Study to Determine the Cause of Delay in Discharge Process

By

Kulpreet Yadav

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2017-2019

The IIHMR University, Jaipur

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IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that **Dr.Kulpreet Yadav**, student of MBA Hospital and Health Management/ Pharmaceutical / Rural Managementfrom The IIHMR University, Jaipur has undergone internship training at **Fortis Escorts Hospital, Faridabad** from **11th February to 11th May 2019**.

The Candidate has successfully carried out the study assigned to him during internship training and his approach to the study has been sincere, scientific and analytical.
The Internship is in fulfillment of the course requirements.

Iwish him all success in all his future endeavors.

Dean, Academics and Student Affairs
The IIHMR University, Jaipur

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Fortis Escorts

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May 11, 2019

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Dr. Kulpreet Yadav has completed her internship in the department of Medical Administration from **11th February'2019 to 11th May 2019** under the guidance of Dr. **Shanu Sharma(Medical Superintendent)** and 3 month dissertation on "**A Study to Determine the cause of delay in discharge process**".

During the period of dissertation Dr. Kulpreet Yadav has been found sincere, hardworking & having an attitude to learn.

We wish her all the success in her future endeavors.

For Fortis Hospitals Limited

Shiv Prasad Dangwal
Deputy Manager – Human Resources

Fortis Hospitals Limited
Neelam Bata Road, Faridabad 121 001

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **A Study to determine the causes of delay in Discharge process at Fortis Escort Hospital Faridabad** and submitted by **Dr.Kulpreet Yadav**.....Enrollment No. 0613...under the supervision of **Dr.Alok Mathur** for award of MBA in Hospital and Health Management in Health and Hospitals of the University carried out during the period from **...11 February 2019 to 11 May2019** .embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Signature

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ACKNOWLEDGMENT

The internship opportunity with Fortis Escort Hospital was a great chance for learning and professional development. I am also grateful for having a chance to meet so many wonderful people and professionals who led me though this internship period.

I am highly grateful and would like to express my deepest gratitude and special thanks to my mentor, Dr. Shanu Sharma, Dr. Shuja Khan (Medical Superintendent ,assistant medical superintendent) at Fortis Escort Hospital, Faridabad who in spite of being extraordinarily busy with his duties, took time out to hear, guide and keep me on the correct path and arranging all facilities to make life easier and allowing me to carry out my project at their esteemed organization during my summer internship. I choose this moment to acknowledge his contribution gratefully and all of the support staff at for their careful and precious guidance which were extremely valuable for my study both theoretically and practically. I would Also like to thank my family and friends for being my support all throughout my internship.

I perceive as this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way.

Sincerely,

Dr. Kulpreet Yadav

ABSTRACT

TITLE OF STUDY - A Study to determine the causes of delay in Discharge process at Fortis Escort Hospital Faridabad

Author: Dr. Kulpreet Yadav

BACKGROUND:

In feedback form the major issue arises from the patient is delay in discharge process. the study is describe process of discharge flow and what are the root cause of discharges , and provide the recommended strategy to improve the discharge flow.

AIM AND OBJECTIVES:

To study the discharge processes and identify the reasons for delay in discharges for improvement.

Objective:

- To study the process of discharge of patient from hospital
- To find out the factors leading to delay of discharge
- To find the loopholes in discharge process and find solutions towards it

METHODS:

The study **is** Descriptive and analytical study was carried out for a period of Three-month duration at Fortis Escort Hospital Data was collect through direct observation, time study and conversation with the department staff however workflow diagram was prepared for better clarity of the reporting process. A sample of 402 reports was taken up for the study.

FINDINGS:

The findings suggested that focusing on intimation time ,bill clearance ,Consultant mooring rounds late ,these factors are greatest impact on discharges.

KEYWORDS: cause and effect matrices, , Process Mapping

A Study to determine the causes of delay in Discharge process at Fortis Escort Hospital Faridabad

INTRODUCTION: -

INPATIENT DEPARTMENT:

Inpatient care is the consideration of patients whose condition expects admission to an emergency clinic. Advancement in present day prescription and the coming of far reaching out-tolerant facilities that patients are possibly admitted to an emergency clinic when they are incredibly sick or have extreme physical injury.

Patients enter inpatient care basically from past mobile consideration, for example, referral from a family specialist, or through crisis medication divisions. The patient formally turns into an "inpatient" at the composition of an affirmation note.

In like manner, it is formally finished by composing a release note.

Planning for patient Discharge

Human services experts associated with restoration are regularly engaged with release making arrangements for patients. While thinking about patient release, there are a few variables to contemplate: the patient's present express, their place of habitation and the kind of help accessible. While thinking about the patient's present state, despite the fact that the patient might be qualified for release it is essential to analyze factors, for example, the probability of re-damage to keep away from higher social insurance costs. Patients' homes ought to likewise be visited and analyzed before they are released from the emergency clinic to decide any prompt difficulties and comparing objectives, adjustments and assistive gadgets that should be actualized. Follow-up arrangements ought to likewise be facilitated with the patient preceding release to screen the patient's advancement just as any potential difficulties that may have emerged.

What is discharge process?

Discharge process is characterized as the procedures, instruments and methods by which a scene of treatment or potentially care to a patient is formally finished up by a wellbeing proficient, wellbeing supplier association or person. The release procedure speaks to the last contact between the patient and the clinic wellbeing experts and the result of the considerable number of techniques experienced by the patient are recorded at this stage. Improving the nature of the release procedure ought to along these lines lead to an expansion in patient fulfilment thus patients are probably going to come back to a wellbeing focus where they have encountered a proficient release process when they next look for treatment. Release process need two the primary tends to the security challenge of emergency clinic release, explaining this as an issue of co-appointment and joint effort among different wellbeing and social consideration offices. Consideration is given to real approach changes and intercessions went for improving release, just as research proof on clinical hazard and patient security. Information sharing may be a wellspring of framework wellbeing through serving to co-ordinate and incorporate the exercises of various organizations and, thus, diminishing framework unpredictability

