DISSERTATION

on

"ANALYSIS, MAPPING AND IMPROVEMENT OF PATIENT DISCHARGE PROCESS"

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INTRODUCTION TO DISCHARGE PROCESS

- **DEFINITION**

- "**Discharge** from the hospital is the point at which the patient leaves the hospital and either returns home or is transferred to another facility such as one for rehabilitation or to a nursing home. **Discharge** involves the medical instructions that the patient will need to fully recover".
- *"The discharge planning process in a hospital will ensure that patients do not have to remain in hospital for any longer than necessary"*

- Result of delay in discharges-

Hospital bed demand sometimes exceeds capacity, leading to delays in patient admissions, transfers and cancellations of surgical procedures. Effective strategies must be in place for an efficient use of existing beds.

AIMS & OBJECTIVES OF STUDY

- **AIM:**

  To identify the delay in the processes and find out the main causes which gives rise to the different problems.

- **OBJECTIVES:**

  -To estimate the average discharge time.

  -To understand the process of discharge.

  -To find out the factors responsible for delay in the discharge process.

  -To suggest mechanism to reduce the time in the discharge process.

METHODOLOGY:

- *The present study was carried out at Narayana Multispecialty hospital, Jaipur with the objective of finding out the hindrances in the discharge process. Study reveals that there are many hindrances which cumulatively causes delay in discharge processes. Delay was observed and recorded in 55.7% of cases in discharge process (39 delayed discharges out of 70)*

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- **Study area**: Narayana Multispecialty Hospital, Jaipur.
- **Study Population**: Indoor patients who have been admitted for some kind of medical / surgical interventions
- **Nature of study**: Quantitative data collected through discharge tracker.
- **Study tool**: Discharge tracker
- **Period of study** : January 2016-April 2016.
- **Sample size**: 70 discharged patients in the ward.

STEPS OF DISCHARGE PROCESS:

1. *Discharge order given by doctor to nurse/RMO*

2. *Discharge intimation given by nurse/RMO to DEO*

3. *Discharge summary given by RMO to consultant*

4. *Final discharge summary made by DEO and print taken*

5. *Discharge summary signed by consultant/RMO*

6. *IP issues/returns done, marked for discharge in system, pharmacy clearance*

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8. *File sent to billing/TPA*
9. *File checked, bill finalized*
10. *Patients relative called for billing/TPA*
11. *File sent back to the respective ward*
12. *Bill settled by pt attender /TPA, discharge ticket given*
13. *File handed over to pt./medication explained/feedback taken*
14. *Patient vacates the room.*

Subprocesses

- The standard time of discharge for cash patient is 2-2:5 hrs and for credit patient its 3-4 hrs but in some cases delay in process occurs, thus to identify the causes of delay in process whole process is divided into sub processes and assumptions have been taken for them

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ASSUMED TIME

Starting process(discharge order given, discharge summary made, TPA file prepared)

- 30 minutes

Discharge summary correction and signed, billing/TPA file sent, mark for discharge done.

- 15 minutes

Pharmacy clearance done

- 30-40 minutes

File sent to TPA from billing

- 10 minutes

Bill sent to the billing counter

- 5-10 minutes

At billing counter

- 20 -30 minutes

No dues clarification

- 15 minutes

Discharge card prepared

- 10-15 minutes

Final bill given to patient with discharge card.

