

Internship Training

at

Fortis Escorts Hospital

**A Study to identify reasons for delay in planned discharges of
patients**

by

Dr .Anshi Tyagi

Enroll No. PG/14/010

Under the guidance of

Dr . A.K Agarwal

Post Graduate Diploma in Hospital and Health Management

2014-16



International Institute of Health Management Research

New Delhi

The certificate is awarded to

Dr . Anshi Tyagi

In recognition of having successfully completed her Internship in the

General Administration

and has successfully completed her Project on

“ To identify the reasons for delay in planned discharges of patients at Fortis Escorts Hospital .”

From 15th February to 15th May , 2016

AT
FORTIS ESCORTS HOSPITAL
Amritsar , punjab

He/She comes across as a committed, sincere & diligent person who
has a strong drive & zeal for learning

We wish him/her all the best for future endeavors



Head - Human Resources



Facility Director

20



FORTIS HOSPITALS LIMITED

Regd. Office: Escorts Heart Institute and Research Centre, Okhla Road, New Delhi - 110 025
Tel: +91 11 2682 5000, Fax: +91 11 4162 8435 CIN: U93000DL2009PLC222166



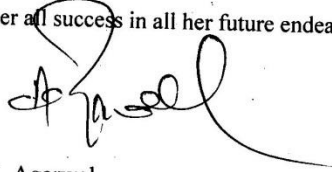
TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr . Anshi Tyagi** student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at **Fortis Escorts Hospital , Amritsar** from **15th February , 2016** to **15th May , 2016**

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.



Dr. A.K. Agarwal
Dean & Mentor (IIHMR, New Delhi)

Certificate Of Approval

The following dissertation titled **"To identify reasons for delay in planned discharges of patients "** at **"Fortis Escorts Hospital , Amritsar** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

Signature

Dr. Nishikant Bele

Dr. Navish Priyadarshi

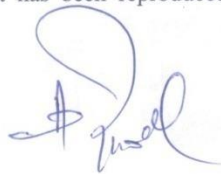
Dr. AK Aggarwal



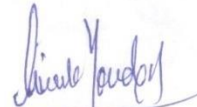
Certificate from Dissertation Advisory Committee

This is to certify that **Dr. Anshi Tyagi** , a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. She is submitting this dissertation titled **“To identify reasons for delay in planned discharges of patients at Fortis Escorts Hospital “** in partial fulfillment of the requirements for the award of the **Post-Graduate Diploma in Health and Hospital Management.**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.



Dr A.K Agarwal
Dean, Academics & Student affairs
IIHMR ,New Delhi



Facility Director ,
Fortis Escorts Hospital ,

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,
NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "**To identify reasons for delay in planned discharges of patients at Fortis Escorts Hospital**" and submitted by **Dr Anshi Tyagi** Enrollment No. **PG/14/010** under the supervision of **Dr A.K Agarwal** for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from **15th February 2016** to **15th May 2016** 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

FEEDBACK FORM

Name of the Student: Dr. Anshi Tyagi

Dissertation Organisation: Fortis Escorts Hospital,
Amritsar

Area of Dissertation: To identify the reasons for
delay in planned discharges in
2nd, 3rd, 4th & 5th Floor IPD wards.

Attendance:

Regular

Objectives achieved:

- Surfacing of bottlenecks in the respective area
- Strategising to achieve expected results.

Deliverables:

- ✓ Timely inputs
- ✓ Quality Data as reqd.

Strengths: - Good Interpersonal Skills
- Keen Learner

Suggestions for Improvement:

Keep Learning!
- All the best.

Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)



Date: 20/5/16

Place: Amritsar

Dissertation Writing

25

ABSTRACT

Delays in discharging patients can impact hospital in terms of spoiling its rapport and leading to patient dissatisfaction .The discharge process is complex and involves lot of stakeholders in the process setting specific challenges that limit generalizability of solutions.