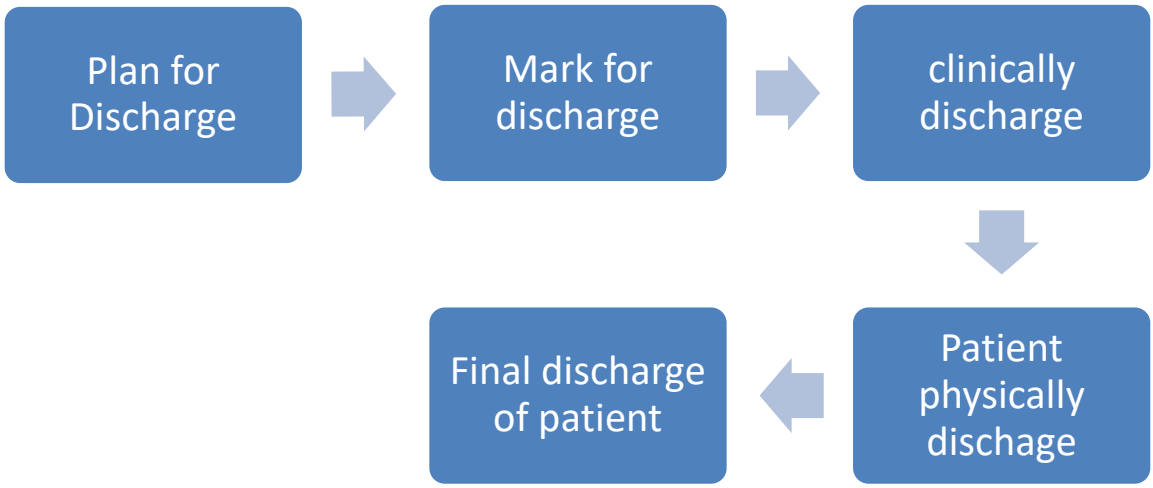

Figure 1: The discharge process

TYPES OF DISCHARRGES:

There are four types of Discharge:

1. Discharge on Consultant's Advice
2. Discharge on Patient's request
3. Discharge against Medical Advice (DAMA)
4. Discharge on Death

1. Discharge on Consultant's advice:
    - The consultant shall advice discharge on satisfaction with the patient's medical condition.
    - Discharge summary after being checked and signed by the treating consultant shall be handed to the patient or the attendant .
    - A copy of the discharge summary shall also be made available to the physician responsible for the patient's follow up care .
2. Discharge on Patient's request:
    - In case the patient or the attendant request for discharge while further treatment is advised due to financial/other reasons, the consultant has to prepare the discharge summary of the patient .
    - A copy of investigation reports and case summary shall be handed over to the attendants after billing procedure is completed.
3. Discharge against Medical Advice
    - The process of patient leaving the hospital on DAMA shall be the same as the discharge on advice.
    - In addition to its consent form is recorded on DAMA form.
4. Discharge on Death
    - The on duty Medical Officer prepares two copies of the Death Certificate and Death Summary and they are stamped.
    - Body is handed over to the relatives along with one copy of Death Summary and Death Certificate and the other copy attached to the patient case records.

The contents of discharge summary include:

- Diagnosis
- Present complaints
- History of present illness
- General and systemic examination
- Course in the hospital including results of the procedure/surgeries performed and medication/treatment given
- Investigations performed and summarized information about the results of the investigations
- Condition of the patient at the time of discharge
- Further management and medication
- Dietary/Physiotherapy (if required) advice.
- Follow up advice.
- Emergency contact number of the hospital / emergency department/treating consultant
- Clinical conditions under which the patient needs to contact the hospital.

5/10/2019

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Website : www.fortishealthcare.com

Date : 10/May/2019

DEPARTMENT OF INTERNAL MEDICINE
Discharge Summary

Patient Name	Mr. ASHOK KUMAR TANEJA	**UHID | Old UHID**	888474 | FHL11.366198
Age / Gender	47 Years / Male	**Episode No**	57980/19/1105
Contact No	9212201308	**Date of Admission**	09 May 2019
Discharge Type	NORMAL	**Date of Discharge**	11 May 2019
Address	H NO 5H 73 NIT FBD		
Name of Consultant	Dr.BN SINGH		
Doctor Team			

DIAGNOSIS

ACUTER GASTROENTERITIS WITH DEHYDRATION

BRIEF HISTORY OF ILLNESS:
Patient was admitted with the chief complaints of multiple episodes of loose stools and vomiting for 1 day

PHYSICAL FINDINGS:

" BLOOD PRESSURE: 110/70mmHg
" PULSE: 80/min
" RESPIRATORY RATE: 18/min
" TEMPERATURE: 98 ºF
" SPO2: 99% on room air
" CHEST: Bilateral clear, No added sounds
" CVS: S1 S2 Normal, No murmur
" CNS: conscious, oriented, no focal neurological deficit
" P/A: Soft, non tender, no organomegaly, Bowel sounds (+)

Local examination :- dehydration (+) , Tongue dry.

HOSPITAL COURSE :-

Patient admitted with the above mentioned complaints and evaluated thoroughly . CBC done revealed Hb-14.8 , TLC- 9.0 , Platelet count -219 , RBC- 6.89 . KFT and LFT were normal . LFT done showed total bilirubin -1.90 , direct bilirubin-0.38. urine routine WNL . USG whole abdomen showed mild hepatomegaly with grade – III fatty liver , mild splenomegaly . Patient managed with I/V antibiotics , I/V PPI , antiemetic , probiotics , I/V fluids and other supportive measures . Patient condition improved and is being discharged with follow up medical advice.

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OUTCOME: Clinical condition of patient is better .

DISCHARGE ADVICE:
TAB. ZIFI - OZ 1TAB TWICE A DAY
TAB. PANTOCID 40MG 1TAB ONCE A DAY (BEFORE BREAKFAST)
CAP. BIFILAC 1CAP THRICE A DAY

PREVENTIVE ASPECTS OF CARE:
- Do not stop or change treatment without advice of treating doctor

URGENT CARE

In case of emergency contact our Emergency No :9560110017, Visit our hospital : Fortis Escorts Hospital & Research centre, Neelam Bata Road Faridabad-121 001, Ambulance No - 105010

WHEN TO OBTAIN URGENT CARE
- Deterioration of consciousness and decreased movements of limbs
- Mild chest pain, ghabrahat & palpitation
- Decrease or increased in blood pressure levels

PENDING REPORTS:

Fortis Escorts

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- Decrease or increased in blood pressure levels

PENDING REPORTS:

There are two types of discharges:

a) **PLANNED DISCHARGES:** Type of discharge in which doctor gives the prior information to the respective nursing ward

b) **UNPLANNED DISCHARGES:** Type of discharge in which doctor does not give any prior information to the respective nursing ward. Information is given during the morning visit of doctor.