- 10-15minutes

TOTAL TIME

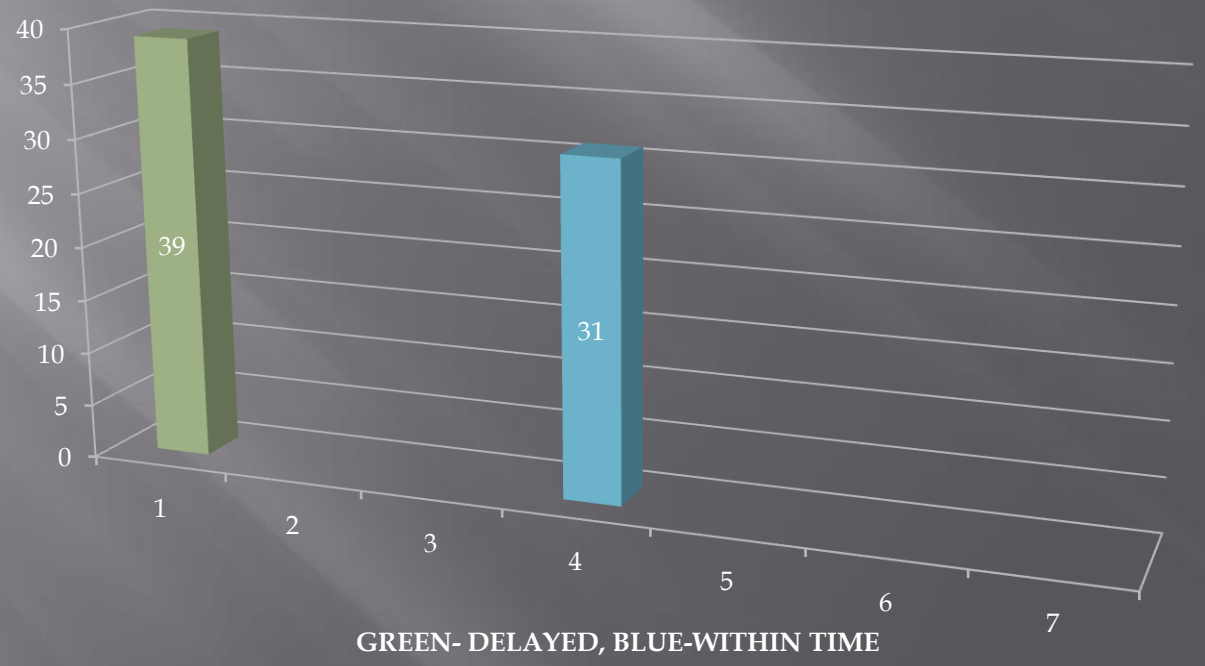
- 2-3Hrs

RESULTS AND OBSERVATIONS:

