Reduction of Inpatient Discharge Turn around time (TAT)

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INTRODUCTION

DEFINITION OF DISCHARGE BY NABH

"Process of activities that involve the patient and a team of individuals from various disciplines working together to facilitate the transfer of the patient from one environment to another."

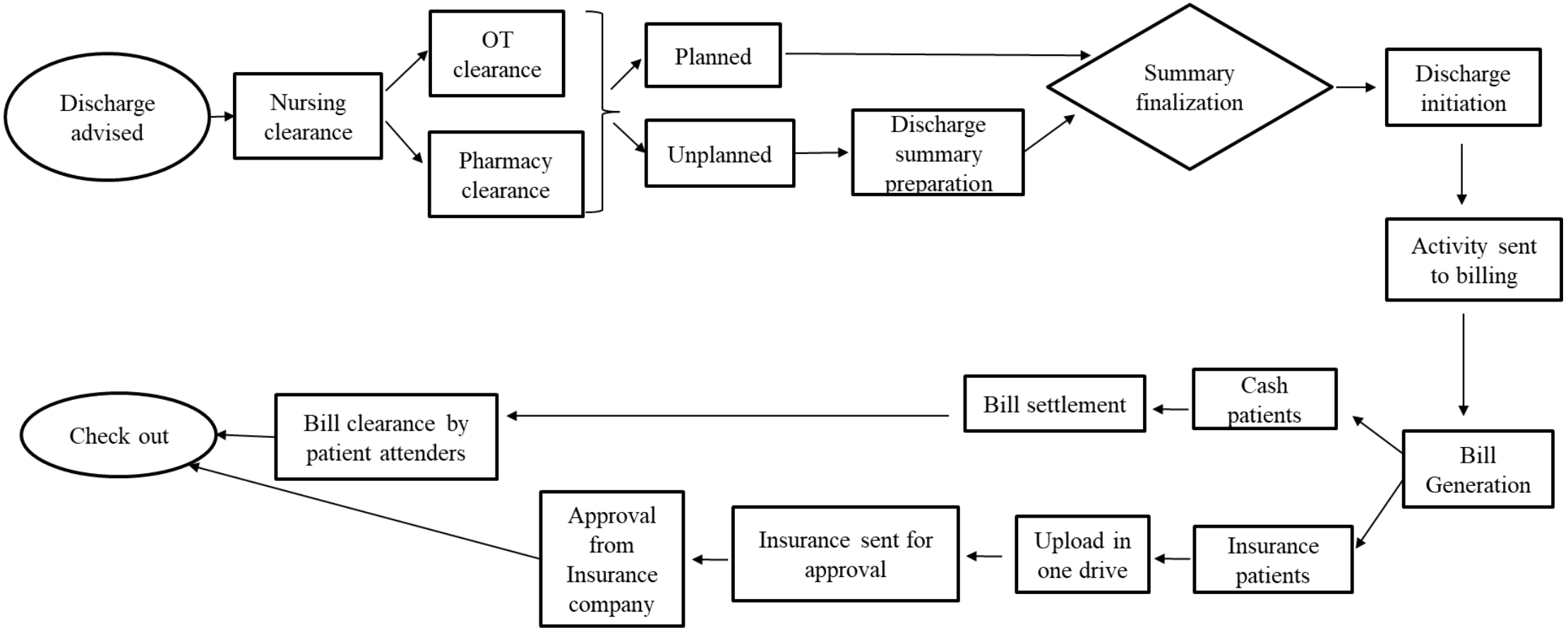
AIM

To understand the discharge process of Apollo Hospitals, BG Road, Bangalore and to identify the factors that contribute to the delay in discharge of patients from the Inpatient Department.