There are 3 types of bill payment options:

- Cash
- Credit "
- Insurance

PROCEDURE OF DISCHARGE IN FORTIS ESCORT HOSPITAL:

- The choice to release a patient and the usage of the release procedure will be started by the treating advisor just and the duty of executing the release procedure lies with the treating group, the appointed nursing staff, visitor relationship officials and the charging division. Notwithstanding, a patient may get released himself/herself against restorative advice.
- A speculative choice of releasing the patient is taken a night prior. In any case, a ultimate conclusion of releasing the patient is embraced the following day in the wake of evaluating the patient's condition in the first part of the day and the equivalent is archived in the therapeutic records.
- The speculative choice of releasing the patient is passed on to the doled out nursing staff who illuminates the GRE (Guest Relationship Executive) about the equivalent.
- A temporary release outline is made by the treating colleague after the conditional choice to release the patient is attempted.
- Any persistent/chaperon who need to stop the treatment in the clinic will be approached to sign a structure (Leave Against Medical Advice structure) whereby the patient/specialist specifies that he/she is leaving the emergency clinic on claim chance.
- The GRE gathers all the speculative releases for the following day and flows the rundown to all the partners like Nursing, charging division, Pharmacy, activity Theater, Laboratory administrations, and so forth.
- The doled out nursing staff takes the temporary load of medications of the patient and according to the exhortation referenced in the temporary release synopsis; the prescriptions for the patient are indented/returned back through Hospital data framework.

- After an official conclusion of releasing the patient is embraced, the essential doctor or assigned colleague plans and settles the substance of release synopsis.
- The printout of the release outline and the examination reports are gathered and organized in the document by the Ward secretary before the record is sent to Medical record division and One print-out of the release rundown is given to the patient/orderly
- The document is sent for conclusive charging to the charging division. When the last bill is prepared, the patient/specialist are mentioned to clear the bill.
- Once freedom is gotten from the charging division, the patient/orderly is given over the release outline and the examination reports.
- The colleague of the treating group or the nursing staff clarifies the patient/orderly about how to utilize the medicine and other valuable exhorts (diet and nourishment, restorative gear use whenever required).
- The transportation needs of the patient, for example, wheel seat, stretcher, walker or a need of rescue vehicle is evaluated amid the release arranging. Contingent upon the patient's clinical condition, the patient is transported on a wheel-seat/stretcher from the bed till the individual vehicle or emergency vehicle of the patient and the patient is joined by the general obligation colleague/nurture/specialist.
- When understanding is alluded to other medical clinic, suitable transportation offices, for example, BLS or ACLS rescue vehicle is masterminded and according to the clinical needs of the patient BLS or ACLS prepared nursing staff or potentially specialist is sent alongside the patient.
- After the patient is released from the emergency clinic, the patient's therapeutic records are stored with the Medical Records Department for support and simple recovery. The treating doctor has the record of the release synopsis in HIS.

RESEARCH QUESTION:

What are the factors responsible for the delay in the discharge process?

RESEARCH OBJECTIVE:

- To study the process of discharge of patient from hospital
- To find out the factors leading to delay of discharge
- To find the loopholes in discharge process and find solutions towards it.

REVIEW OF LITERATURE:

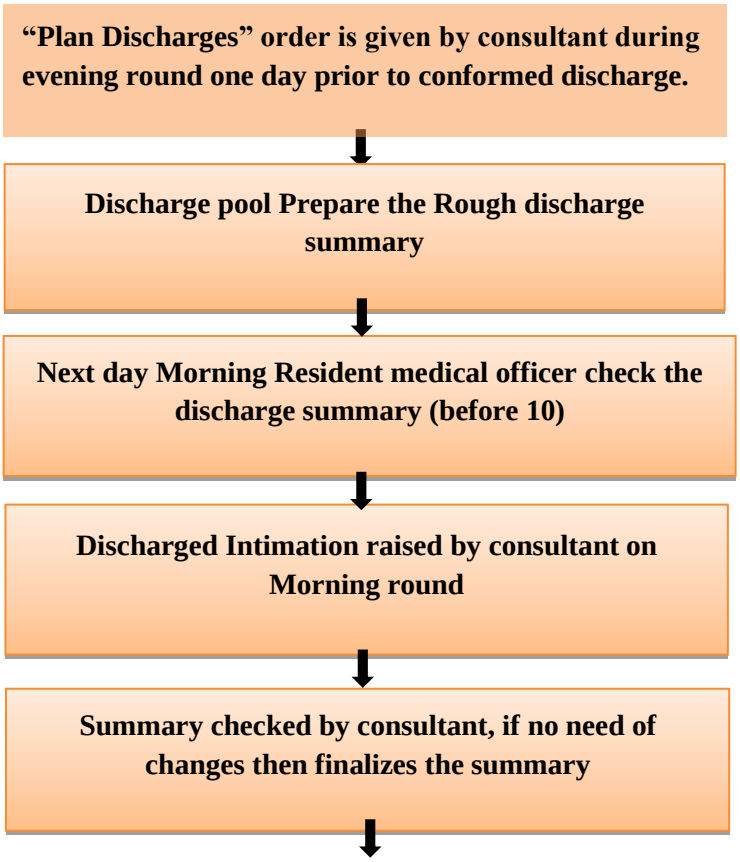
- According to *LixinOu et al.* reported that Discharge delayed most commonly associated with the patient's medical conditions, delayed healthcare services or medical consultation, delay in diagnostic services and delayed allied health services. Publication of the Australian hospital association-august 2009 .

- *Carroii and Dowiing*in their primary study identified key elements of best practice in relation to discharge planning. Their review confirmed that effective communication between patient and healthcare professional is paramount to the success of effective discharge planning, in addition to other elements of coordination, education, patient participation and collaboration between medical staff. British journal of nursing 27th September 2013
- *Bauer et al in his article Discharge of the Frail* suggests that inadequate discharge planning for older people can lead to adverse outcomes and risk in hospital readmission. It demonstrated the direct correlation between good quality discharge planning and reduction in the rate of hospital readmission. US national library of medicine national institute of health September 19,2009
- *Murchison R.S* stated that Hospital Information System helps to integrate the data from beside monitors and ancillary equipment and this technology enables faster, easier and fewer patient transfers, continuous monitoring and remote access of patient information . October 2017
- In a *Cochrane Database Systematic Review, Shepperd et al* reported that nearly 30 percent of all hospital discharges are delayed for non-medical reasons and these factors mainly include inadequate assessment resulting, late booking of transport and poor communication between hospital and providers of services in the community medical research 24 November 2011
- *Hopkins AD and Jones I* in his article "*Does a dedicated discharge coordinator improve the quality of hospital discharge"* suggests that discharge co-ordinators can improve hospital discharge through supporting the integration of different professionals, overseeing and direct planning and addressing emergent problems in a more responsive way.Quel healthcare ,june1996
- *Shobitha Sunil, Sarala K.S and R G Shilpa*in their study mentioned that the quality of care provided by the hospital also depends on time taken for completion of discharge process and as per NABH the time completion of discharge process should not exceed 59 minutes and delay in discharge process can be depressing to the patients and also it increases the pressure on hospital beds . Saveetha school of management India 2017
- *Tierney et.al* in his study pointed a range of factors for the delay in discharge in November 2007 which includes:

i. Deprived communication among patients and healthcare providers.
ii. Require of assessment and planning for discharge
iii. Insufficient notice of discharge
iv. Inadequate contribution of patient and family
v. Over-reliance on unceremonious care
vi. Lack of concentration to the special needs of vulnerable groups

- Research conducted by *Smith* reported that a comprehensive approach to patients throughout could yield nearly 25 percent more effective capacity for the average hospital. Accelerating patient placement and discharging patients earlier in the day can significantly impact hospital capacity. Houston July 2005
- *Stevens M, Reininga IH AND VAN Horn JR* in their study expressed that the quality of medical care provided by the hospitals depends on patient satisfaction. Over many years rating given by the patients are highly satisfied which remains remarkable . February 2006

STANDARD OPERATING PROCEDURE OF DISCHARGE FOR PATIENTS



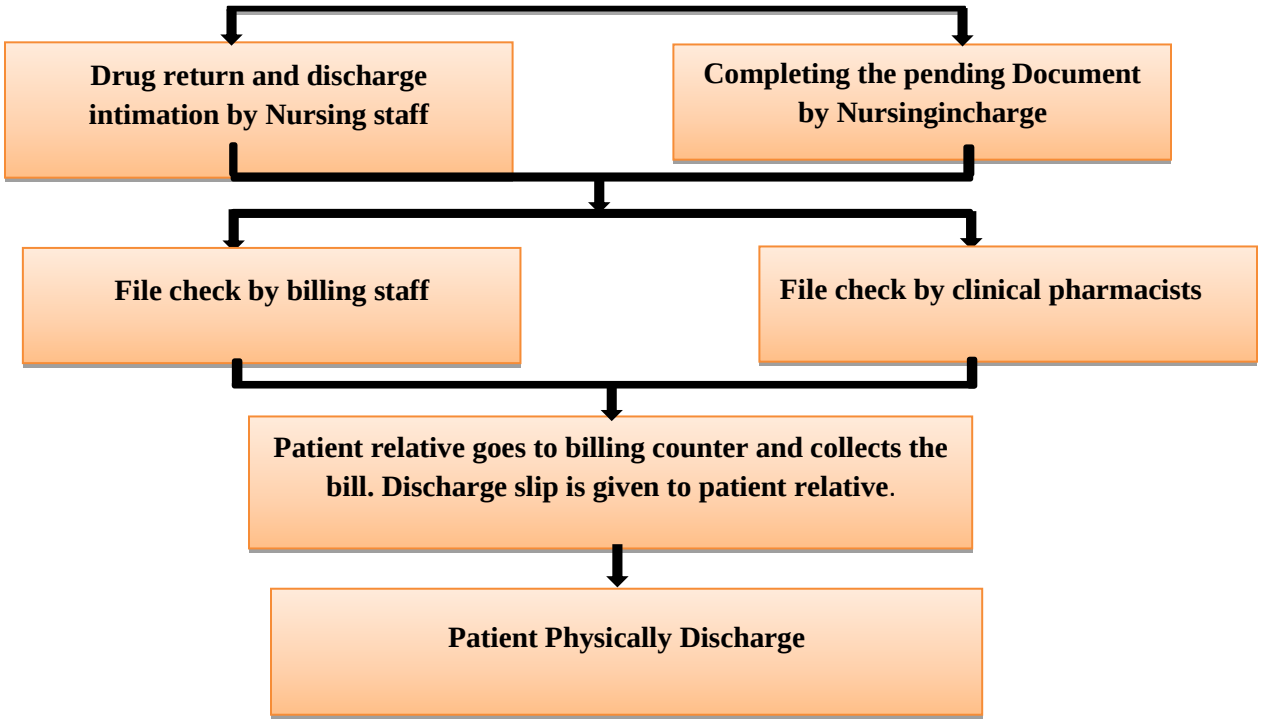


Figure.2

The above process map depicts that there are various phase or sub – process involve in the discharge process. These sub- Process were described as follows:

- **Discharge Summary Finalization:** In the first part of the day round by expert chose to release the patient and the equivalent is educated to doled out medical attendant. In the meantime, educated to typist to set up the rundown with the assistance of doled out RMO and agreement with the specialist's notes referenced in the document. After consummation of harsh outline, the rundown s sent to advisor to settle the synopsis.
- **Pharmacy Clearance:** When the specialists on their round have educated the attendant with respect to release of patient, the doled out medical attendant gather all the unused medication from the patient other than and put demand for returns in the HIS framework. The unused drug is stuffed into one conveying sack and mark and sent to the IPD drug store. In the wake of restoring the medication the alloted Nurse raised the release implication.

- **File preparation:** The RMO and assigned Nurse complete the file by attaching all documents and investigation**.**
- **File check-up:** The file is check is by billing department. The status in the HIS is updated as bill ready.
- **Summary check:** Summary check:After updating of bill the clinical pharmacists check the summary
- **Bill Clearance:** Once the status is updated about bill, the patient is informed of the same and requested to clear the bill at the billing desk

  Physically out:: After submitting the discharge slip to Nursing staff the RMO explain the discharge summary to relative, assigned Nurse removed all accessories from patient, arrange the wheelchair and patient is physically left to the ground floor.

STANDARD TIMINGS FOR DISCHARGE PROCEDURE:

The administration of Fortis Escort medical clinic has benchmarked the release procedure inside an hour and a half for money tolerant Patients. The standard timings for the patient to get increased for release by the specialist and after that increased for Sent for charging by the head nurture must take 15 minutes. After that the left-over meds are sent to the drug store office and in the event that the patient had any medical procedure, at that point freedom from the Operation Theatre office is taken and this entire leeway is done through Hospital Information System and must not take over 15 minutes. In the wake of getting Clearance, the document is exchanged to the International charging office inside 15 minutes. When the document scopes to the concerned individual the bill must prepare inside 15 minutes and gave over to the patient/orderly/facilitator. As the patient pays the bill, the charging work force marks Discharge Approved on the framework and this procedure must not occur more than 15 minutes. After that 15 min for the patient physically move from the emergency clinic. Consequently, the absolute time taken for the release ought to be inside an hour and a half.