- **Discharge Tracker:**

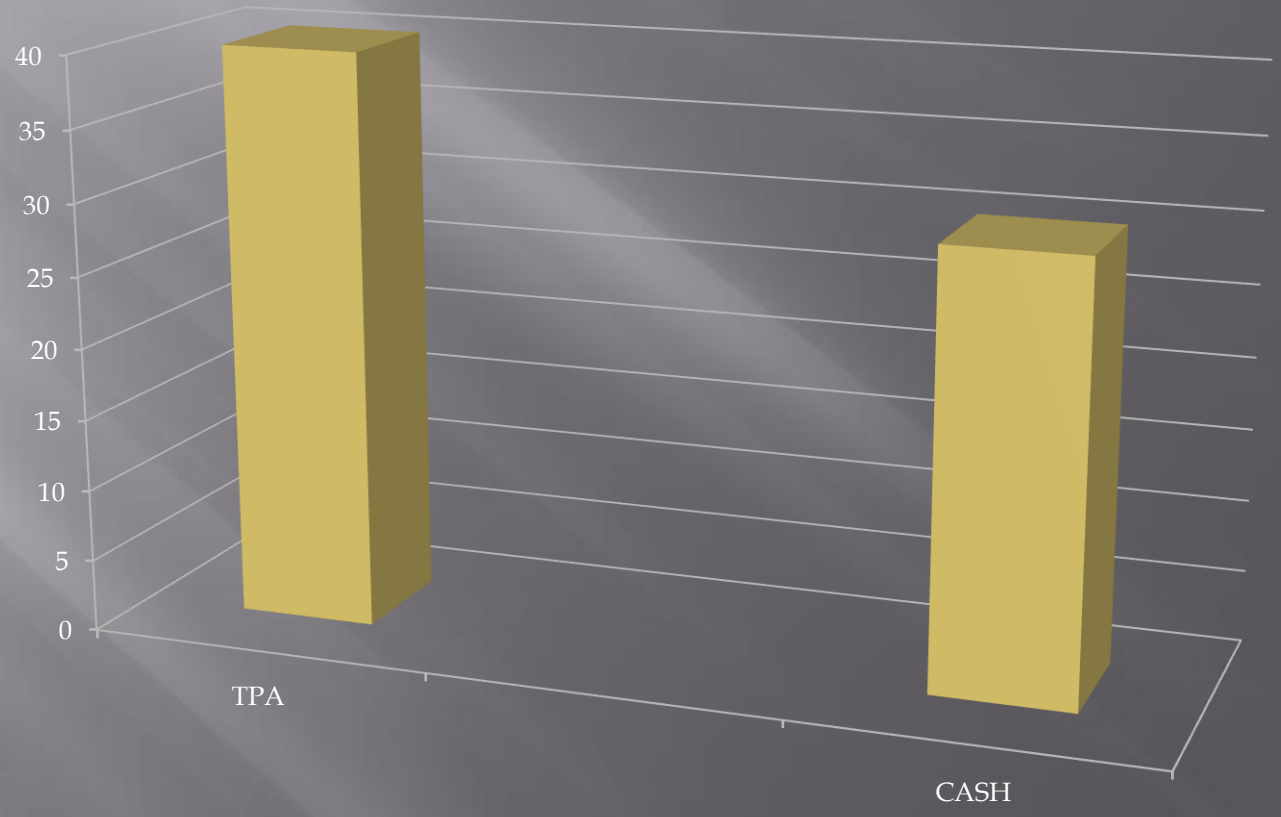
DELAYED DISCHARGES

- Out of 70 discharges 39 discharges were delayed while 31 were discharged well in time



