self-payment patients & insurance patients.
2. To find out the delay points in discharge process.

3. To provide appropriate recommendations/ suggestions for improving the discharge process.

6. Methodology

Type of study: Observational, Analytical Study involving the review of patient discharges. The data was recorded from the Hospital Information Management System to analyze the discharge process.

Location of study: IPD Patients of 4 major departments named, Internal Medicine, Medical Oncology, Nephrology, OBGY Surgery of Amrita Hospital, Faridabad.

Duration of study: Period of 1 month (01.03.2023 - 31.03.2023)

Sample Size, (n = 259) A total of 259 patients were discharged from the hospital from 1st March 2023 to 31th March 2023. A sample of 259 was selected from the total sample, out of which 179 were self-payment and 80 were insurance patients. Data was collected from the Patient records and from HIMS to identify the time taken from the time the physician on rounds said that the patient can be discharged till time the patient physically left the room.

Data collection tools: HIMS of AHRC and Patient Record Files. Interviews with the involved staff in the Process Mapping.

Method of Collection:

Real time monitoring and personal observation.

Data (information) to be collected include:

Current discharge process

Specialty/ Departments

Elective / Emergency (Booked / Un-Booked in case of OBG Cases)

Insurance/ Self Payment Cases

Time of arrival at and departure from stations

About causes of delay in discharge process

Length of stay in AHRC Hospital.

Viewpoints and attitudes of hospital personnel

Methods Employed

Data was collected from the Patient Records and Hospital Information Management System to identify the time taken from the time, the physician on rounds gave the discharge orders, till time the patient physically left the room.

7. Discharge Process in Multidisciplinary Hospital

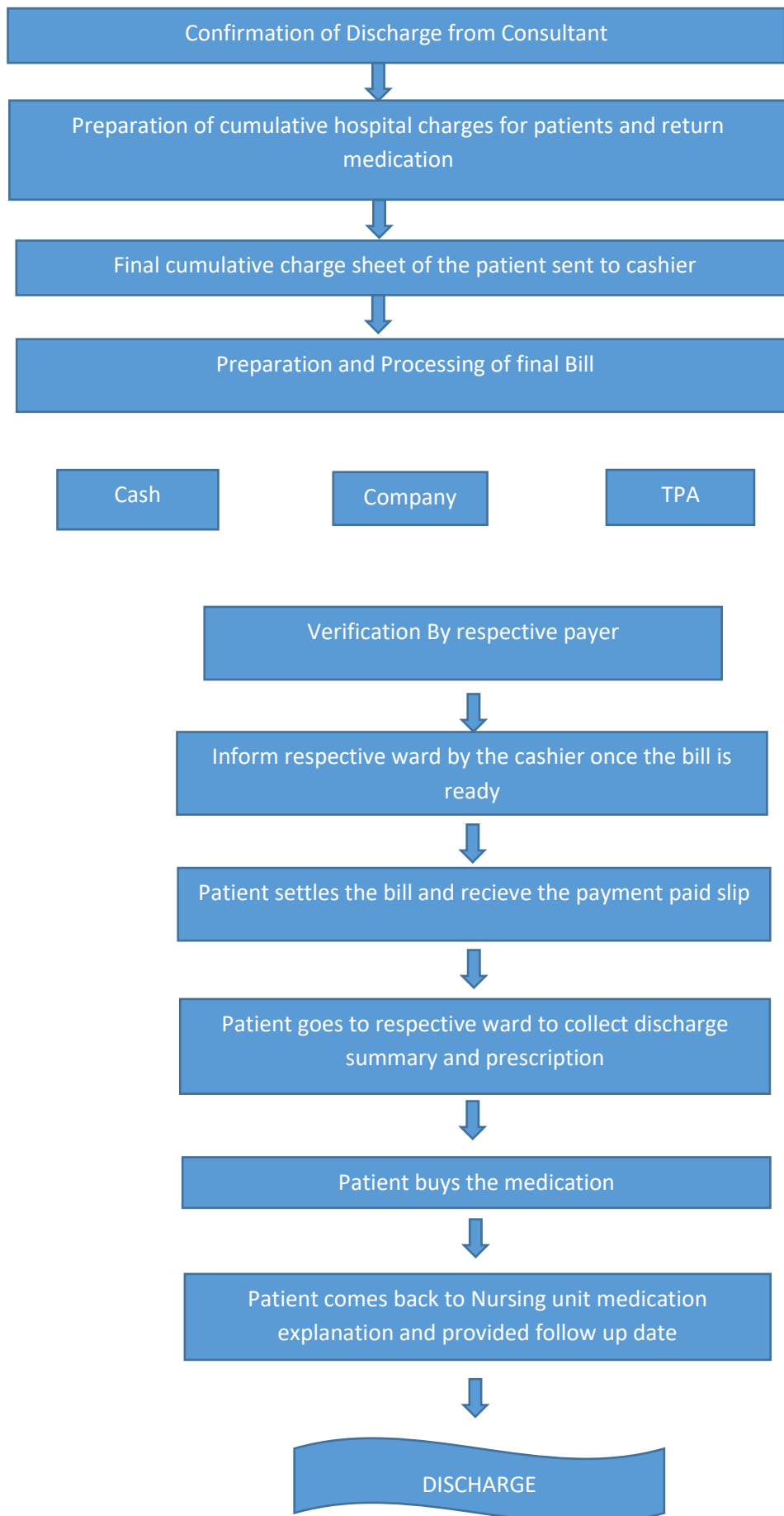
The discharge process in a multidisciplinary hospital involves several steps to ensure that patients receive appropriate care, treatment, and support after leaving the hospital. Here are some of the typical steps involved in the discharge process:

- Assessment of patient's condition: The medical staff will evaluate the patient's health and decide whether or not the patient is fit for discharge.
- Developing a discharge plan: A detailed discharge plan that takes into account the patient's needs and guarantees a seamless transition from the hospital to their home or another care setting will be developed by the healthcare team in collaboration with the patient and their family.

- Coordination of services: To make sure the patient has access to necessary services after leaving the hospital, the healthcare team will coordinate with other healthcare providers, such as home health organisations.
- Medication management: The medical staff will go over the patient's current list of drugs and give instructions on how to take them as directed.
- Patient education: The medical staff will inform the patient's relatives and friends about their condition, the discharge schedule, and any required post-discharge care.
- Discharge instructions: The medical staff will provide the patient and their family written directions for after-hospital care and follow-up.
- Follow-up appointments: The patient's primary care physician or a specialist will be contacted to arrange any necessary follow-up appointments on the patient's behalf.
- Discharge documentation: The medical staff will see to it that the discharge plan, medications, and any other pertinent information are updated in the patient's medical file.

In a multidisciplinary hospital, the discharge procedure entails a cooperative effort among medical staff members to guarantee that patients receive the right care and assistance after leaving the hospital.

7.1. Discharge Process Mapping:

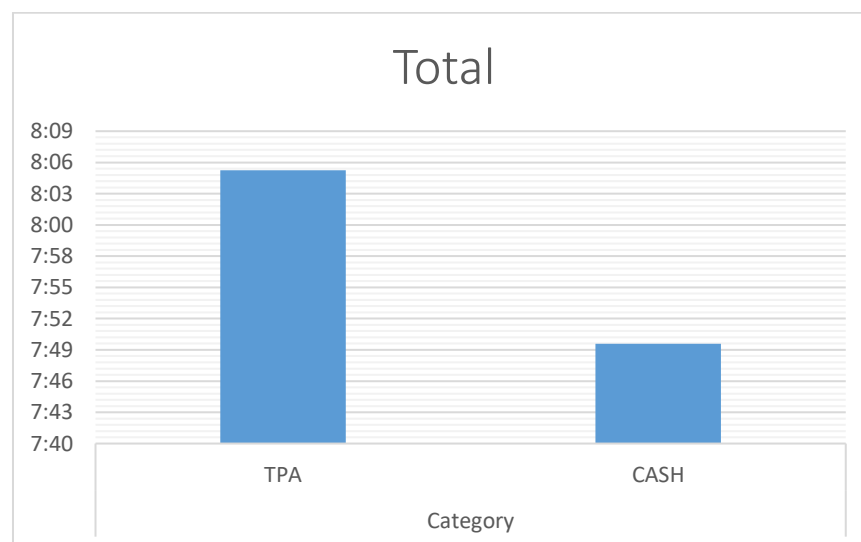


8. Analysis and Results

Results are commonly presented in the form of text, figures and tables, complete with data analysis.