METHODOLOGY: The study was carried out in the inpatient department of Fortis Escort hospital.

SAMPLE SIZE: 402 (3-month total discharges 4020) So I selected 10 percent of total sample size

STUDY DURATION: 11th February to 9th May 2019

SAMPLING: Probability random sampling from 3 floors

RESEARCH DESIGN: Descriptive and analytical study

RESEARCH APPROACH: Quantitative approach

METHODE OF GATHERING DATA: Audit checklis**t**

NATURE OF DATA:

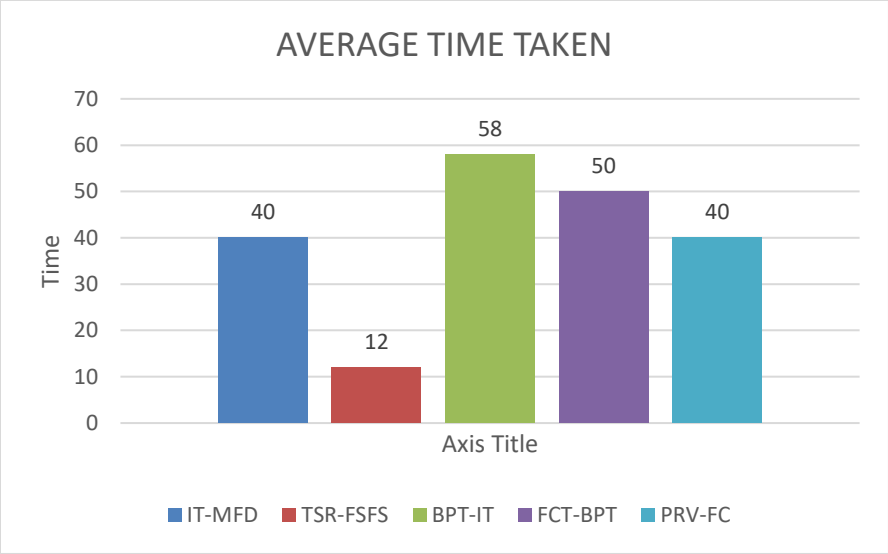
Primary data was collected by:

- Informal interview with the nurse in charge
- Informal interview with the hospital staff on nursing station in ward
- Informal interview with the Guest Relations Executive
- Informal interview with pharmacist and billing personnel.

Secondary data was collected by:

- Standard Operating Procedures (SOP" s)
- Organization's discharge manual

OBSERVATIONS & FINDINGS:

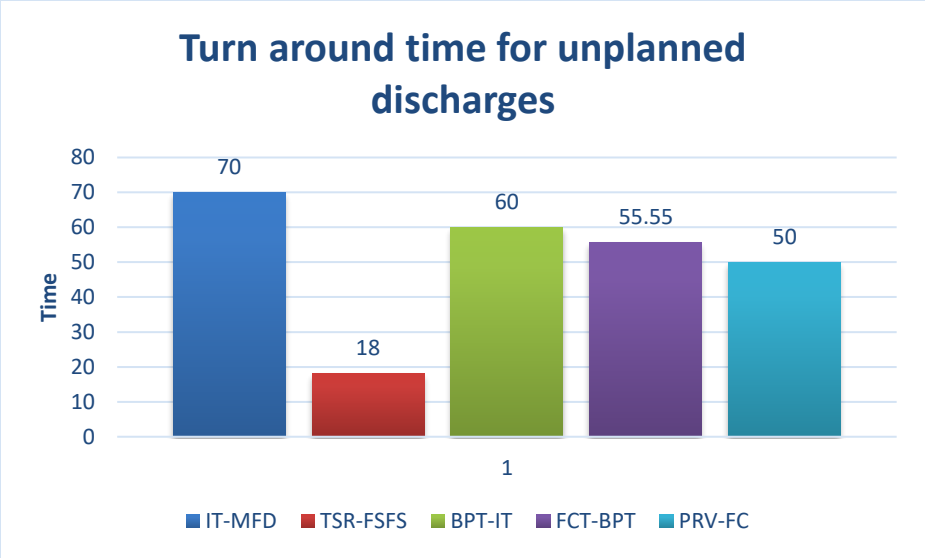


Graph 1: Total average time taken in different steps of discharge process.

- The graph represents the average time taken for patient marked for discharge and intimation time is **40 minutes**, time taken for final summary receiving in **12minutes** and the average time taken for the intimation to bill preparation **58minutes.** Bill preparation to financial clearance 50 **minutes**. And after financial clearance to patient room vacating time is 40 minutes.

INFERENCE:

The study shows that the average time taken for marked for discharge to intimation time 40 minutes exceeds the standard time by **30 minutes .**and time taken for intimation to bill preparation time 58 minutes exceeds by **18minutes.**financial clearance to patient room vacating time 40 minutes exceeds by **10 minutes.** However, the discharge approval takes **1hour 56 minutes** which exceeds the standard timing by **2 hours**. Hence most of the delays in discharge is due to time taken in bill clearance and the delay in intimation time.