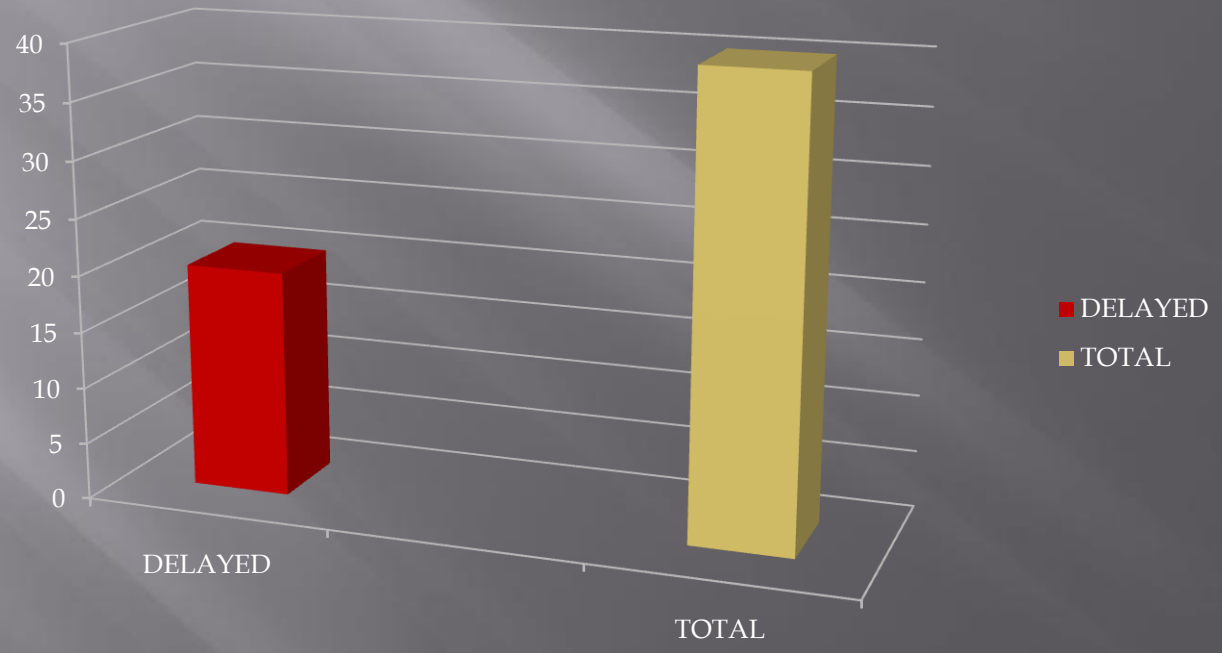
GREEN- DELAYED, BLUE-WITHIN TIME

Out of 70 discharges 40 were from TPA while 30 were cash patients

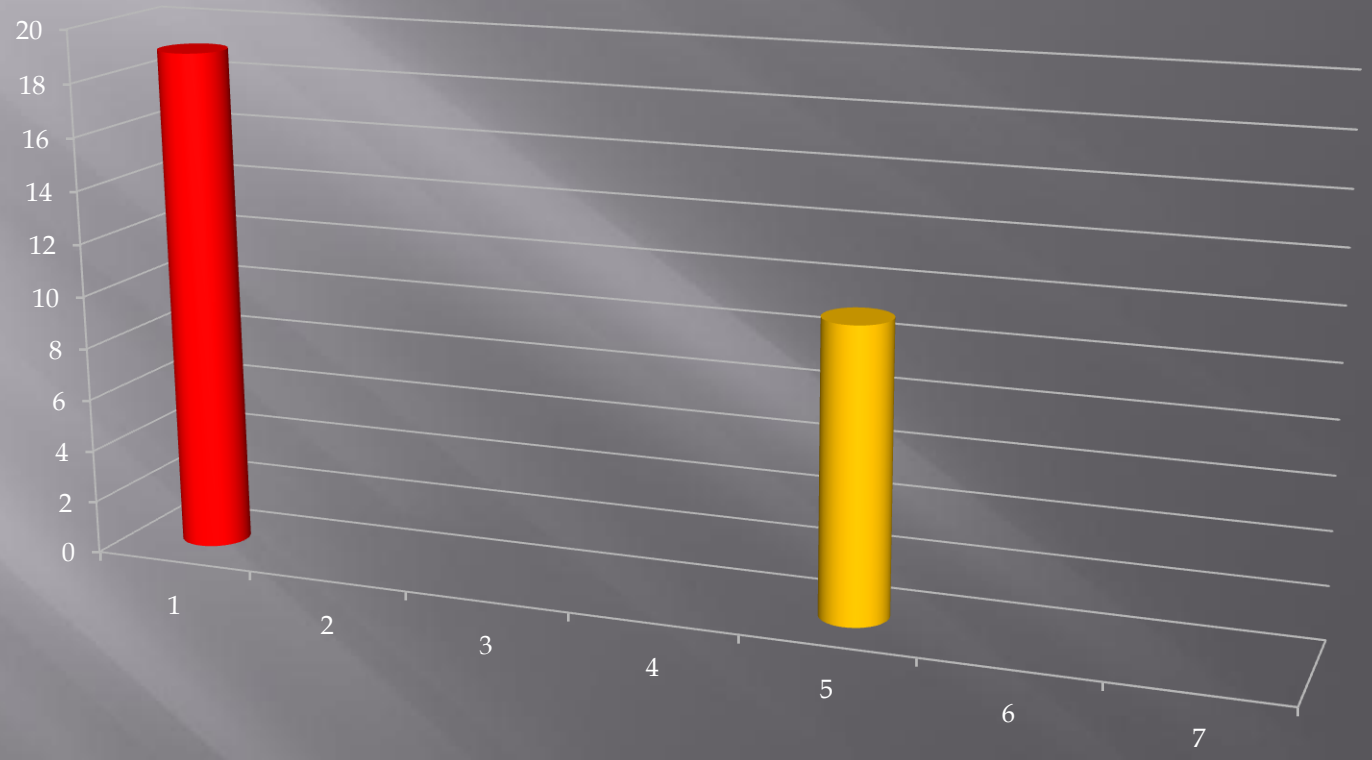


TPA DISCHARGES –

- 20 were delayed out of 40 discharges.



CASH DISCHARGES



RED- delayed discharges, ORANGE- Within time discharges(i.e 63.3% are delayed)

Average time taken for discharge processes are

- Marked for discharge (includes summary preparation if unplanned discharge and file ready if TPA discharge) –