8.1 Average discharge time as per the payment method.

Department	Category	
	TPA	CASH
Total	8:06	7:50

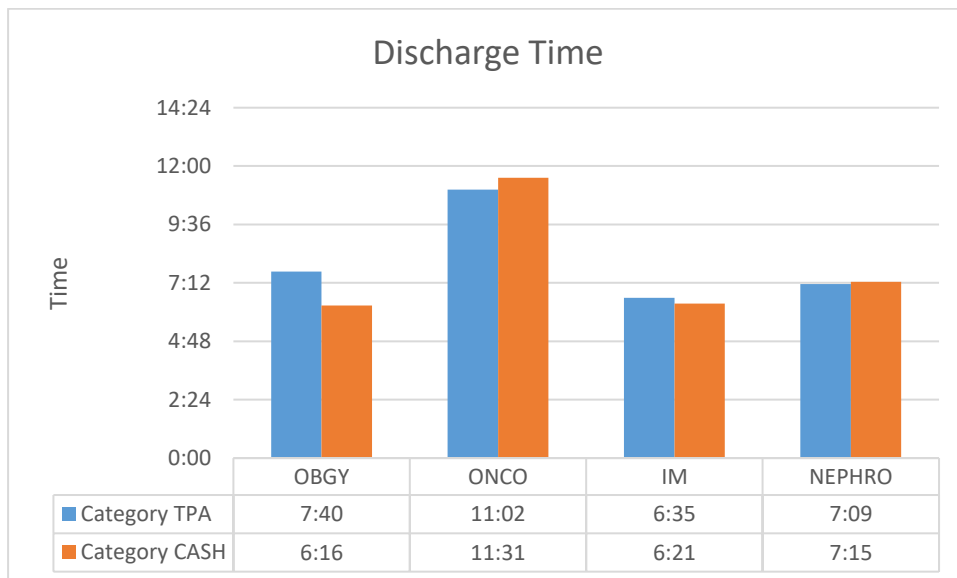


Interpretation (Graph 1)

1. The average time taken for discharge of Self Payment patients came out to be 7 hours 50 minutes, with maximum time recorded as 21 hours and 42 minutes.
2. The average time taken for discharge of TPA patients came out to be 8 hours 06 minutes, with maximum time recorded as 21 hours and 24 minutes.

8.2 Average Discharge Time Specialty Wise

Department	Category	
	TPA	CASH
OBGY	7:40	6:16
ONCO	11:02	11:31
IM	6:35	6:21
NEPHRO	7:09	7:15



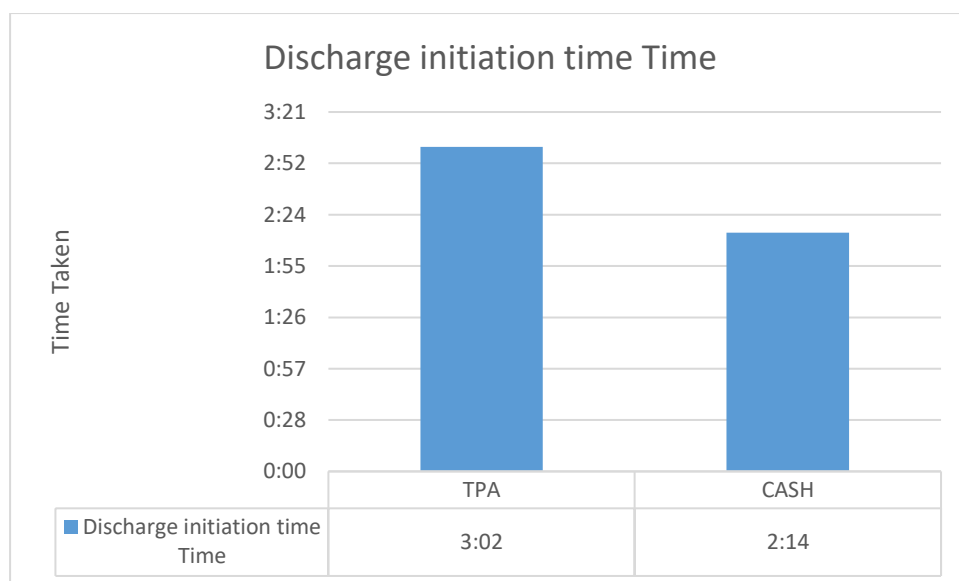
Interpretation (Graph 2)

Graph 2 shows that the maximum number of cases discharged in the stipulated time were from four specialties in which oncology is the one which takes highest time in getting a discharge process done.

- a. OBGY (41)
- b. Oncology (111)
- c. Internal Medicine (62)
- d. Nephrology (45)

8.3 Discharge Initiation Time

Discharge initiation time	
Category	Time
TPA	3:02
CASH	2:14



Interpretation (Graph 3)

Discharge initiation time is calculated from the time physician gives the discharge orders to the time concerned nurse initiates the Discharge in the HIMS, intimating the PAD department to start the process on their end.

In case of Self Payment patients it is 2 hours 14 minute. During this time interval, doctor/s writes the discharge summary that may take more time if, the discharge summary was not prepared in advance, when nurses get occupied in other duties.

On few days in a week, discharges are more; with better planning in advance discharges can be made faster.