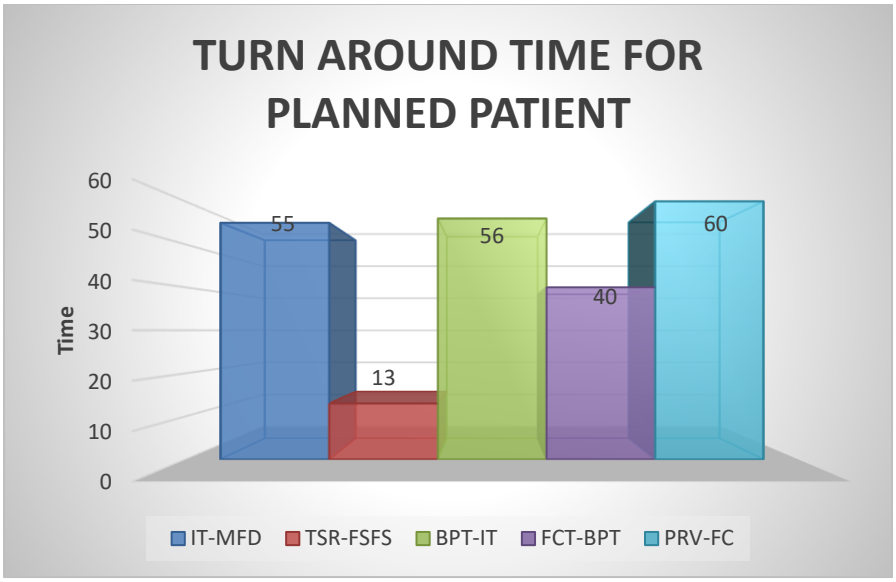


Graph 2: Average time taken in unplanned discharges

- This graph represents that in UNPLANNED discharges the average time taken for marked for summary to intimation time 70**minutes,** time taken for file send for summary to receive final summary**18minutes**and the average time taken for intimation time to bill preparation time 60 **minutes.** The bill preparation to financial clearance 55.55 minutes**.** Whereas, the average time taken for financial clearance to patient room vacating time is 50 minutes.

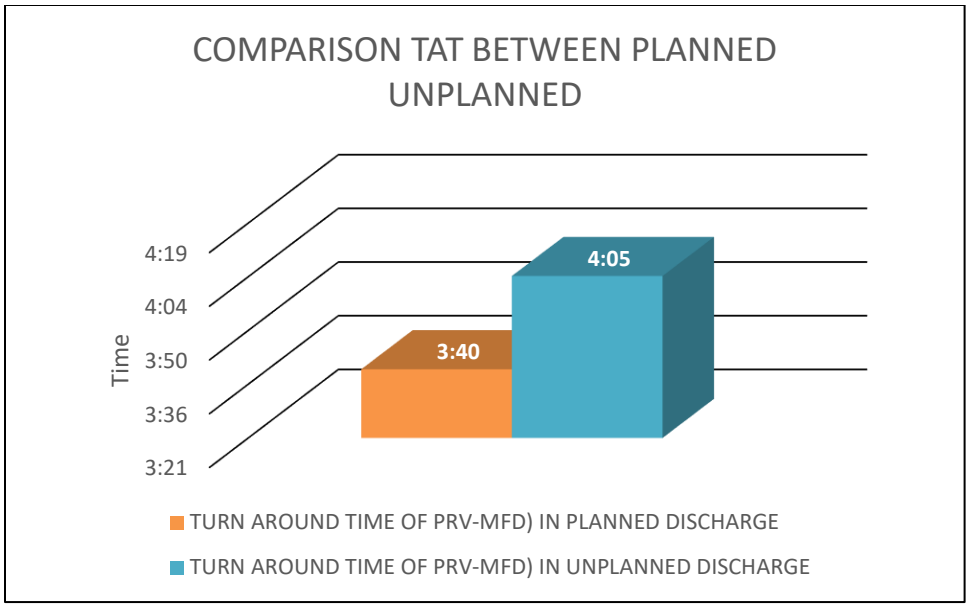
  INFERENCE:

  This graph implies that average time taken for the patient to get marked for discharges to intimation time is 70 minutes exceeds the standard timings 60 minutes, and time taken for bill preparation gets increased by 30 minutes . Whereas, discharge approval in unplanned discharge stakes 2 hours which exceeds the standard timing by 1hour 45 minutes. Hence most of the delays in discharge is due to time taken in bill clearance by the patient.



Graph 3: Average time taken in planned discharges

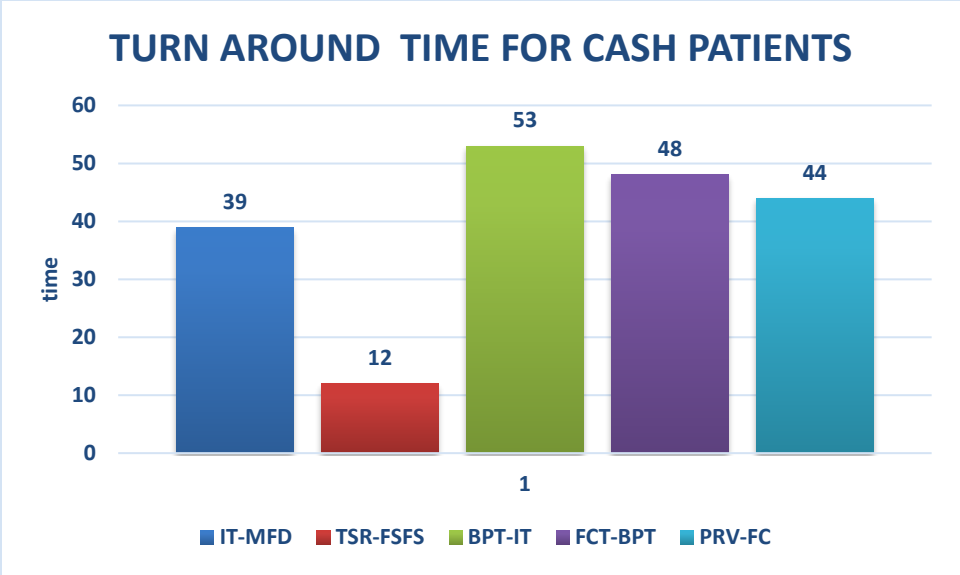
- This graph represents that in PLANNED discharges the average time taken marked for discharged to intimation time 55**minutes.** The average time taken for file send for summary to final summary receiving time 13 **minutes** and the average time taken for intimation to bill preparation 56**minutes.** The bill gets ready in an average time for bill preparation to financial clearance time 40 minutes**.** However, the average time taken for financial clearance to patient room vacating time 60 minutes
- **INFERENCE:**
  This graph implies that average time taken for the patient to get marked for discharged to intimation time 55 minutes exceeds the standard timing 45 minutes, time consumed in preparing the bill exceeds 26 minutes. Financial clearance to patient vacating room exceeds the standard time 30 minutes However, discharge approval in planned patients takes 3 HOUR 73 minutes which exceeds the standard timing by 2hour 21minutes. Hence most of the delays in discharge is due to time taken in bill clearance by the patient and patient vacating room.



Graph4: Comparison of turnaround time between Planned and Unplanned discharges.

- This graph represents that average time taken for the discharge process to get completed in PLANNED discharges takes 3hour 40 minutes, whereas UNPLANNED discharges takes 4 hour 05 minutes.