  25 to 30 minutes.
- Pharmacy clearance –

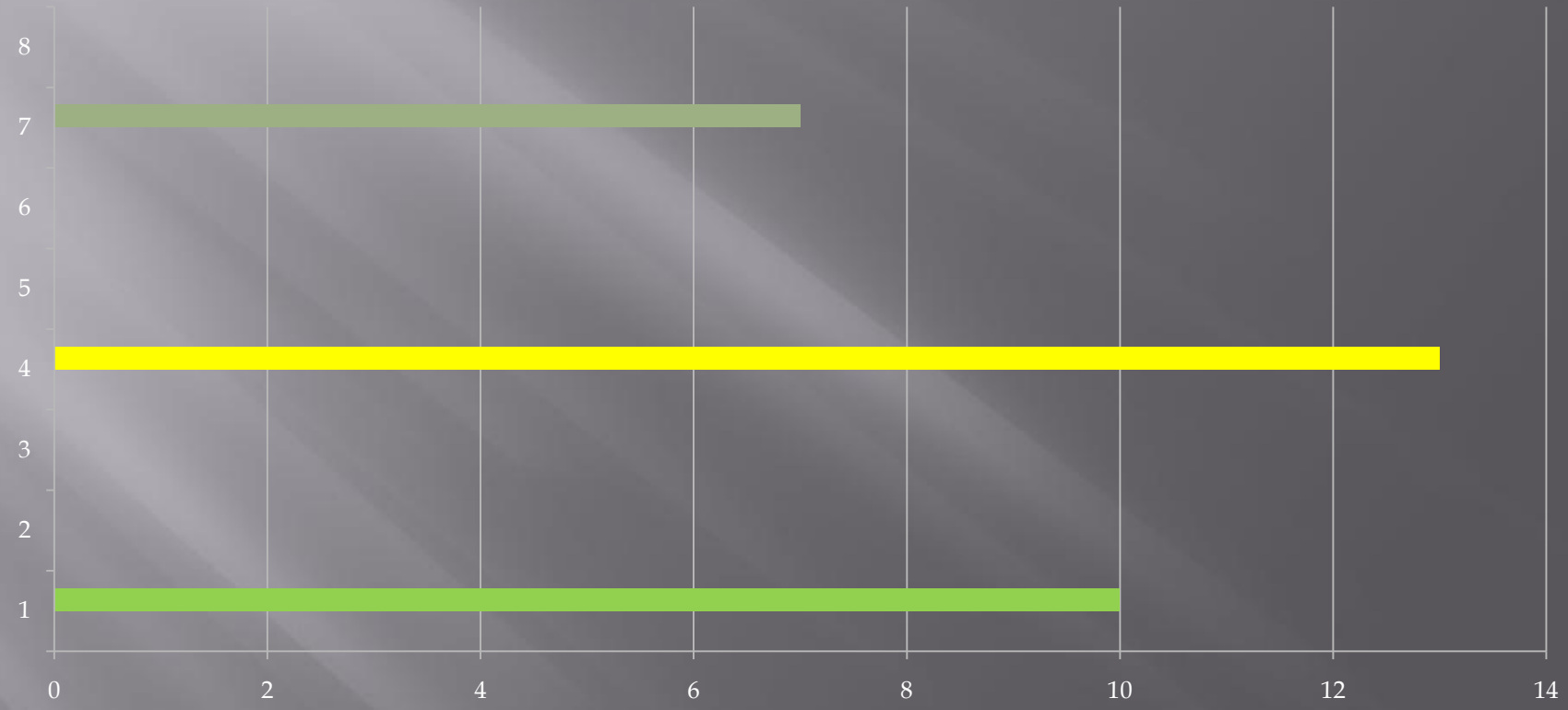
  15-20 minutes
- Billing - 40 to 45 minutes for billing
- Total time-

  2 to 2 :30 hrs for cash / 3-4 hours for TPA

OBSERVATIONS FROM DATA COLLECTED

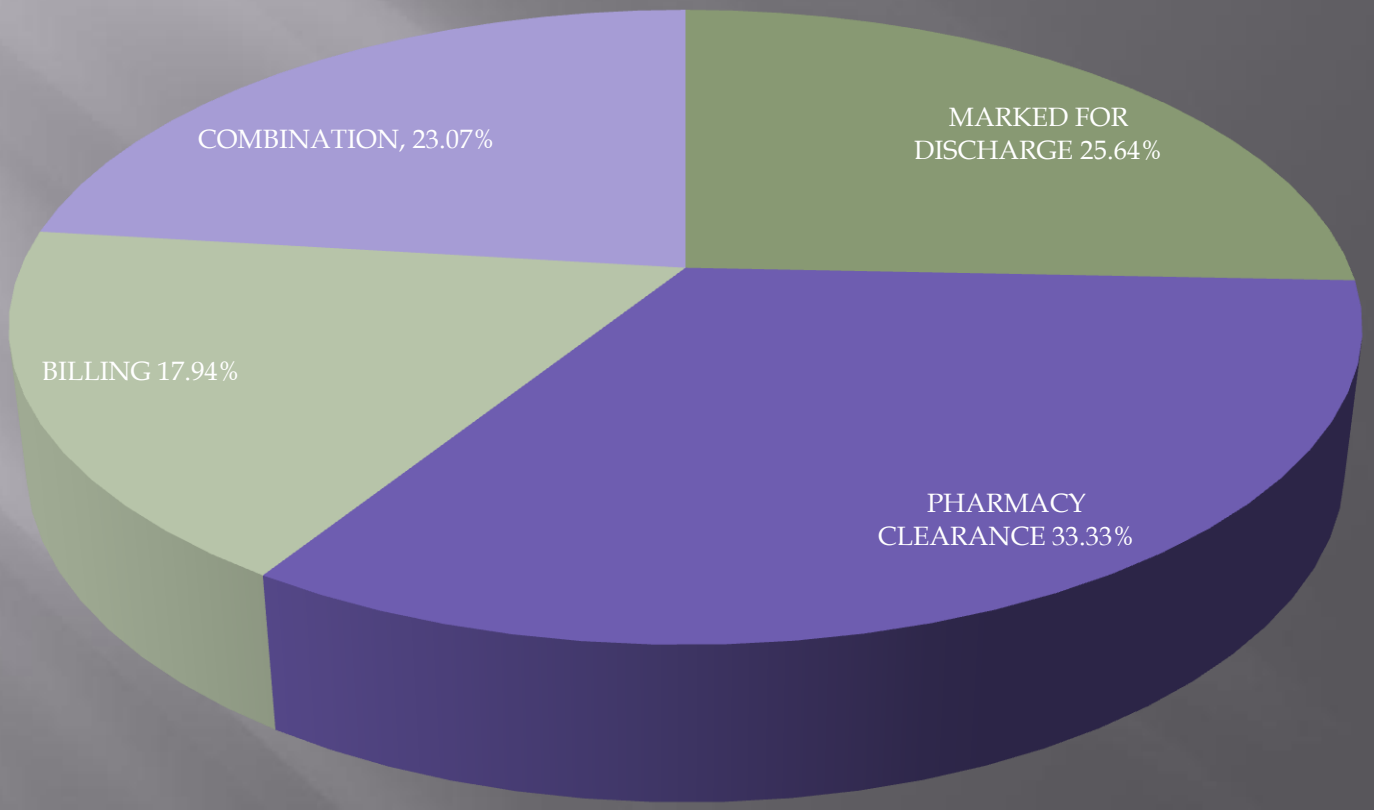
- Out of 39 delayed discharges-
- 10 delayed by late marked for discharge (25.64 %)
- 13 delayed by late pharmacy clearance (33.33%)
- 7 delayed by late billing (17.94%)
- 9 combinations of above 3 factors (23.07%)

