A STUDY ON REDUCING DISCHARGE PROCESS TIME FOR MCH PATIENTS AT APOLLO HOSPITAL, LUCKNOW

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

Rishabh Singh

Under the Supervision and Guidance of

Dr.PR Sodani

2021

Appendix C: Title Page

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Apollomedics
SUPER SPECIALITY HOSPITALS

DECLARATION BY STUDENT

I hereby declare that this dissertation titled **A STUDY ON REDUCING DISCHARGE PROCESS TIME FOR MCH PATIENTS AT APOLLO HOSPITAL, LUCKNOW** 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 Information derived from the published or unpublished workof others has been duly acknowledged in the text.

Rishabh Singh

(Signature)

Name of Student: RISHABH SINGH

Date 1|07|2021

Apollomedics
SUPER SPECIALITY HOSPITALS

CERTIFICATE

This is to certify that Rishabh Singh in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management from the IIHMR University, Jaipur has successfully completed her/his internship at (name of the organization) during March 22, 2021 to June 19,2021.

Place: LUCKNOW
Date: 1/07/2021

Preceptor/Head of the Organization
Name of the organization

APOLLOMEDICS SUPERSPECIALITY HOSPITAL
REGISTRATION NO.
HOS/16/552
LUCKNOW
226012

CERTIFICATE

This is to certify that dissertation titled **A STUDY ON REDUCING DISCHARGE PROCESS TIME FOR MCH PATIENTS AT APOLLO HOSPITAL, LUCKNOW** is a record of the research work undertaken by Rishabh Singh in partial fulfillment of the requirements for the awardof 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

Date

School Dean
IIHMR University, Jaipur

Date

ABSTRACT

A visit to the hospital is often perceived as a daunting task for the patients as well as their attendants. As a healthcare provider the primary focus of any hospital is to ensure the best possible care to the patient. The moment a patient is admitted into the hospital to the time they are discharged, begins a complex process of healthcare management and involves a multi-stakeholders approach.

The "Discharge" process is perhaps one of the most critical step to ensure that the patient is on a recovery path. Both the patient as well as their attendant/s look forward to the returning to the serenity of their homes. The hospital too looks forward to ensure timely care to their patients and reduce their average length of stay in the hospital. The study here attempts to assert that that an improved discharge process can substantially enhance patient outcome as they result in seamless transition to the further level of care and treatment.

The prime purpose of this study is to understand the process flow of the discharge of a patient admitted under the MCH IPD department at Apollo Hospital, Lucknow. This study takes the form of a case study in which data was collected by observation. A total of 86 samples were collected in a month. The discharge process here, ideally takes around 4-5 hours in typical cases. However on examination of the monthly data it was revealed that on an average a patient took only 2.14 hours to complete the discharge process from the Obstetrics & Gynecology wards. The findings further showed that the was slight delay while completing formalities such as the preparation of discharge summaries which is done by the ward staff and the payment of the final bill by the attendant of the patient waiting to be discharged. Therefore it can be inferred that there exist a further possibility of improvement of the discharge times.

This study looks at the cue for an effective discharge of a patient from the hospital, with a focus on certain key determinants and offers suggestions for the overall improvement of the process.

ACKNOWLEDEMENT

At the outset I would like to thank the kind patronage, inspiration and guidance which I received from my guide **Dr. PR Sodani** (President, IIHMR University) without whose support, guidance, encouragement and suggestions this research and the online learning would have been impossible.

I express my heartfelt appreciation to the continuous support and love provided to me by my family and friends.

I am thankful to my supervising Manager and colleague **Dr. Ankur Nigam** for providing his continuous support and direction at each and every step of this work and who was instrumental in helping me proceed in an orderly and systematic manner.

I am also thankful to the leadership team at Apollo Hospitals especially our **CEO & MD Dr.Mayank Somani** and **COO Mr. Pramit Mishra** whose steady support have been instrumental in concluding this project.