The aim of this study was to do a Root cause analysis to identify reasons for delay in planned discharges of patients and to streamline the process leading to improvement .Primary outcome studied was discharge time (physical movement of patient from the room) and secondary outcome measured was length of discharge process. Data collected was analysed and results were discussed with an aim of improving the process and increasing the efficiency of the hospital .

The study was conducted from 15th February to 15th May 2016 at Fortis Escorts Hospital , Amritsar .The main objective was to track the planned discharge process of patients and streamline the process to avoid any delay and increase bed availaibility and patient satisfaction.

ACKNOWLEDGEMENT

I express my grateful thanks to Dr A.K Agarwal , Dean IIHMR, New Delhi, who guided me at every step in preparing this dissertation. My special thanks are also to Dr. Pinak Moudgil , Facility Director and Dr. Deepika Sharma FOS head at Fortis Escorts Hospital , Amritsar Limited who played a pivotal role in providing me the requisite opportunity to undertake this study.

TABLE OF CONTENT

1.	Abstract	8
2.	Acknowledgement	9
3.	Table of contents	10
3.1	List of tables	11
3.2	List of figures	11
4.	Internship Report	13
4.1	Organization profile	13
4.2	Learning from different departments	19 – 34
5.	Dissertation Report	35
5.1	Introduction	35
5.2	Review of literature	39
5.3	Objectives	40
5.4	Methodology	40
5.5	Result and Discussion	41
5.6	Conclusion	48
5.7	Annexure	50 - 52
5.8	References	53

List of Tables

Table No.	Table Title	Page no.
Table 1	Equipments in radiology	21
Table 2	FOS metrics	31-34
Table 3	Questionnaire compliance level	45

List of Figures

Figure no.	Title of Figures	Page no.
Figure 1	Organogram	16
Figure 2	Performance appraisal	26
Figure 3	Total time taken in length of discharge process for ECHS patients	41
Figure 4	Total time taken in length of discharge process for CASH patients	42
Figure 5	Total time taken in length of discharge process for TPA patients	43
Figure 6	% discharges according to mode of payment leaving before 11am	44
Figure 7	pie chart depicting compliance level for questionnaire	45

LIST OF ABBREVIATIONS USED

- NABH - National Accreditation Board for Hospitals & Healthcare Providers
- UHID - Unique Hospital Identification
- HMIS – Hospital Management Information System
- TPA – Third Party Administrator
- ICD – International Classification of Diseases
- CMC – Comprehensive Maintenance contract
- AMC – Annual Maintenance Contract
- FOS – Fortis Operating System
- AERB – Atomic Energy Regulatory Board
- LAMA – Leave Against Medical Advice
- ECHS – Ex –Servicemen Contributory Health Scheme
- TAT - Turnaround Time

INTERNSHIP REPORT

ORGANIZATIONAL PROFILE :

Fortis healthcare limited was established in 1996 by its founder, Late **Dr. Parvinder Singh**

Fortis Hospital, Amritsar, is a 153 bed multi-speciality hospital specialising in Cardiac Sciences. The hospital began its operations in 2003 and since then has been a familiar and trusted hospital ministering to the healthcare needs of the community. Spread over five acres, this is the only NABH accredited hospital in the region. We house 26 specialties under one roof and are equipped with 56 ICU Beds.

Fact and figures:

- NAME : Fortis Escorts hospital
- LOCATION : Amritsar , Punjab
- SPECIALITY : Multispeciality Hospital
- NO OF BEDS : 154

The Fortis brand and logo :

LOGO

“A HEALING PASSION”

The Fortis brand with its distinctive logo is a synthesis of human values of trust, ethics and service and quality healthcare. Fortis project clinical excellence, distinctive patient care, transparency in actions and high level of integrity and excellence.

The 2 nurturing hands along with red dot on the top depicts:

“Nurturing hands caring for human life”

Green is a colour of healing and depicts well-being and red symbolises steadfast focus, dynamic zeal and enthusiasm

Vision

“Saving and enriching lives”

Mission

“To be a globally respected healthcare organization known for clinical excellence and distinctive patient care.