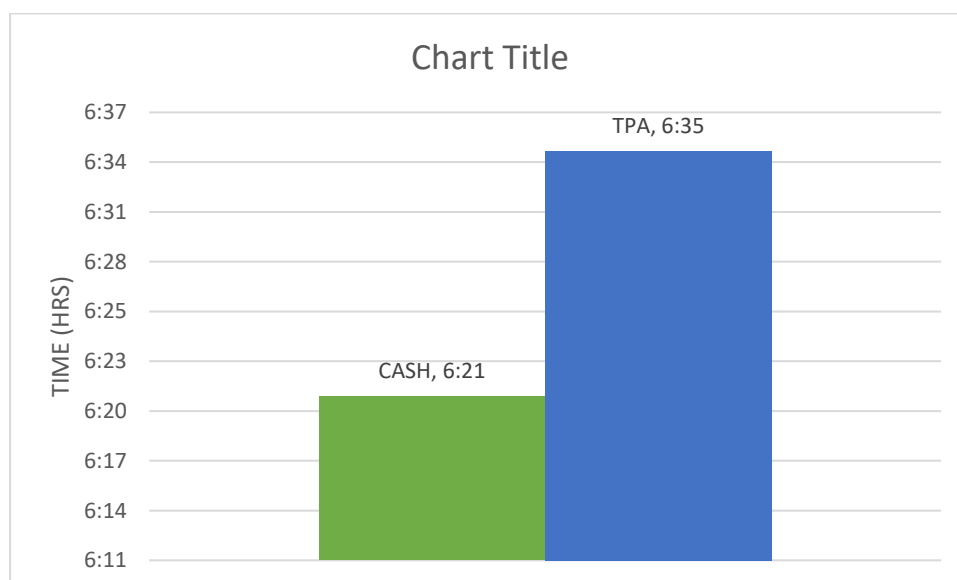
In case of Insurance Patients this initiation time is even more, i.e. 3 Hours 02 Minutes. In this case it is more, because the discharge medications are to be provided to the patient and to be added in the records before initiating in the HIMS.

8.4 TOTAL TIME TAKEN IN DISCHARGE PROCESS

(DEPARTMENT WISE)

8.4.1 Internal Medicine

TOTAL TIME IN DISCHARGE PROCESS	
CASH	6:21
TPA	6:35



Interpretation

The average discharge time for self-payment internal medicine patients has been recorded as 6 hours, 21 minutes. While the time taken for cash patient is somewhat similar to the cash patients with 6 hours, 35 minutes.

There are few reasons which has been recorded for the delay in discharge process of Internal Medicine patients which include:

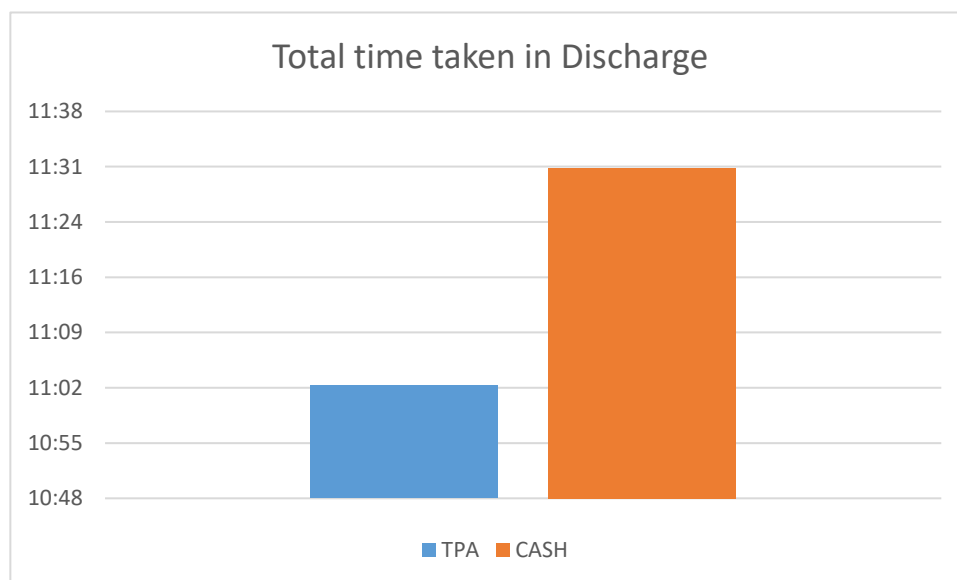
1. **Complex medical conditions:** Patients in internal medicine may have complicated medical issues that necessitate multidisciplinary care. Due to the need for consensus among all the professionals regarding the best course of care and discharge strategy, this could cause delays in the discharge process.
2. **Availability of community resources:** To guarantee a secure transfer from the hospital to their home, patients might need additional resources like home health care or rehabilitation programs. The accessibility of these resources may differ by geography and contribute to discharge delays.
3. **Medication management:** During their hospital stay, internal medicine patients frequently need their many medications to be maintained and modified. It can take some time to make sure the patient has the right drugs and usage instructions, which could delay the discharge process.
4. **Coordination with primary care providers:** It is crucial to make sure the patient's primary care doctor is aware of their hospitalization and has a strategy for continuing their care once they are released. It may take some time to coordinate with primary care doctors, which could delay the process of discharging patients.
5. **Insurance and financial issues:** If insurance or financial concerns need to be resolved before the patient can be discharged, discharge planning may also be postponed. Delays in the discharge process may occur, for instance, if the patient's insurance does not cover specific services required for the patient's care after discharge. In this case, other arrangements may need to be arranged.