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LIST OF ABBREVIATIONS

IPD: In Patient Department
MCH: Mother and Child Healthcare
Floor: Flr
LA MA: Leaving Against Medical Device
MRD: Medical Records Department
ANC: Antenatal Care
ALOS: Average length of stay
BOR: Bed occupancy rate
GFC: General wards Cubicles
NICU: Neonatal Intensive Care Unit
FIFO: First In First Out

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REDUCING DISCHARGE PROCESS TIME

INTRODUCTION

The project titled "Reducing Discharge Process Time" was undertaken at Apollo Hospital, Lucknow. This particular study was required since there was a large number of patients and their attendants who had given the feedback to expedite the discharge process at the MCH wards. As a part of this study, data was collected for a month and further analysis was carried out.

INTRODUCTION TO TOPIC:

Discharge of a patient from the hospital is a stage of care at which the patient either (a) leaves the hospital premises at their own will or (b) returns home after completing clinical procedures or (c) is referred and shifted to another level of care such as to a rehabilitation centre or to a nursing home for further follow-up.

Discharges could be of the following types:

Planned discharge: It is the most common type of discharge seen in hospitals when the admitted patient is fully recovered and under the direction of the consulting doctor and ward doctors is discharged from the hospital. The IPD patient's discharge is planned ahead of time and does not require further stay in the hospital.

LAMA: The acronym LAMA refers to Leaving against Medical Advice. In this case the patient requests for his/her own discharge without seeking any approval or permission from the doctor. This generally happens due to an unforeseen circumstances and leads to financial loss of the hospital as the patient opting for LAMA may not be in a position to bear the expenses of his/her treatment at the designated hospital.

Discharge process of a hospital is ordinarily a cumbersome procedure and it is also one of benchmark of quality assurance in every hospital. Therefore an expedient discharge process is desirable in every hospital. The process involves a go-ahead from a multiple departments such as the Medical Records Department (MRD), IP Pharmacy, IP Billing, TPA department etc. Additionally the hospital staff is also under constant pressure from the attendants/relatives of the patient to expedite the discharge. Despite all these pulls and pressures the hospital administration cannot fulfill the discharge obligations without due diligence and following the protocol of discharge in letter and spirit. Aggregating the clearance time taken by each of the various departments associated with the discharge of the patient along with the times related to various factors associated with patient concerns will give the total time consumed in the discharge process.

Delayed Discharge: This is the time elapsed between the patient being medically fit to be discharged and the delays in the clearances obtained to initiate the final discharge of the patient. The most common reason for the delay is because the patient may be in an altered state due to old age who may require further care or the patient is a case of Antenatal care (ANC) pregnant women.

Objectives:

- To reduce Average length of stay (ALOS) and to reduce bed occupancy rate (BOR). Bed occupancy rate indicates the actual utilization of the in-patient infrastructure for a defined period of time.
- To increase number of admissions by quicker discharging of existing patients.
- To decrease pressure on hospital beds.
- To minimize bottlenecks in discharge process.
- To identify factors of delayed discharge.
- To increase patient satisfaction by decreasing waiting time for discharge.
- To maintain continuous quality improvement as discharge process is one of the most important quality indicators.

PURPOSE OF THE STUDY:

- To ensure timely discharge of patients.
- To give prior information to the families of the patients.

Methodology:

- Quantitative manual live data was collected (for one month - from 1st Feb, 2021 to 28th February, 2021) from Obstetrics and Gynecology department, Apollomedics Hospital, Lucknow relating to discharge.
- Past quantitative data was collected from case sheets (of 15 days from 15th January to 31st January 2021).

How the study was conducted:

- First 7 days of the study was devoted to observe the discharge process in detail (from 25th Jan, 2021 to 31st Jan, 2017)
- At a later stage, data was collected (1st February, 2021 to 28th February, 2021).
- Then, 30 days was spent on analyzing data, from which conclusions were drawn and suggestions were given.
- For the next 15 days, suggestions were incorporated from the Supervisor.