Showing factors of delay

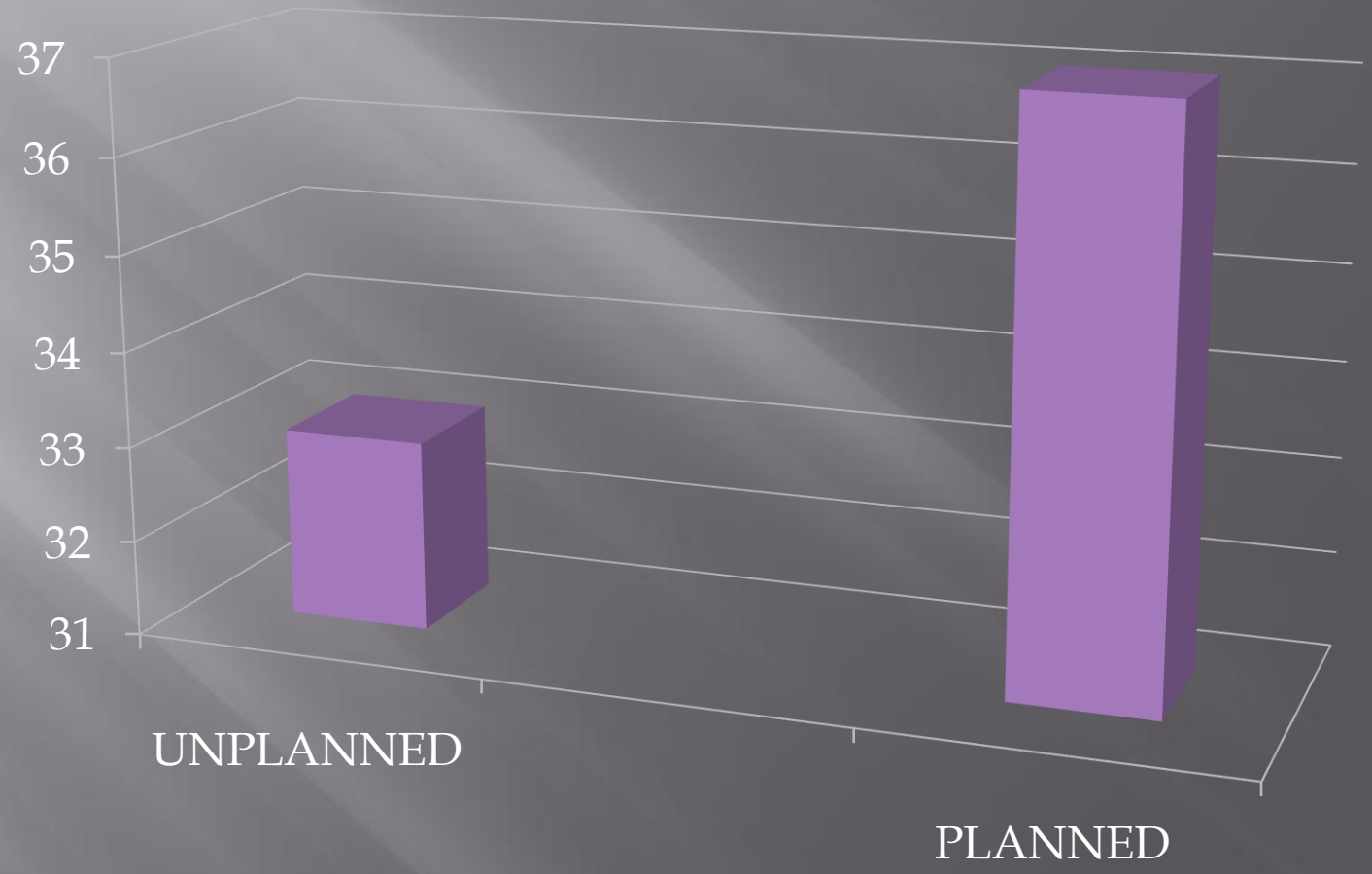


Light green- delay due to billing
Yellow- delay due to pharmacy clearance