Values

➤ **Patient centricity:**

- Commit to best outcomes and experience for our patients.
- Treat patients and their care givers with compassion, care and understanding.
- Our patients needs will come first.

➤ **Integrity :**

- Be principled, open and honest.
- Model and live our values.
- Demonstrate moral courage to speak up and do the right things.

➤ **Team work :**

- Proactively support each other and operate as one team.
- Respect and value people at all levels with different opinions, experiences and backgrounds.
- Put organization needs before department / self -interest.

➤ **Ownership:**

- Be responsible and take pride in our actions.
- Take initiative and go beyond the call of duty.
- Deliver commitment and a greement made.

➤ **Innovation :**

- Continuously improve and innovate to exceed expectations.
- Adopt a 'can do' attitude.
- Challenge ourselves to do things differently.

ORGANOGRAM



figure 1

SERVICES PROVIDED BY HOSPITAL:

Clinical Services

- Anaesthesiology
- Cardiac Anaesthesia
- Cardiac Thoracic Surgery
- Cardiology

- Clinical Haematology
- Gastroenterology (medical & surgical)
- General medicine
- General Surgery
- Nephrology
- Neuro Surgery
- Neurology
- Oncology (Medical & Surgical)
- \Orthopaedic Surgery
- Otorhinolaryngology
- Plastic & Reconstructive Surgery
- Psychiatry
- Respiratory medicine
- Urology
- Vascular Surgery

Laboratory Services

- Clinical Biochemistry
- Clinical Microbiology & Serology
- Clinical Pathology
- Cytopathology
- Haematology
- Histopathology

Diagnostic Services

- CT Scanning
- Mammography
- Ultrasound
- \X-ray

Transfusion Services

- Blood Transfusions Services

Pharmacy

- Dispensary

Professions Allied to Medicine

- Dietetics
- Physiotherapy
- Speech & language Therapy

Support Services

- Mortuary

Non clinical departments

- Biomedical engineering
- Engineering
- Finance
- Human resource
- Housekeeping
- Laundry
- Pharmacy
- Medical records
- Food and beverages
- Security
- Central stores
- Quality assurance
- Research
- Patient welfare department
- Information technology

OUTPATIENT DEPARTMENT

Front office :

- Front office of the hospital includes help desk , admission desk and OPD billing Counter .
- Patient details are updated immediately on HIMS.
- OPD billing counter deals with OPD patient services, form filled by the patient.
- A unique number is given to new patients , UHID number .
- Admission Desk is located in the main lobby of the hospital .
- LOCATION- on Ground floor
- Number of consult chambers- 22
- OPD timings- 8:00am to 5:30pm
- Appointment system- through Fortis , Amritsar internal call center.
Use portal in which slots are given to doctors .
- No .of opd/day - 300(approx.)
- Average time taken for billing is calculated manually .
- Issues - Space constraint
Small waiting area

Executive Health Checkup :

- Located on the ground floor of the hospital department
- It deals with full body checkup of patients
- Different packages are availed :
 - Pre employment checkup
 - Executive Health checkup
 - Cardiac checkup

INPATIENT SERVICES

Inpatient services are hospital services and items provided to inpatients of a hospital by the hospital including beds , nursing services , Diagnostic and therapeutic services and medical and surgical services.

DEPARTMENTAL OVERVIEW

The patient care coordinator is responsible for carrying out multiple sequential tasks while admitting a patient to the hospital

- **ADMISSION PROCEDURE :**

- **PRE ADMISSION INVESTIGATION PROCESS**

- ✓ Patient approaches IP desk with admission request form issued by the doctor
 - ✓ Patient details entered in HIS , advance collected and Estimation is provided to the patient.
 - ✓ Advance receipt & Pre admission number generated.
 - ✓ Patient is told about the reporting time and entry is made in Admission register

- **PATIENT ADMISSION PROCESS :**

- Patient informed about the charges and other essential details like Estimated Expense , inpatient Information, etc required during the stay.
- Availability of room is checked from the Bed manager.
- Patient details entered in HIS and face sheet generated
- Advance amount taken from the patient by cash / credit card / as per the estimated cost.
- For TPA patient pre auth form is given to be filled up by the patient and the doctor and signature is taken on In patient Information Sheet for TPA Hospital Policy.