DISCHARGE PROCESS AT APOLLO HOSPITAL:

IP WARDS:

Apollo Hospital at Lucknow has the following IP wards and rooms:

- Fourth Floor : LDR, NICU, MCH and HDU wards
- Fifth Floor: General ward and cubicles
- Sixth Floor: Private & Semi-Private Room
- Seventh Floor: Deluxe & Super deluxe patient rooms

Patient occupancy is 100% in General Ward and GWC (General Ward cubicles) when compared to other rooms in the hospital as prices for General Ward and GWC are lower when compared to rooms on other floors. Deluxe and Super deluxe rooms are progressively more expensive than rooms on Sixth and Seventh Floor. Hence, it is more challenging to manage admission and discharge processes for the General Ward.

DISCHARGE PROCESS:

The Doctors goes for rounds of every ward every day and records their opinion of the patient progress in the case sheet marked against the patient. If the progress of the patient is such that that it permits the patient's discharge, the doctor logs the recommended discharge date and time in the case sheet. This time is called the discharge intimation time. After it the nursing staff initiates the discharge process by intimating the other departments associated with the discharge process. A draft summary of the discharge is prepared by the MRD department. It is then reviewed and appropriate modifications are initiated (if required) by the Doctor. Henceforth the case sheet is reviewed by the nursing station. The patient's (baby's) case sheet is then obtained by the nursing station. After receiving and reviewing the case sheets of the mother and the baby, a comprehensive case sheet of the mother and the baby is sent to the Pharmacy department for the clearance of the pharmacist and sends the file to the billing department. It is then that the attendant of the patient initiates payment of the due amount at the IP Billing counter. The IP Billing department then issues gate passes to the nursing station. One of the nurse at the nursing station explains the discharge summary to the patient and their attendant. The patient then handover the keys of the room that was occupied to the nursing station. The patient then proceeds to the waiting/security area. The security personnel then authorizes the exit of the patient from the hospital after checking the gate pass of the patient and attendants.

BENCHMARKS OF DISCHARGE TIME AT APOLLO HOSPITAL:

Cash patients: 2-3 hours
Insurance patients: 3 – 4 hours

DISCHARGE PROCESS FLOW DIAGRAM:

MOTHER BABY

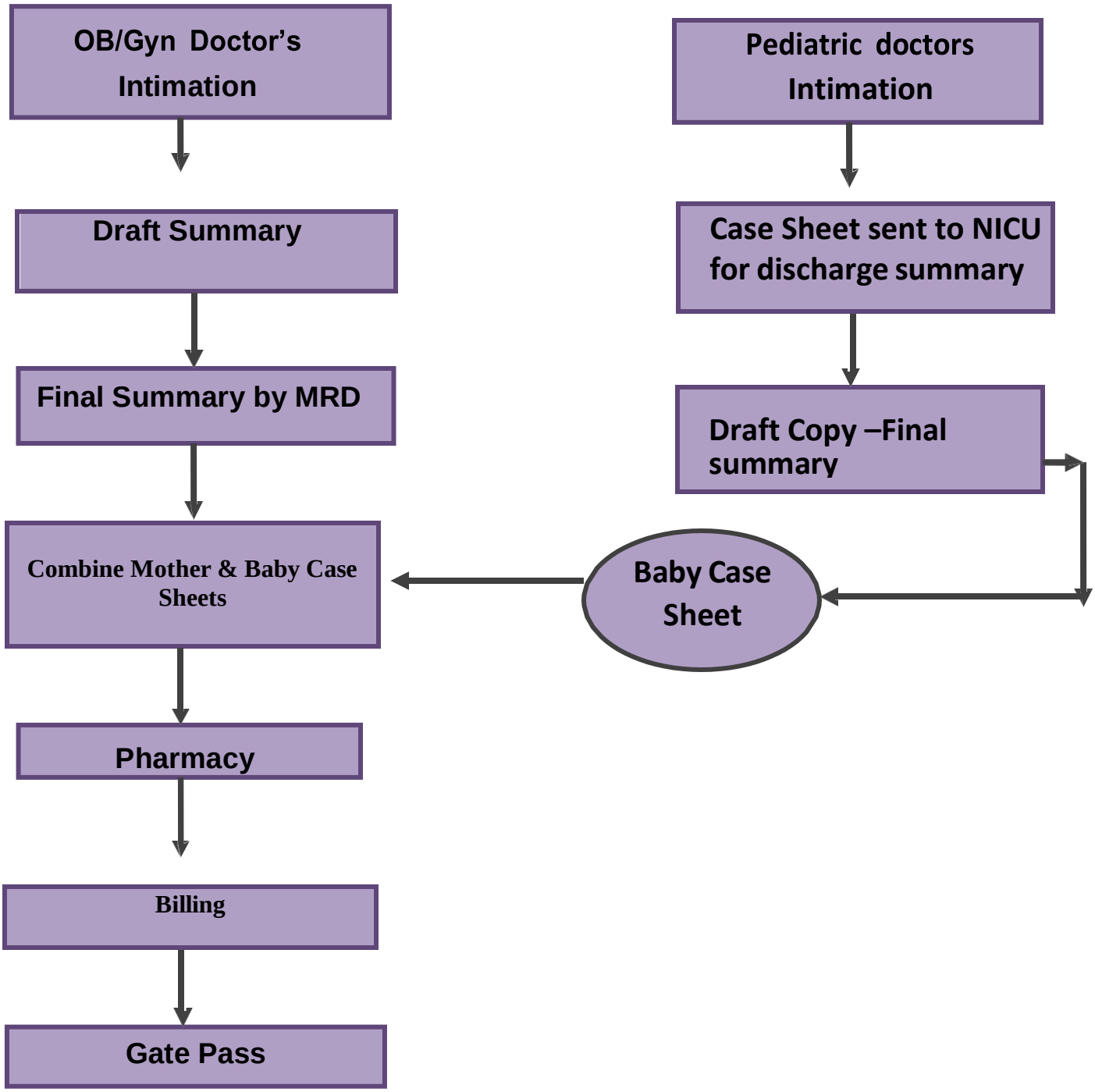
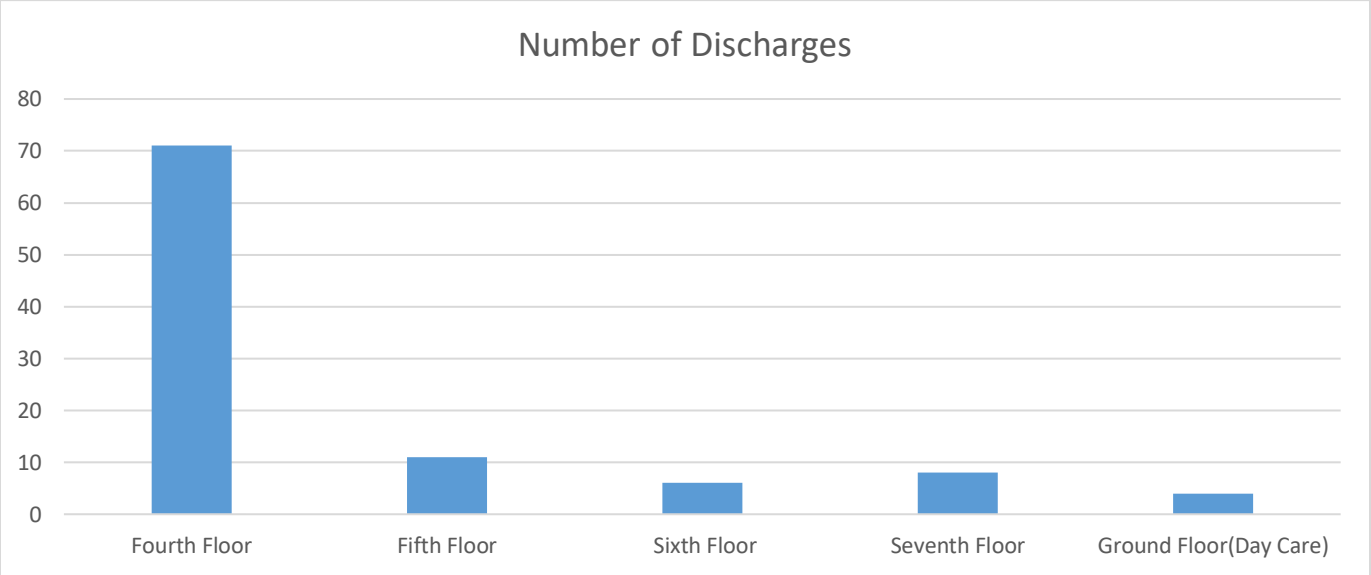