Overall, there are many factors that can contribute to delays in the discharge process for internal medicine patients. It is important for healthcare providers to work

together to ensure a safe and efficient transition from the hospital to the patient's home.

8.4.2 Oncology

Total time taken in Discharge (ONCOLOGY)	
TPA	11:02
CASH	11:31



Interpretation –

The average discharge time for self-payment oncology patients has been recorded as 11 hours, 02 minutes. While the time taken for cash patient is somewhat like the cash patients with 11 hours, 31 minutes.

There are few reasons which has been recorded for the delay in discharge process of oncology patients which include:

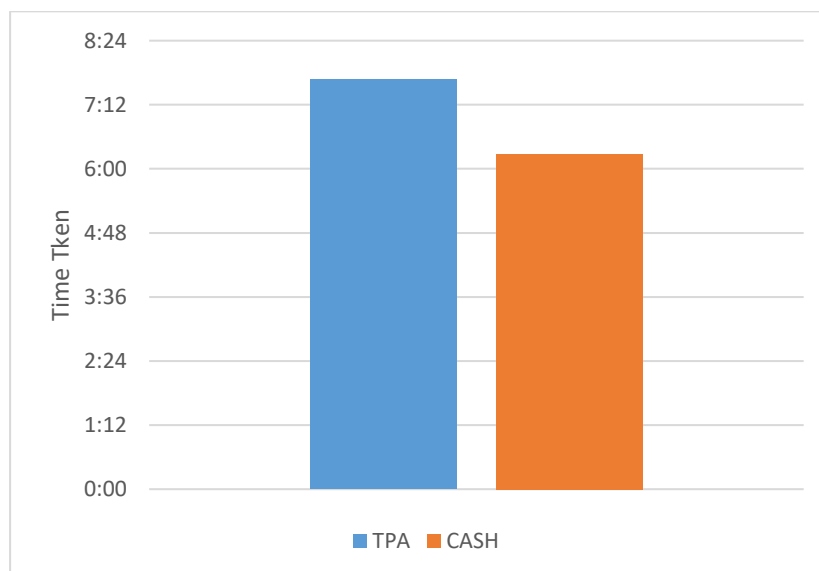
1. **Delay in preparing discharge summary** - It has been noted that the main reason for this delay is that even after the duty doctor marks a patient for discharge, Junior doctors still fail to finish the discharge statement the following day.
2. **Post-treatment monitoring:** Oncology patients may require close monitoring after treatment, such as chemotherapy or radiation therapy, to ensure that they are recovering well and not experiencing any adverse side effects. The hospital may need to monitor the patient's blood counts, vital signs, or other parameters before determining that they are stable enough for discharge.
3. **Home care arrangements:** Oncology patients may require specialized equipment or home care services, such as a nurse or a caregiver, after discharge. Coordinating these arrangements can sometimes take time and may cause a delay in the discharge process.
4. **Medication management:** Oncology patients may require complex medication regimens, and the hospital may need to ensure that the patient and their family members understand how to take the medications properly. This may require additional education and counseling before the patient can be safely discharged.
5. **Social support:** Oncology patients may require emotional or social support after treatment, and the hospital may need to coordinate with social workers, chaplains, or other support personnel to ensure that the patient has the necessary resources after discharge.
6. **Insurance coverage:** Oncology treatments can be expensive, and the hospital may need to coordinate with insurance providers to ensure that the

patient's treatments are covered. This can sometimes cause delays in the discharge process.

It's important to note that the hospital's priority is always the safety and well-being of the patient, and they may take additional time if necessary to ensure that the patient is ready to leave and receive proper care after discharge.

8.4.3 Obstetrics and gynae -

Total time taken in Discharge process	
TPA	7:40
CASH	6:16



Interpretation –

Total time taken in discharge process of TPA Patients is 7 hours, 40 minutes and while the cash patients take 6 hours 16 minutes.