OBJECTIVES

- To manually track the discharge process of cash and insurance patients.
- To identify the time-consuming parts of the process which contribute to the increase in overall Discharge TAT
- To suggest measures to reduce the Inpatient Discharge Turn Around Time

PROCESS


Discharge advised
Nursing clearance
OT clearance
Pharmacy clearance
Planned
Unplanned
Discharge summary preparation
Summary finalization
Discharge initiation
Activity sent to billing
Bill Generation
Cash patients
Insurance patients
Bill settlement
Upload in one drive
Insurance sent for approval
Approval from Insurance company
Bill clearance by patient attenders
Check out

ACTIVITY AND TEAM INVOLVED

S.No	Process	Activities	Target TAT Time	Activity Type (Seq / Parallel)	Team Involved
1	Discharge Planning	Plan Discharge list to be compiled each day & sent to respective stakeholders one day prior	One day before Discharge day- by 5 pm	Seq	Doctors
2	Discharge Intimation	Discharge confirmation date & time to be mentioned by Doctors in Patient's file -on the day of Discharge	On the day of Discharge	Seq	Consultant/Ward Doctors
3	Discharge initiation	Initiation is done by Nursing /Secretaries after getting activities closed OT/CATH Stores consumption declaration, pharmacy returns, Equipment usage, OT/ Cath consumables. Need to check the status of the lab and radiology investigations	20 mins	Parallel (activities like closure of consumption from various areas)	Nursing / Secretaries /OT/OT stores/Pharmacy/ Cath/ Cath stores/ labs/ radiology
4	Summary Finalization	Includes part of summary typed by typist from case sheets and few part typed by the Doctors . Summaries needs to be finalized and signed by the consultant/Doctors	60 mins	Parallel (activities of summary finalization and discharge initiation can be 2 parallel activities)	Primary Doctors / Referral Doctor / Ward Doctor / Typist / Secretaries

ACTIVITY AND TEAM INVOLVED

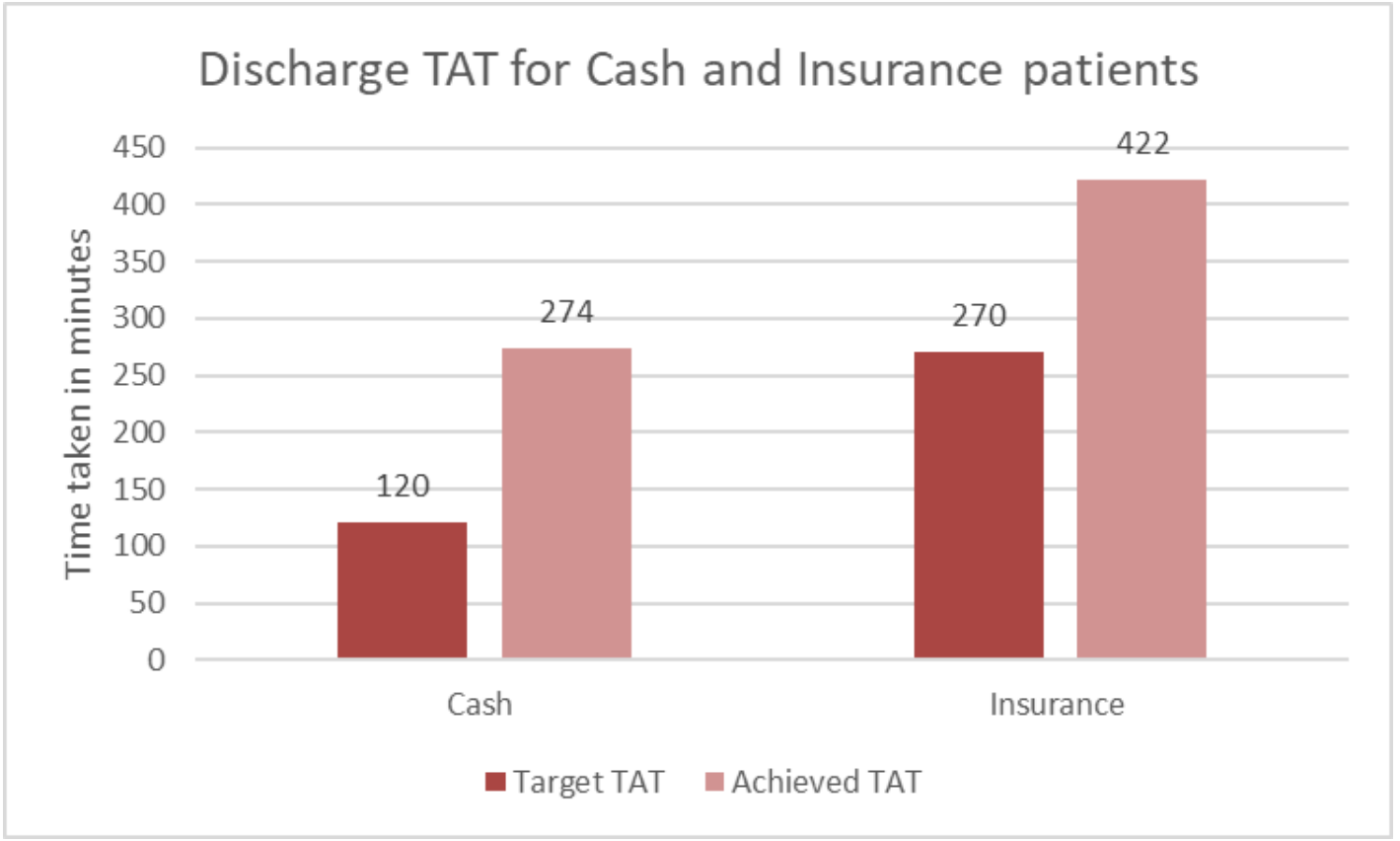
S.No	Process	Activities	Target TAT Time	Activity Type (Seq / Parallel)	Team Involved
5	Interim Final Bill generation	Done By the billing team after verifying the billing card and actual procedure details, check for implants and consumables. Will check with the consultant for professional charges/surgical fees. Will add consultation charges based on the no:of visits	20 mins	Seq	Billing Team with inputs from Doctors
6	Bill settlement	Once the Bill generated ,billing staffs will inform the patient attendant through secretary and patient will be provided with the updated bill and requested to settle the bill. This activity will be done In room for pvt and above category.	20 mins	Seq	Billing team,patients attendant/secretaries
7	Checkout	Nurses to show checkout status in the system once Patient has vacated the room	20 mins	Seq	Nursing/ Security
8	For Insurance Patients – Insurance approval	Once Summary & bill is ready , the same is sent to TPA companies for approval – Different queries if coming are to be sorted within least TAT	2hrs 50 mts hrs	Seq	Billing team/Insurance/Attendant