- Passes are issued to the patient as per visitor policy and entry made on Face Sheet (Office Copy)
- Patient folder is created & sent to the wards along with a Front Office Staff / GDA.

BLOOD BANK

- Licensed for – Whole human blood IP
 - Preparation of Blood components
 - Apheresis Blood products
- **QUALITY INDICATORS USED –**
 - TAT (only in emergency cases) – for all blood components – PRBC Cross match - within 30 mins ;
Requisitions from wards - Fresh frozen plasma –within 30 mins , PRBC – within 1 hr
 - Component preparation
 - Wastage of blood
 - Transfusion reaction in patient
- **EQUIPMENTS-** Amicus cell separator, Platelet Apheresis machine , Gel cards-used for cross matching, non-reactive blood bags , Infectious marker machine
- Daily stock consumption - maintain stock buffer register segregating as Main & Running stock.

RADIOLOGY

EQUIPMENTS IN DEPARTMENT :

S.no	Equipment	Qty	Make	AMC/CAMC Status
1	CT-scan	1	Siemens	CMC
2	Digital Radiography	1	Allengers	CMC
3	X-Ray (portable)	2	Siemens & Philips	AMC
4	Mammography	1	Wipro GE	AMC
5	Ultrasound	1	Wipro GE	CMC

- According to FOS data - 93 % of CT & MRI reports within 2 hrs .(Target - > 90 %)
- 94 % Ultrasound reports within 15 mins & X-ray reports within 30 mins (Target - > 95%)
 - MRI machine installation in progress
 - AERB guidelines are being followed & use of radiation protection devices by the staff.
 - Issue - Space constraint due to which there is no space for separate radiology registration desk .

MEDICAL RECORDS DEPARTMENT:

- TYPE OF MEDICAL RECORD SYSTEM- Manual
- ICD Coding 10 module , recent version used for ICD Coding .
- Patient Tracer Card used in case any location of the file is changed or not available .
- MRD Committee - has following members:
 - Medical Director
 - Head MRD
 - Emergency Incharge
 - Quality Head
 - Pharmacy Head
 - Nursing Head
- RETENTION PERIOD-
 - Paediatric file has to be kept till 21 years of age
 - Medicolegal cases,- files have to be kept forever (life time – 30yrs)
 - Death Files - files have to be kept for 10 yrs
 - RETRIEVAL -In cases of death , court case – 1 wk extension is given to keep the records for reference & for routine reference - 48 hrs
 - ARRANGEMENT OF Medical Records :
 - It is done according to IP no
 - In cancer patients , UHID is used
 - DISCARDING FILES PROCESS- 1 month prior notice is given in newspapers i.e advertisement before destroying files.

CENTRAL STERILE SUPPLY DEPARTMENT

- LOCATION -1st floor
- EQUIPMENTS

1.Steam sterilizers: 2 in number (capacity 16 & 32 cu f)

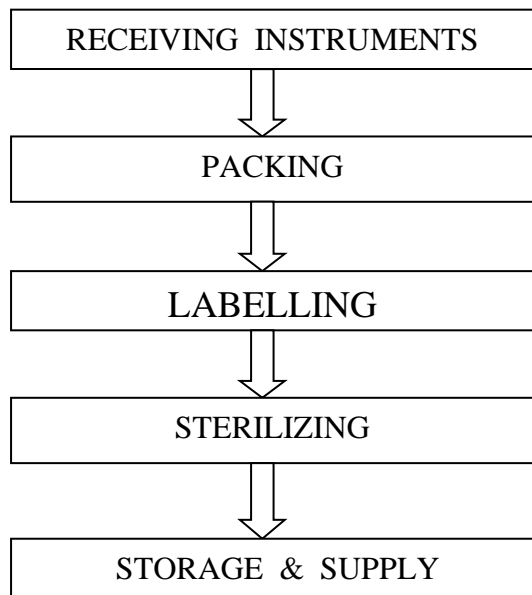
2.Ethylene oxide gas sterilizer : 1 no.(capacity 4 cu f)