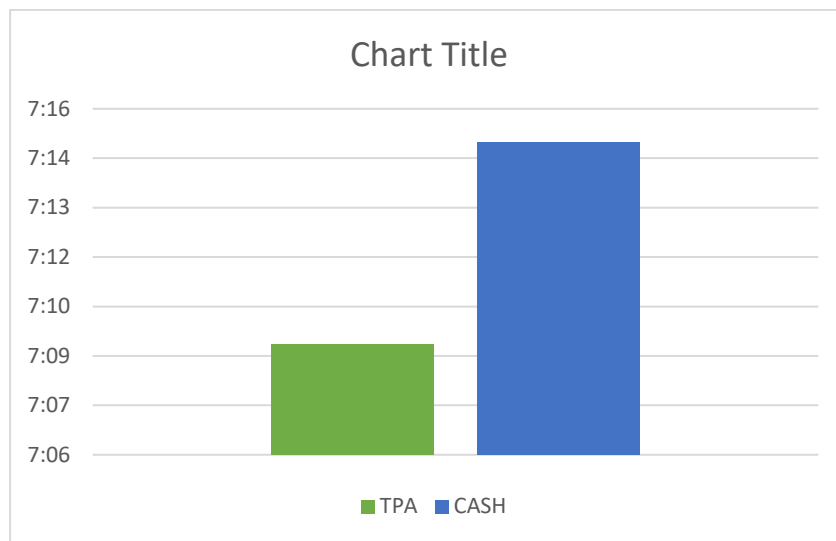
The reasons for delay in discharge process of gynae patients are -

1. **Postoperative care:** If the gynae patient has undergone a surgical procedure, they may require additional postoperative care and monitoring to ensure that they are recovering well before being discharged. This can sometimes cause a delay in the discharge process.
2. **Medical complications:** If the gynae patient experiences any medical complications, such as excessive bleeding, infection, or other issues, the hospital may need to keep them for a longer period to ensure their safety and well-being.
3. **Waiting for test results:** If the gynae patient has undergone tests or procedures that require analysis, the hospital may need to wait for the results before discharging the patient.
4. **Recovery after childbirth:** If the gynae patient has given birth, the hospital may need to provide additional postnatal care and support to ensure that both the mother and the baby are healthy and ready for discharge.
5. **Waiting for paperwork:** If there are administrative processes such as documentation and billing that need to be completed before a patient can be discharged, this can cause a delay.

It's important to note that hospitals prioritize patient safety and well-being and may take additional time if necessary to ensure that the gynae patient is ready to leave and receive proper care after discharge. The length of stay in the hospital will depend on the individual patient's medical condition and recovery process.

8.4.4 Nephrology

Total Time taken in discharge process	
TPA	7:09
CASH	7:15



Interpretation –

Total time taken in discharge process of TPA Patients is 7 hours, 09 minutes and while the cash patients take 7 hours 15 minutes.

There is delay because of Awaiting results of complimentary tests, related to medical related accountability, awaiting specialist final consultation.