THE STUDY

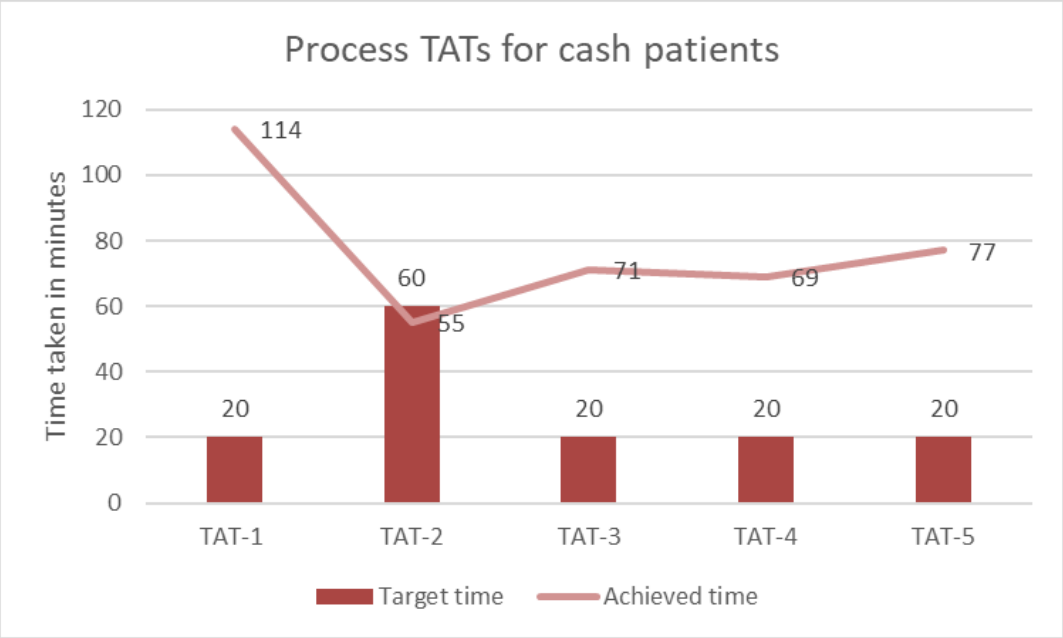
- **DESIGN**: Observational study (Descriptive)
- **SETTING:** Apollo Hospitals, BG road, Bangalore
- **POPULATION:**
  - *Inclusion criteria*: General ward beds, Twin sharing rooms, Private rooms, Platinum Suites, Executive Suites, ICU beds, Day-care beds
  - *Exclusion criteria*: Transit ward beds, Emergency ward beds
  - *Study Tools*:
    - Doctor Intimation to Discharge Initiation time (TAT-1)
    - Doctor Intimation to Finalization of Discharge Summary (TAT-2)
    - Discharge Initiation to Final Interim Bill time (TAT-3)
    - Final Interim Bill to Settlement of Bill time (TAT-4)
    - Settlement of Final Bill to Check out time (TAT-5)
    - Overall Discharge Turn Around time (Overall TAT)