- METHODS

1.Steam sterilization-(for linen) at 134 C for 4 minutes,
121 C for 16 minutes

2.Ethylene oxide sterilization/Steam sterilization -(only plastic items) at 55 C(hot cycle) for 12 hrs,at 37 C(cold cycle) for 24 hrs

- 3 types of indicators used :
 - 1) Biological indicators
 - 2) Chemical indicators
 - 3) Mechanical indicators
- Bowie – dick test done daily to check any leakage or error in machine.
- Carbolysed three times a day by the staff
- Process flow :



HUMAN RESOURCE MANAGEMENT

- It is the management of human resources .It is a function in organizations designed to maximize employee performance in service of an employer's strategic objectives.
- **Recruitment Process** comprises of Requisition raised by the organisation for a vacancy, sourcing and screening ,Interview conducted for candidates and shortlisting is done and after final selection LOI (Letter of intent) is issued.
- **Employee Engagement** activities carried out by Fortis is :
 - Celebrating employee birthdays on last Friday of every month called as FUN FRIDAY. Games are played by all employees .
 - FAMILY DAY celebrated by FORTIS on 17th april , in which employee family is invited for outings .
- F1 ONLINE SYSTEM - used for applying Leaves , self enrollment for trainings ,etc .
- **Grievance handling** is done through an INTERNAL COMPLAINTS COMMITTEE which comprises of :
 1. Director
 2. Unit Head – HR
 3. Deputy Manager – HR
 4. Manager – HR
 5. Nursing Superintendent
- **Performance Appraisal**
ELIGIBILITY
 - All employees are covered in this except revenue generating clinicians.
 - All employees must have spent min 6 months in the organization to be eligible in the process.