Green- delay due to marked for discharge

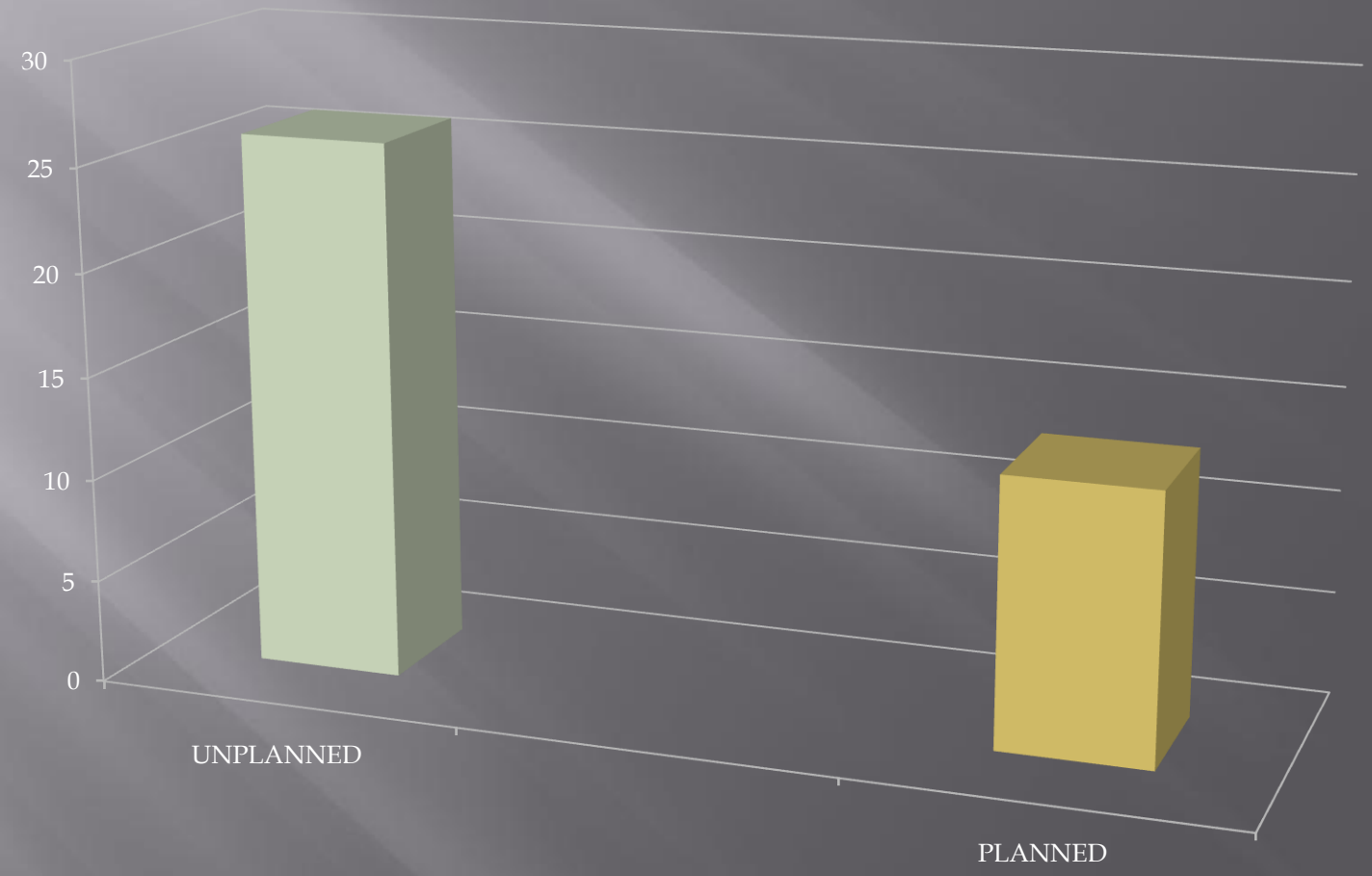
Pie Chart Showing Major Reasons causing delay in Discharges