- **DURATION OF STUDY:** 3 months
- **SAMPLE SIZE**: 1000 (Cash patients- 500; Insurance patients- 500)
- **SAMPLING TECHNIQUE**: Stratified random sampling
- **DATA COLLECTION TECHNIQUE**: Secondary data (Real-time data) tracked daily using Apollo's MedMantra and then transferred to MS Excel for ease of calculation.

TARGET VS ACHIEVED TAT FOR CASH AND INSURANCE PATIENTS

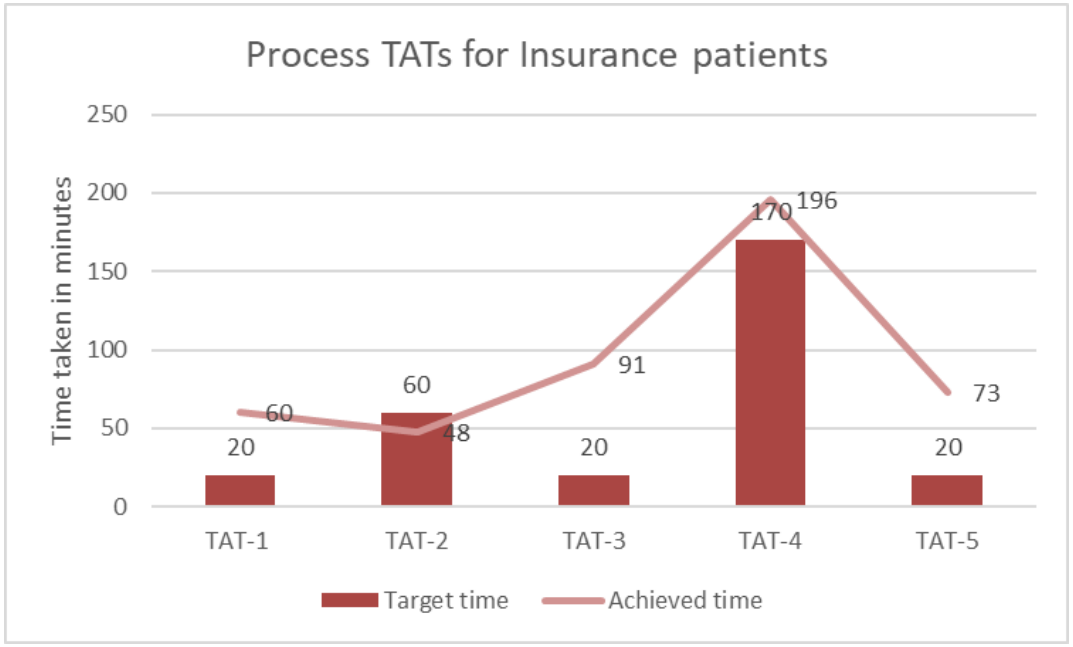


CASH DISCHARGES



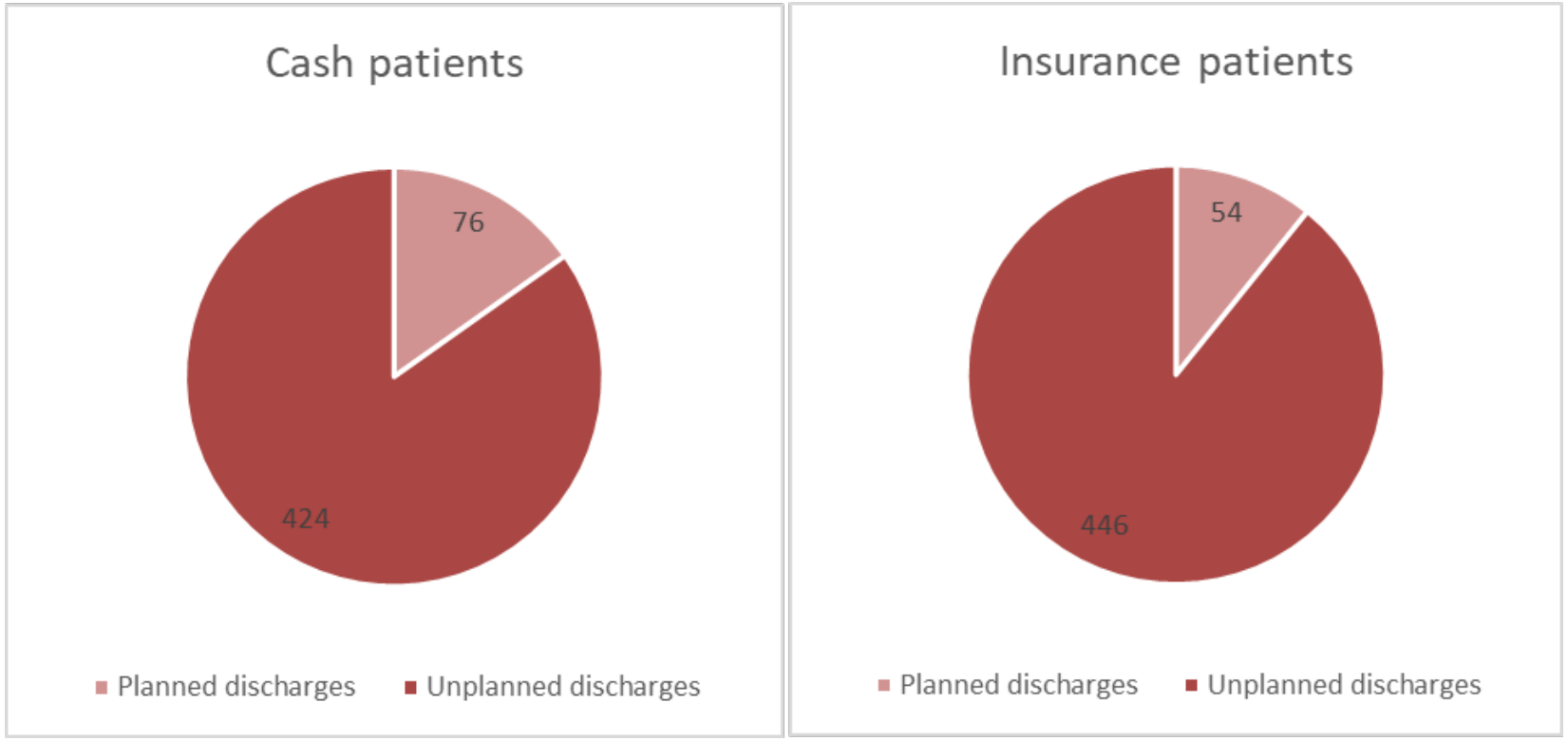
Process	Target	Samples: Jan 2022- May 2022			
		Achieved numbers	% Achieved	Achieved average TAT in mts	Remarks
Total cash discharges		**500**			
Discharge TAT	**120 min 90%**	110	22%	**274 min**	Above Target
TAT-1	**20 min**	153	31%	**114 min**	Above Target
TAT-2	**60 min**	395	79%	55 min	Within Target
TAT-3	**20 min**	125	25%	**71 min**	Above Target
TAT-4	**20 min**	214	43%	**69 min**	Above Target
TAT-5	**20 min**	221	44%	**77 min**	Above Target
% of planned discharges (Previous day)	**90%**	76	15%		Above Target