Table 1: Patient discharge load at different floors/ wards

Total No. of discharges	86
4th Flr	71
5th Flr	11
6th Flr	06
7th Flr	08
Ground Flr(Day Care)	4

Fig 1: Patient discharge load at different floors/ wards



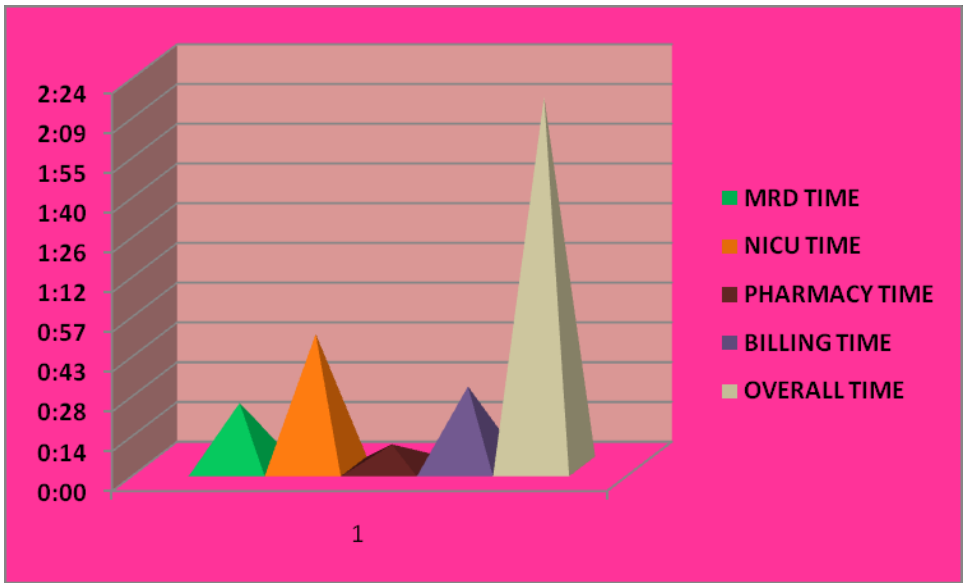
From the above table 1 and fig 1, as mentioned before, we can find that the number of patients discharged in Fourth Floor rooms is more than that of the other wards. This is because the fourth floor is a dedicated floor for all MCH related in-patient admissions. Within the fourth floor the maximum number of discharges is seen from the semi-private rooms followed by Single/Private rooms and least by deluxe rooms and Suite. This is because accommodation charges in Private/Semi-Private are more economical than the deluxe and suite rooms. Hence, patient discharge load is high in the Fourth floor. Therefore, discharge cases are more in Ground floor and first floor.

AVERAGE TIME ELAPSED IN THE DISCHARGE PROCESS: DEPARTMENT-WISE

Table 2: Time elapsed vis-à-vis departments involved in discharge process

MRD TIME	**0:23**
NICU TIME	**0:48**
PHARMACY TIME	**0:08**
BILLING TIME	**0:29**
OVERALL TIME	**2:14**

Fig 2: Time taken at different departments



From table 2 and fig 2 we may observe the time taken at each stage. The overall time taken to discharge a patient is 2 hours 14 minutes. The time taken by the Pharmacy department is least, while the MRD takes around 23 minutes to reconcile the clearance. This is essentially because they prepare a draft copy of the discharge summary which has to be vetted by the doctor who makes the desired changes in the draft and then the MRD prepares the final copy of the discharge summary. NICU time is maximum because the nursing staff follows a similar procedure while preparing the discharge summary of the baby. The IP Billing time is calculated at around 29 minutes and sometimes it exceeds this threshold because the billing staff needs to explain and (sometimes) convince patient and their attendants regarding the expenditure incurred.