INFERENCE: From the above graph it is clear that time taken for the complete discharge process for Planned as well as Unplanned discharges exceeds the standard timings. The standard turnaround time for planned/unplanned discharges is 90 minutes but it is clearly seen that there is a delay of 1hours 50 minutes in planned discharges and 2 hours 5 minutes in unplanned discharges

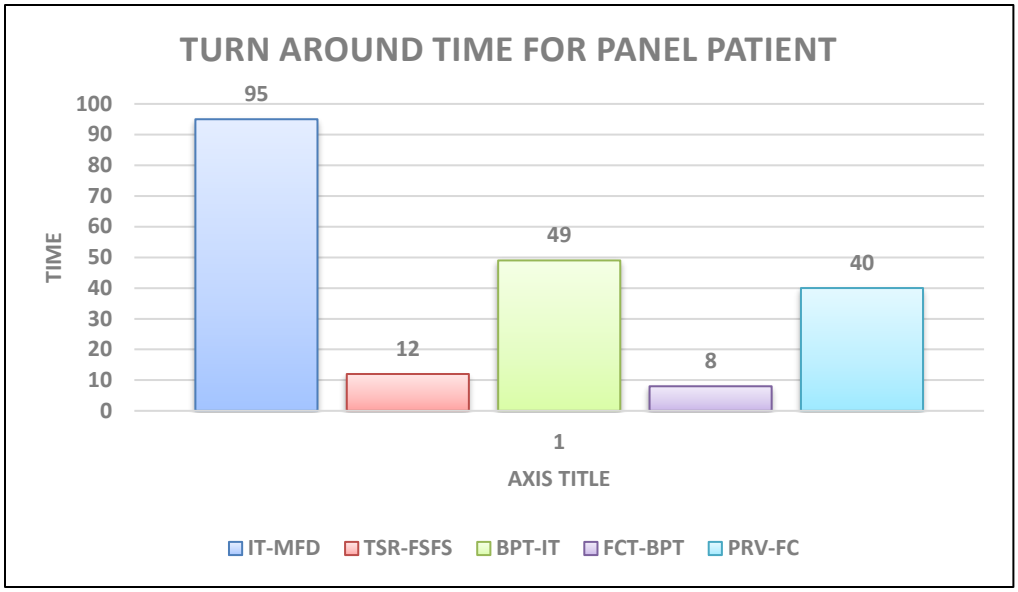


Graph 5: Turnaround time taken for cash patients

According to data there were 150 cash patients and this graph shows that in cash patients the average time taken between the patient marked for discharge discharge to intimation time is 39**minutes,** time taken for file send for summary to final summary receive 12 **minutes** and time taken for the intimation time to bill preparation time 53 **minutes.** Bill preparation to financial clearance time is 48**minutes.**However the average time taken for financial clearance to patient room vacating time 44**minutes.**

INFERENCE:

This graph depicts average time taken for the cash patients to get marked for discharged to intimation time39 exceeds the standard timings by 29minutes.Since the bill preparation time taken is 53 minutes, which exceeds by 33minutes.finacialclearace to patient room vacating 44 minutes which exceeds by 14 minutes However discharge approval in cash patients takes3 hour 26 minutes , which exceeds the standard timing by 1hour 76 minutes. Hence most of the delays in discharge is due to time taken in bill preparations by the cash patients.

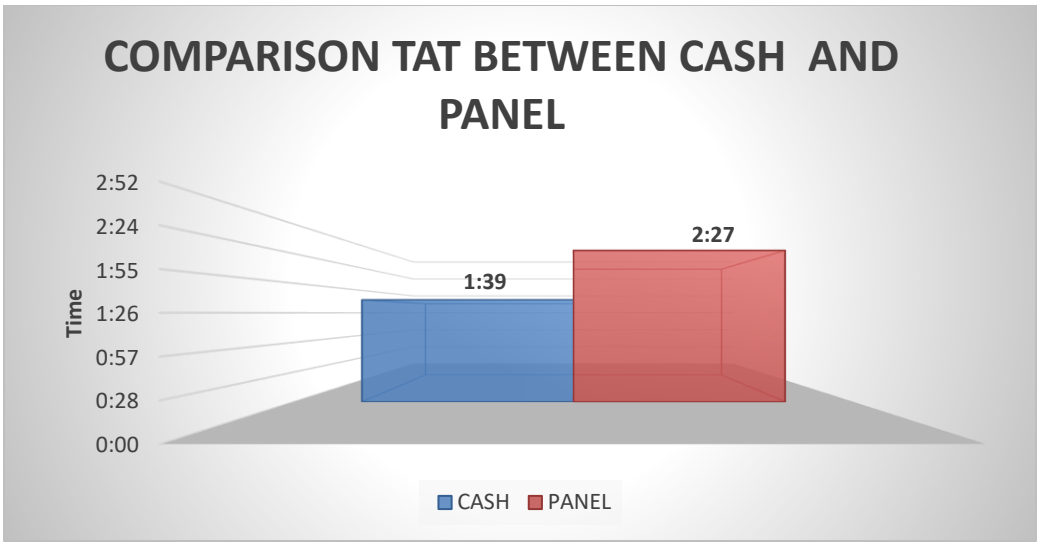


Graph 6: Turnaround time for panel patients

- According to data there were 251 panel patients and this graph represents that in panel patients average time taken marked for discharge to intimation time 95 **minutes.** The average time taken for file send for summary to final summary receive in 12**minutes** and the average time taken for the intimation time to bill preparation time 49 **minutes.** The bill preparation to financial clearance 8 minutes However, the average time taken by panel patients for financial clearance to patient room vacating time 40 minutes.

INFERENCE:

This graph signify that average time taken for the panel patient to get marked for sent for marked for discharged to intimation time exceeds the standard timings by 80 minutes , time consumed in bill preparation is increased by 24 minutes minutes .and financial clearance to patient room vacating time exceeds 10 minutes Whereas, discharge approval in panel patients takes 3 hour 40minutes which exceeds the standard timing of 84 minutes minutes. There is delay in discharge process for panel patients due to Intimation time



Graph 8: Comparison of turnaround time between cash, panel patients

- This graph Compares the average time taken for the discharge process for CASH& PANEL patients. As the data of Cash patients is less, one discharge took a very long time so turnaround time is more.

INFERENCE:

From the above graph it is clear that time taken for the complete discharge process for cash, panel patients exceed the standard timings. The standard turnaround time for cash, panel patient is 90minutes, 120minutes respectively, but it is clearly seen there is delay in cash patients by 39 minutes, delay in panel patients by 27 minutes.