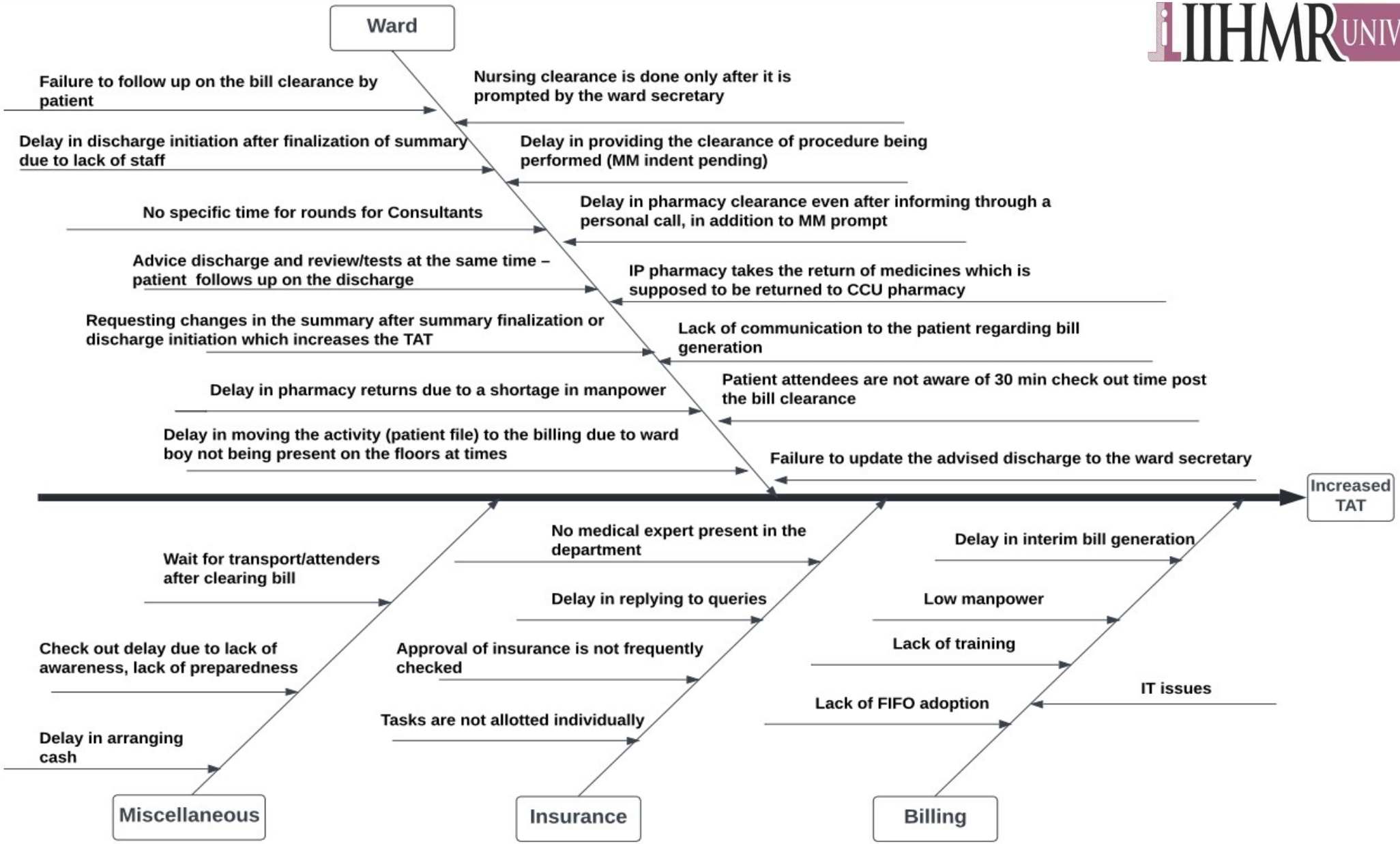
INSURANCE DISCHARGES



Process	Target	Samples: Jan 2022- May 2022			
		Achieved numbers	% Achieved	Achieved average TAT in mts	Remarks
Total Insurance discharges		**500**			
Discharge TAT	**270 min 70%**	129	26%	**422 min**	Above Target
TAT-1	20 min	92	18%	**60 min**	Above Target
TAT-2	60 min	353	71%	48 min	Within Target
TAT-3	20 min	63	13%	**91 min**	Above Target
TAT-4	170 min	267	53%	**196 min**	Above Target
TAT-5	20 min	225	45%	**73 min**	Above Target
% of planned discharges (Previous day)	90%	54	11%		Above Target

PLANNED DISCHARGES FOR CASH AND INSURANCE PATIENTS




Ward
Failure to follow up on the bill clearance by patient
Nursing clearance is done only after it is prompted by the ward secretary
Delay in discharge initiation after finalization of summary due to lack of staff
Delay in providing the clearance of procedure being performed (MM indent pending)
No specific time for rounds for Consultants
Delay in pharmacy clearance even after informing through a personal call, in addition to MM prompt
Advice discharge and review/tests at the same time – patient follows up on the discharge
IP pharmacy takes the return of medicines which is supposed to be returned to CCU pharmacy
Requesting changes in the summary after summary finalization or discharge initiation which increases the TAT
Lack of communication to the patient regarding bill generation
Delay in pharmacy returns due to a shortage in manpower
Patient attendees are not aware of 30 min check out time post the bill clearance
Delay in moving the activity (patient file) to the billing due to ward boy not being present on the floors at times
Failure to update the advised discharge to the ward secretary
Increased TAT
Wait for transport/attenders after clearing bill
No medical expert present in the department
Delay in interim bill generation
Delay in replying to queries
Low manpower