PERFORMANCE APPRAISAL

-

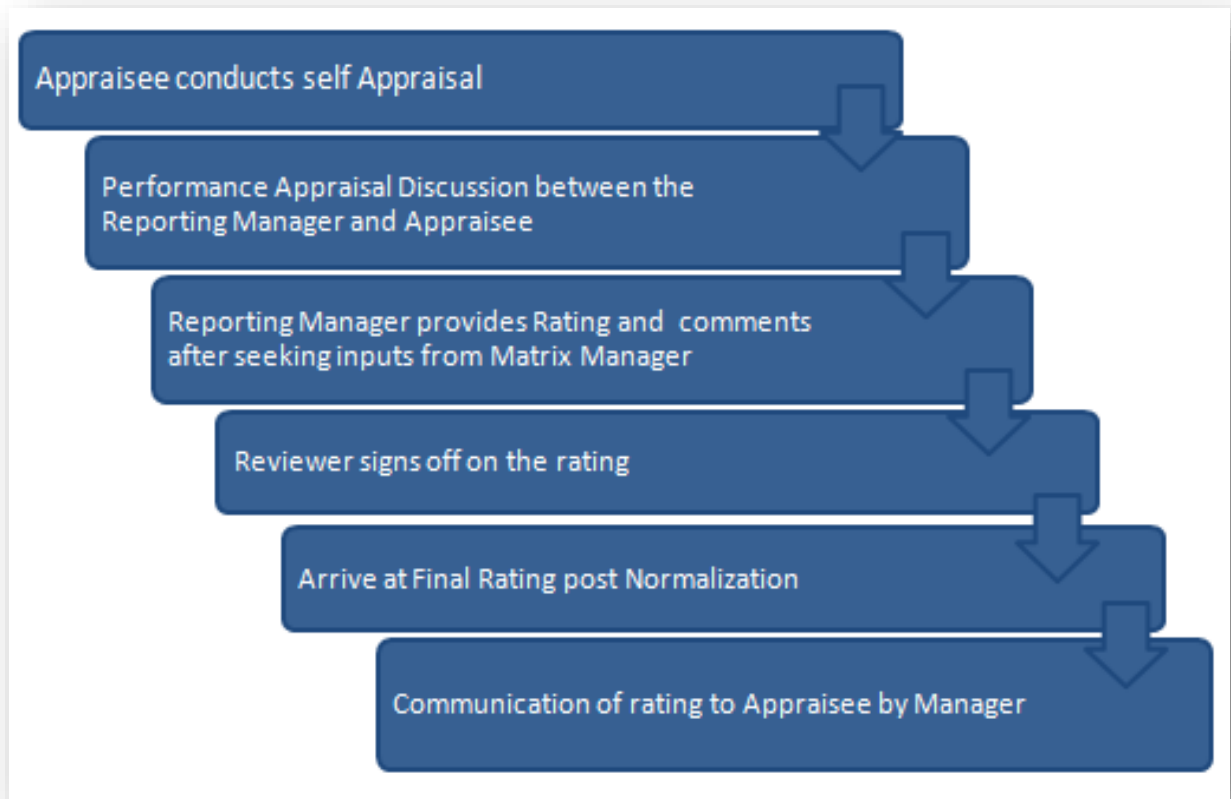


Figure 2

- **Bell curve appraisal system** is used .It requires managers to rank their employees from best to worst , apply the rankings to a bell curve and use the results to determine pay as well as who to fir

MARKETING DEPARTMENT

- **Catchment area** – approx 200 km
- **Promotional activities undertaken** – organizing camps in schools , health talk in multiplexes , corporates , hoardings , distributing pamphlets , organising press conferences to discuss achievements.
- **Outreach OPD** - conducting OPD in Jammu , pathankot , gurdaspur ,etc
- **Continued medical education programme -**

tie-up with various ima doctors (approach those doctors from whom high revenue generated .Conducted twice a month

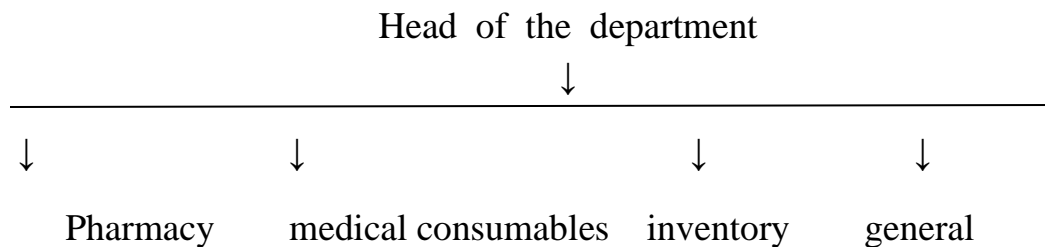
- **corporates-**

1)Direct corporate- Direct link to hospital

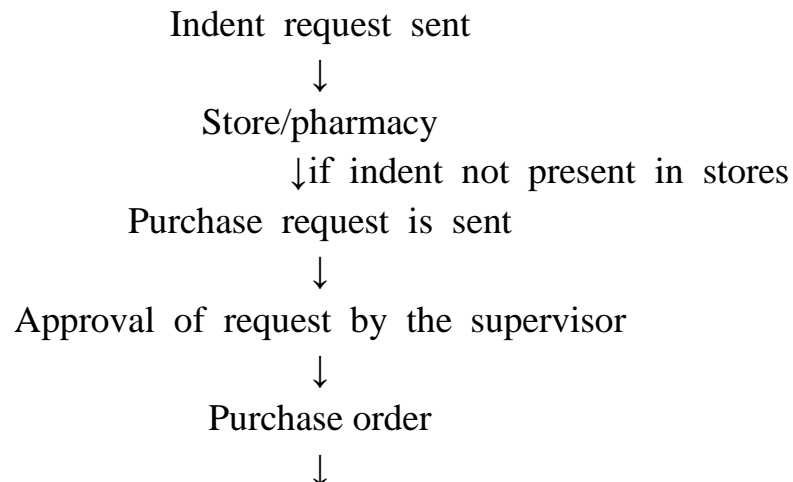
2)Corporates set by TPA- indirect hospital link i.e through TPA