In the context of the study, the cause and effect diagram were constructed after studying the mean time for the sub – process.

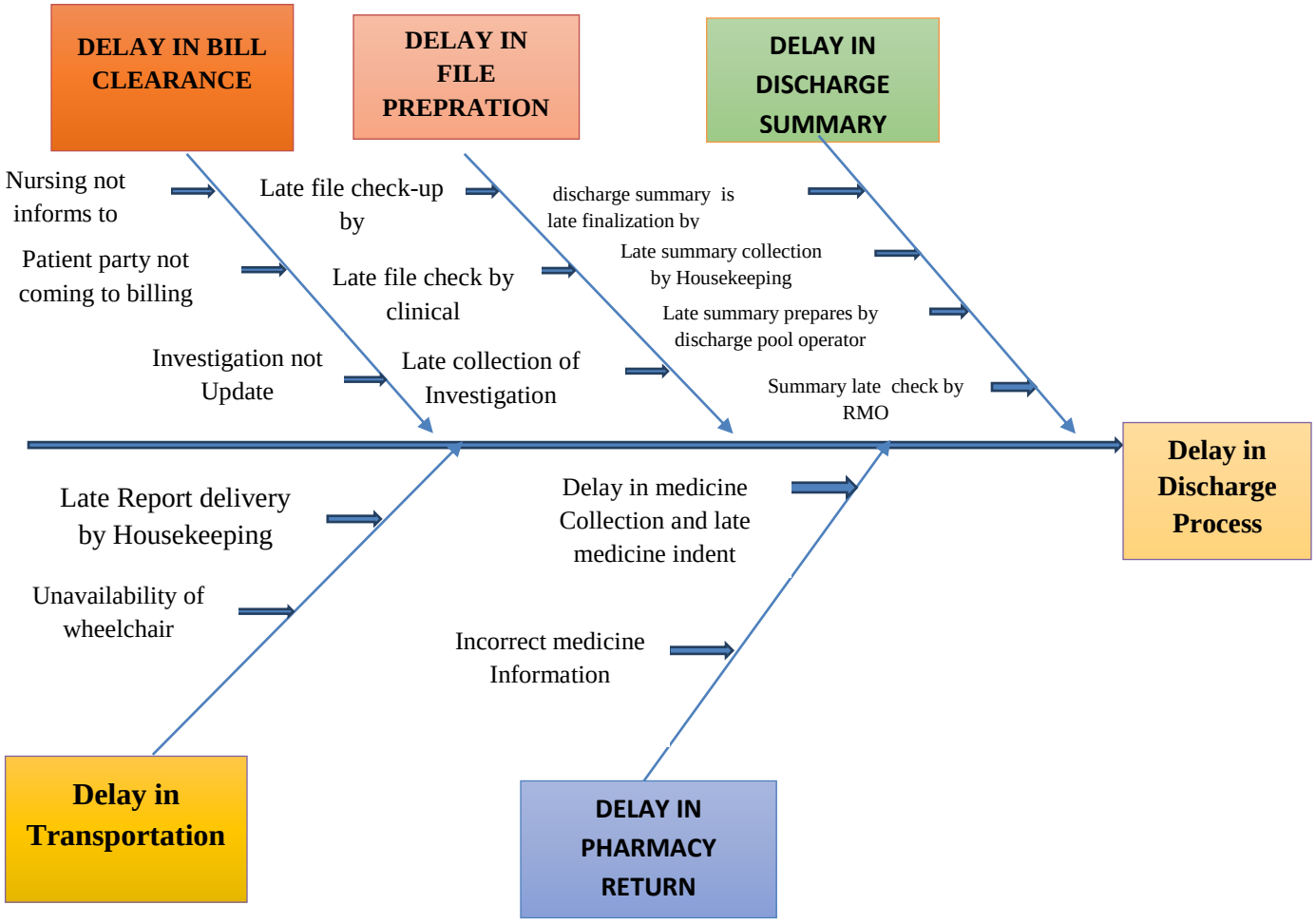


Figure .3

From the above diagram, it was observed that the following were the major cause of delay in the discharge process in billing preparation, bill clearance, intimation, summary delay.

ROOT CAUSE ANALYSIS:

According to the observations and analysis of the data the following are the reasons leading to delay in steps of discharge process:

Steps of discharge process under investigation	Root Cause of the Problem	Solutions to the Problem
Delay in marking Sent for billing by the Head Nurse	• Lack of clarification about the signing of discharge summary. • Head Nurse is busy with other tasks	• Signed discharge summary should be kept on a particular location at desk • Head nurse should sensitize their task.
Delay in pharmacy clearance	• Lack of manpower in clinical pharmacy	• Increasing manpower in the pharmacy department
Delay in receiving the file in billing department	• GDA's have to wait for elevators for carrying the file to the billing department. • Unavailability of GDA's as they are also supposed to carry the samples to the laboratory.	• Training of GDA's for prioritizing their tasks and service lift must be used by utility service employees. • Specific GDA's can be assigned for transferring the file to the billing department.
Delay in preparation of bill	• Large number of file reaches at a time	• There could be a provision for some of the wards to finalize the bill through Hospital Information System.
Delay in bill clearance i.e getting discharge approved	• Lack of Communication by the Guest Relations Executive (GRE's) to the patients/attendants.	• Reminder messages/emails are sent to GRE's as soon as the bill is prepared.

RECOMMENDATIONS:

Based on the study findings, to improve the time taken for discharge process and to make discharge procedure more patient friendly, for all types of discharges, it is suggested that:

- All stake holders involved in the discharge process should be appropriately available, depending on the patient load.
- Staff recruited for these departments should be trained in discharge process and have efficient communication skills for better interaction with patients/relatives.
- Instead of sending files from each floor to the billing department for preparation of the bill, there could be a provision for some of the wards to finalize the bill through Hospital Information System.
- Reminder messages/emails can be sent to GRE's as the bill gets prepared.
- The limit for cashless claim should be prior notified to the patient at the time of admission so that they can manage how much cash they need to pay.

CONCLUSION:

Patient discharge is a complex process involving coordination of all departments and staff in the hospital. Discharge patient in a timely manner is a challenging task. In this study, time taken for discharge process in patients in Fortis Escort hospital was analysed. It was found that time taken for clearance of the bill was contributing the most to the total time taken for discharge process. With adequate staffing and improving communication skills billing clearance can be reduced. Thus, time taken for discharge not only improves patient satisfaction but also helps in effective bed management for the hospital.

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