Check out delay due to lack of awareness, lack of preparedness
Approval of insurance is not frequently checked
Lack of training
IT issues
Tasks are not allotted individually
Lack of FIFO adoption
Delay in arranging cash
Miscellaneous
Insurance
Billing

SUGGESTIONS

- Making the people involved in the discharge process aware of the targets would motivate them to enable the completion of each part of the process in time.
- Setting a strict environment for following set standards.
- Allocating a person with the sole responsibility of coordinating and live-tracking the discharges from the time they are advised.
- Track the patients from the time of admission keeping the tentative date of discharge in check.
- In case of surgeries scheduled and completed for the patients, the nurse in charge should also be assigned the duty to perform OT or Cath store returns and obtain the clearance instead of waiting till the time discharge is advised.
- To avoid patient confusion and to prepare them better for arranging cash, the outstanding bill amount can be updated to them by the end of each day.
- The billing department to be encouraged to adopt the FIFO.

CONCLUSION

The standard time taken for a cash discharge is set at 2 hours whereas, the achieved turnaround time from January to May on an average is 4 hours 34 minutes.

Similarly, for an insurance discharge, the standard TAT is set at 4 hours 30 minutes whereas, the achieved TAT on an average is 7 hours 2 minutes.

Apart from the time taken to finalize the discharge summary, other process TATs are also way above the target.

There should be proper measures in place to mitigate the shortcomings of the current discharge process in the hospital for better service excellence.

Reduction of Inpatient Discharge Turnaround Time has not only proved to improve inpatient satisfaction during their time of departure but also pave way to reduce the waiting time of patients who are to be admitted in the hospital.