INCREASED EFFICIENCY IN HOSPITAL:

The benchmark standard for the discharge process is around 3 hours. Efficient planning and processing can further expedite the discharge process and may bring down the discharge time by almost 50%. The following practices may help in increasing process efficiency of discharges:

- Advance preparation of the tentative/anticipated discharges by the various departments involved in the discharge process.
- Review & Corrections of the Discharge summary by the duty doctors in the night.
- Initiate rounds by the Obstetrics and Gynecologists along with the Pediatrician in the early hours of the morning.
- Initiate visits of the Pharmacy assistants to the MCH wards and their nursing stations to review case sheets to avoid any downstream delays.

GAPS IN THE DISCHARGE PROCESS:

- Patients should be well informed and briefed about the discharge process, absence of which results in negative feedback and patient dissatisfaction.
- Communication gaps and consequent trust-deficit between the billing staff and the patient's attendants regarding the outstanding bill payment needs to be addressed by ensuring maximum transparency and robust communication.
- Case sheets are stacked up together they dispatch for action which mayprolong discharge time for some patients. Often, discharge time is not monitored for punctuality.
- Process is also delayed due to IT issues.
- Case sheets may get mixed up which may result in confusion/ambiguity andconsequent delays.
- Lack of awareness among staff regarding importance of discharge process.

SUGGESTIONS FOR IMPROVEMENT:

The following suggestions may further enhance efficiency and cut down dischargetime even more:

- Although the discharge process is supported by the automated in-house portal MedMantra yet lack of awareness of some of the nursing staff and departmental staff leads to gaps in tracking and monitoring of all discharges. It is advisable to conduct periodic training by the IT department to all the stakeholders to ensure that all discharge related departments complete their tasks as early and as efficiently as possible. Ideally a seamless mechanism should be in place where all discharge related departments come together and work in sync with each other the moment discharge is intimated by the doctor.

- All the nursing staff and other staffs involved in the discharge of the patient should effectively counsel the attendants and their patient about the discharge process well beforehand. They should also educate the patient of the importance of timely discharge so as to ensure that there is no compromise to the outcome of the incoming patient to the room.
- All staffs associated with the discharge process must be monitored by their departmental managers to ensure that they uphold and comply with the discharge protocol in a timely manner..
- Keep proper alignment of files/case sheets and classify by types (what types are you referring to?) .There should be a system which separates patient case sheets by type (insurance, cash, credit etc)come first serve must be followed.
- Order of priority of patients must be followed in the following way:
    a. Cash>Credit>Private Insurance>Government Insurance
    b. First in First Out (FIFO).

CONCLUSION

In the end it can be concluded that the average time taken for the discharges at MCH IPD is well within the desired level. However there is still scope for its further improvement. Apollo Hospital should frame a policy document which prescribes the entire discharge processes with a well-defined Turn-around time for the multiple steps involved in the patient discharge at hospital.

Elapsed time and procedural bottlenecks in the discharge process leads to overall patient dissatisfaction while also dealing a blow to the brand of the hospital. It is therefore desirable that all departments that are involved in the discharge process should not be understaffed and a frequent time-motion study is carried out of all the relevant departments which would enable a root-cause analysis of the various reasons for the delays and other roadblocks in ensuring timely, well-documented discharge process. An important aspect of this analysis could be the periodic patient satisfaction surveys and feedbacks which would further enable us to identify the core areas of improvement within the discharge process in the hospital.

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Thank You.