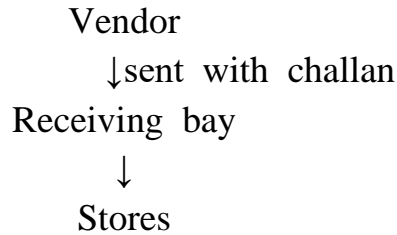
PHARMACY & PURCHASE DEPARTMENT

- Hold licenses for Retail Sale , Whole sale , Narcotic and Schedule X drugs .
- Three type of indents :
 1. Emergency – issued within 15 mins
 2. Normal – issued in 1 hr time
 3. New Admission - issued in half hr time
- Hospital has its own formulary having approx 15k drugs.
- Drugs are stored according to specification in refrigerator.
- Vaccines stored in deep freezer -2 – 8 degree
- Sound alike drugs- blue coding , Look alike drugs – pink coding
- High risk drugs are kept in lock & key
- Licensed narcotic drugs available are Morphine & Fentanyl
- It involves supply chain management.
- Hierarchy of purchase department



- Pharmacy department keeps the record of the indents.
- Procedure followed in pharmacy





- Purchase order is taken with a GRN either with or without purchase order.
- When purchase order is sent through request then GRN is received as per purchase order.
- When a medicine is not available in store and is needed urgently then they are purchased from any medical store but the GRN is prepared without purchase order.
- CAPEX and OPEX

CAPEX – used for green channel items negotiated by central supply chain.

OPEX - used for departmental and seasonal items

- Purchase of equipments comes under budgetary control.
- ORACLE SOFTWARE used for GRN no generation.

FOS (FORTIS OPERATING SYSTEM)

FOS was started in March 2007 at Fortis hospital, Mohali to focus on streamlining of non-clinical processes.

Fortis healthcare ltd. has extensive growth plan in near future and its aim is to give high quality experience to its patients which are repeatable at every facility that it creates.

Objectives of FOS :

- To ensure uniform high quality customer facing processes across Fortis hospitals.
- To embed best practices in operational facilities to yield bottom line impact.
- To facilitate performance management across all sites through use of standardized cascades of metrics, tools and templates.

Basic framework of FOS:

- 16 departments in the hospital and 142 metrics within those departments, have been included in a 'scorecard' format which is reviewed on a weekly basis in FOS meeting. The aim is to focus on improving the operational efficiency of non-clinical processes and ensuring a set of sustainable and reliable activities spanning the function of entire hospital.
- 29 core metrics have been identified to be reviewed with the corporate management on weekly basis.
- Metrics are categorised on scorecard into **service for all & predictable services**
- Hospital progress and performance is evaluated by comparing the achieved monthly and weekly scores with predefined benchmark targets of the performance measure.

Asset	Metric	Unit
OPD	Patients waiting beyond 15 mins of appointment	%
OPD	Doctors arriving late for the OPD patients	%
PHC	%age PHCs completed within defined TAT	%
ER	Pts with LOS > 4 hrs in triage	%
Wards	Discharges before 11 am for Cash patients	%
Wards	Discharges before 11 am for CGHS/ECHS/Corporate etc patients	%
Wards	Discharges before 11 am for TPA patients	%
IPD	ALOS	Days
IPD	Pre-Op ALOS	Days

OT	Procedure / Surgeries starting within 30 mins of scheduled time	%
Lab Med	Short lead test completed with in 1hour 30 mins	%
Radiology	% of CT and MRI reports within 2hrs	%
Radiology	USG reports within 15 mins X-ray reports within 30 mins	%
Asset	Metric	Unit
OPD	Calls Dropped	%
IPD	Admissions denied	%
Pharmacy	% of stock outs	%
OT	Surgeries rescheduled	%
Asset	Metric	Unit
ICUs	% Step downs planned	%