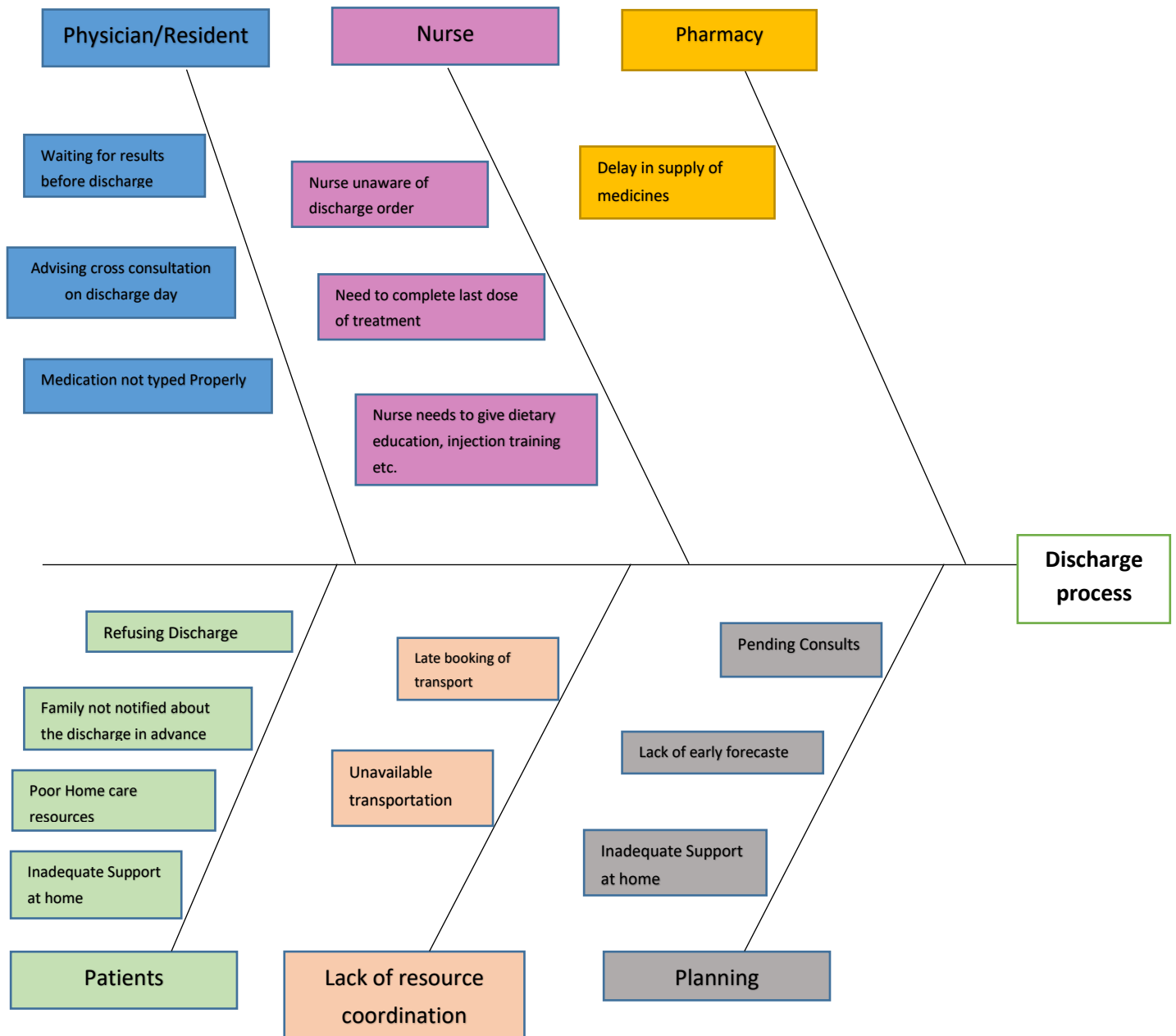
The main factors which result in delay in discharge are -

- 1. Monitoring the patient's condition:** Nephrology patients may have complex medical conditions that require close monitoring to ensure that they are stable before discharge. For example, patients undergoing dialysis may need to be monitored for several hours after treatment to ensure that they are stable and have no complications.
- 2. Coordination of care:** Nephrology patients may require ongoing care and support after discharge, such as medications, home health care, or follow-up appointments with specialists. Coordinating these services can sometimes cause delays in discharge, especially if the hospital needs to coordinate with external providers.
- 3. Planning for dialysis:** Some nephrology patients require ongoing dialysis treatment, which may need to be arranged before discharge. This can sometimes cause delays, especially if the hospital needs to coordinate with external dialysis centers or if there is limited availability of dialysis machines.
- 4. Education and counselling:** Nephrology patients may require education and counselling on their condition, medications, and lifestyle changes to manage their condition after discharge. Providing this education and counselling can sometimes cause delays, especially if the patient has questions or concerns that need to be addressed.

It's important to note that hospitals prioritize patient safety and well-being and may take additional time if necessary to ensure that the nephrology patient is ready to leave and receive proper care after discharge.

9. Quality Process Improvement Analysis -

Fish Bone Analysis (Cause and effect diagram) – Shows where the process is lacking during discharge process.



10. CONCLUSION –

Being a newly operated hospital, the current study's findings revealed that the average time, or the average amount of time from the moment the consultant placed the order until the patient went off the bed, was 7 hours 58 minutes, which is longer than the usual NABH recommendation of 180 minutes.

Due to reasons listed below –

- Consultant rounds
- Delay in pharmacy clearance
- Delay in receiving the file in the billing department.
- Delay in preparation of the bill
- Delay in bill clearance.

An effective discharge process for cash and insurance patients in the hospital require coordination among the departments and all the stakeholders who are involve in the process, so if a step is completed on time, then the subsequent steps will also more likely to complete on time. Apart from this proper delegation of work among the staff need to be ensured for further smoothening of the discharge process. Discharge of the patient directly related to a patient satisfaction as it is a last quality experience of the patient in the hospital so it should be dealt effectively and harmoniously so that patients can take good memories with them back home.