Out of 70 discharges 33 were unplanned whereas 37 discharges were planned .



Out of 39 delayed discharges 26 were unplanned whereas 13 were planned discharges



REASONS FOR DELAY IN DISCHARGE PROCESS ACCORDING TO THE ABOVE DATA

- Sometimes Delay in discharge process occurs due to the delay in feeding discharge intimation in HIS by nursing staff as they are not fully dedicated towards their work.(mark for discharge in system)
- Due to lack of coordination causes delay in pharmacy returns causes delay in discharge process (pharmacy clearance)
- Patient's relative are not present in the hospital at the time of billing.
- Discharge summary not prepared on time by data entry operator.(sometimes due to confusions in summary)
- Sometimes consultant gets confused regarding discharge of the patients due to some complications.
- Sometimes consultant visit become late which causes delay in discharge process.

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The pharmacy store/department takes a lot of time to take returns of unused medicine.(drug return)

Sometimes pharmacy staff seemed to be taking more than the required time for finishing a task.(pharmacy clearance)

A delay in the starting up of the discharge process after the doctor's departure was seen.

Ignorance of phone calls by nursing staff, this call may be from IP billing for discussing about the discharge of the patient.

Impact on other factors

- Patient satisfaction
- Bed availability

To successfully implement the discharge process improvements, the following four components are needed

- **Communication:**

- This is probably the most critical component and the most difficult for large divisions with numerous care givers throughout the patient's hospital stay. The specific method of communication must be customized according to the culture and situation of the division

Physician Discharge Orders:

- Physicians are expected to write an order with "intent to discharge next day".
- If the discharge approval is contingent on any condition, this is also included in the order. Then one day of discharge, the order should be written at least two hours before the established discharge time.

Discharge Board:

- Categories for patient procedures and tests must be customized according to the requirements of each division.
- A discharge board is a visual tool that is most successful if it is located in a high traffic area that is convenient for numerous care givers.
- Ideally each care giver that completes a required activity will update the board to communicate the status of that requirement.
- The board must be flexible and easy to change.

Data Collection, Entry into Database, Analysis:

- There must be a method to track success of the new discharge process. Time of discharge for the patients must be recorded

Timely completion of all tests and procedures

- Timely tests and procedures needed for discharge. No matter what type of patient is being discharged
(medicine, orthopedic, neurologic) numerous activities must be completed for each before the patient can be released. This work toward discharge day should begin upon admission

RECOMMENDATIONS

- By improving the sub processes
- Proper communication between doctors and staff
- On time round of consultants as well as availability of MOD on time
- Well trained nursing staff as well as promptness and dedication of all staff together can hasten the discharge process(like preparation of file if TPA patient or preparation of discharge summary by DEO as early as possible especially of planned discharges.)
- Making pharmacy people more trained to hasten the process of clearance as well as processing the discharge medicines.
- In discharge board mention the time of declaration of discharge by the consultant.
- Dr. should inform about the patient discharge in the evening round itself if patient is well.
- Nursing and typist Staff should be trained to handle a number of discharges simultaneously

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- Implement a web-based software application called “Patient Tracker” to manage the discharge process , minimizes delays in admission and reduce surgical procedure cancellations.

CONCLUSION

- Health care sector is one of the most rapidly growing sectors now days. Level of competition is increasing day by day so any corporate hospital which wants to survive and for wealth maximization has to maintain a standard quality in the organization.
- Quality consciousness and competitiveness must be developed in the organization by constant monitoring, counseling and training, to achieve desired result.
- From the above study it can be concluded that more number of delayed discharges were unplanned as compared to planned discharges hence we should focus and work more towards making more number of discharges as planned and minimizing the number of unplanned discharges.

Thank you