The proportion of patients whose discharge was delayed because of their medical condition was higher,

***Oncology patients* are known to take the longest to get discharged from hospital whether it's a cash or TPA patient.**

The two main causal factors were identified as communication and multidisciplinary rounds in the oncology department.

The first identified cause seemed to stem from the lack of clarity and the misunderstandings regarding various team member's roles as well as the various forms and documents that were being used throughout the discharge planning process. Some team members were unsure about their colleague's roles and their involvement in the discharge planning process.

Secondly, team members commented on the need for rounds to be held more frequently and to be attended by the staff specialists to facilitate direct communication regarding patient plans and their vitals.

Moreover, delayed discharge reports can lead to inefficiencies and delays in hospital operations, leading to decreased productivity and increased workload for healthcare providers. This can also lead to decreased job satisfaction and potentially affect the quality of care provided to patients.

Therefore, it is essential to have efficient and timely discharge processes in place to minimize delays in the discharge report. Healthcare providers should work collaboratively to identify and address any potential issues that may cause a delay in the discharge process, such as inadequate staffing, incomplete documentation, or lack of communication among healthcare providers. Timely and accurate discharge reports not only benefit patients but also improve hospital operations, making it a crucial aspect of healthcare delivery.

11. SUGGESTIONS–

Things you can implement right away to eliminate the bottlenecks in your discharge process and improve revenues.

We understand that as the Amrita hospital, offering enhanced patient care while maximizing revenues, cutting costs and achieving operational efficiency are some top priorities.

One of the primary factors that affect the operational efficiency is the delays that occur in the patient discharge process. The average time taken to discharge patients in most hospitals is in the order of 5-6 hours. While the delays seem inevitable at the time of discharge, they are a direct result of poor bed management, lack of proper coordination between the medical staff and lack of efficient planning from the time of patient admission.

There are some process changes which can be implemented in the right way to eliminate delays in discharge and admit new patients faster.

1. Training of staff

The correct training should be given to the staff regarding patients' rights and responsibilities as well as staff responsibilities as a result of the fact that the staff was uninformed of the responsibilities and the procedure due to a communication gap.

2. Efficient billing system

Make sure your discharge process is designed such that consumables and procedures are charged at the time of consumption itself. This will ensure

correct and transparent billing without confusion at the time of discharge. Having a centralized billing system between the various departments and facilities will allow easy real-time billing, making this process much easier. Most importantly, your billing department can provide details about interim pending amount at any point that the patient wants to know. Interim bill payments will also ensure that the patient does not ask for a discount at the point of final payment, expediting the discharge process.

3. Electronic charts and medical records

One big reason for delays in patient discharges is the discharge summary completion. Usually, junior doctors fill the discharge summary at the last minute, after the consultant has confirmed patient discharge. Updating the patient file on a regular basis will ensure that the complete information from the time patient is admitted is recorded, allowing faster discharge summary dictation. One way to automate this step is to maintain central electronic patient charts and adopt an efficient EMR system. This will allow the medical staff to update observations, medication, treatment plans etc. directly to the chart making the discharge summary process much easier.

4. Discharge planning during admission

Emphasize on a care plan even if your clinical team says there may be uncertainty due to variations and a tentative discharge date cannot be put down. A care plan is the planned blueprint of a patient's medical care that also predicts the expected outcome and tentative discharge date. Things may go a bit out of plan at times, but still everyone in the system is ready for a discharge, which ensures that the time taken is minimal.

5. Improve care coordination

The discharge process is lengthy and requires clearance from several departments once the consultant approves the patient for discharge. This is usually the longest step in the process and on an average takes well over 2 hours. Instead of running from pillar to post getting approval, one way to ensure all teams process discharge fast is to automate. Having an effective hospital information system will connect the various departments in the hospital on a central platform, making the communication between the different departments seamless. When the consultant triggers the discharge, the concerned departments will be notified right away, and can give clearance at the earliest time. This will slash the delays and make it possible to prepare the final bill in a matter of minutes.

6. Better bed management

There is usually a lot of confusion surrounding bed management in hospitals. A new patient who needs to be admitted must typically wait for hours sometimes before being assigned a bed in the in-patient ward. One way to tackle this problem is to establish a central management system that triggers bed cleaning notice during discharge itself. This way, there is no delay between a patient leaving the hospital and a new patient being admitted. Further, having a centralized bed management system provides a quick snapshot on which beds are available making room and bed assignments to new patients more efficient.

7. Ensure Discharge Medication Reaches the Ward ASAP

Another step in the discharge process that may cause delays is getting discharge medication from the pharmacy. Confirming the discharge in advance and establishing automated inventory management systems in place ensures the excess medication return and discharge medication issue to the wards can be completed well ahead of time, easing out a major bend in the discharge process.

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