Pharmacy	% of (first) indents delivered within 30 mins	%
F&B	Average TAT for Room Service Orders	Mins
IPD	Time taken for new Admission	Mins
OT	% of admission on the day of surgery	%
Billing	Patients with final bill more than 5% of estimate	%
Wards	% discharges planned	%
Wards	Length of discharge process for Cash patients	Mins
Wards	Length of discharge process for CGHS/ECHS/Corporate/International patients	Mins
Wards	Length of discharge process for TPA patients	Mins

HK	TAT for room cleaning post discharge	Mins
OT	% of Patient attendants communicated during surgery	%
ICU	% of Patient attendants communicated during ICU stay	%
ICU/Wards	% of MDT consults done	%

DISSERTATION TOPIC

To identify reasons for delay in planned discharges of patients at Fortis Escorts Hospital

INTRODUCTION

- Discharge of an individual refers to transfer from the hospital to an alternative setting which is normally homecare. Planning for hospital discharge is an ongoing process that should start prior to admission for planned admissions and as soon as possible for all other admissions.
- Discharge is defined as, “a release of a hospitalized patient from the hospital by the admitting physician after providing necessary medical care for a period deemed necessary”.
- It is also defined as, “the process of activities that involves the patient and the team of individuals from various disciplines working together to facilitate the transfer of patients from one environment to another”.
- Discharge process is initiated only after the patient’s consultant deems his/her fit for discharge.

Discharge management is essential to ensure:

- Beds are available for emergency admissions.
- Quality of patient care
- Beds are efficiently used for elective patients to minimize waiting time.

Discharges are of four types:

- Planned discharges
- Unplanned discharges
- Discharge on request
- LAMA

- **Planned discharges-** Discharges should plan one night prior to the date of discharges, when the patient is fit for discharge.
- **Unplanned discharges-** When the doctors come for their rounds and they feels that patient condition is good enough to discharge then the doctor advice to discharge the patient.
- **Discharge on request (DOR)-** It is the discharge decision taken on request by the patient or relative of the patient with discharge summary.
- **LAMA (Leave Against Medical Advice)-** It is the discharge against medical advice on the request of the patient with LAMA summary.

DELAYED DISCHARGE:

Discharge begins when the patient is ready to be discharged but is still occupying the hospital bed.

Persons involved in the discharge process:

- Doctors: Doctors are responsible for intimating the nurses for the discharge, making discharge summaries and taking rounds before discharge on time.
- Nurses: Nurses are responsible for returning medicines to the pharmacy during night prior to discharge date & preparation of discharge file.
- Patient welfare officers (PWO): They distribute the discharge process sheet to the patient one day before.
- TPA cell: TPA department receives discharge summary from the nursing GDA and final bill from the billing department. Then send the documents to the respective TPA's through an e-mail and fax.

- Billing: This department is responsible for preparing the bills of all the patients i.e. the cash, credit, ECHS and TPA patients.
- Cashier: Cashier informs the patient/ attendants for getting the final clearance done. Cashier gives two discharge clearance slips to the patient's attendant of which one has to be handed over to the nursing station and the other to the security while leaving.
- In fortis escorts hospital , target for discharging planned patients was before 11am (physical movement of patient from room)

PROBLEM STATEMENT

Delayed discharge or 'bed blocking' are terms used to describe the inappropriate occupancy of hospital beds. Delay in discharging patients from hospital is a long-standing and common problem [7]. Delayed discharges have an impact on hospitals' ability to cut waiting lists and deliver healthcare effectively and efficiently. In acute care hospitals, prolonged length of stay (LOS) not only increases cost, but is also associated with increased rates of complications [8].

LOS is being used to analyse surgical performance as part of efficiency drives and financial pressures have emphasised the importance of expeditious hospital discharge. Identification of the barriers to timely discharge may help direct efforts towards reducing unnecessary hospital stay.

Delay in discharge leads to bed unavailability and patient dissatisfaction.

REVIEW OF LITERATURE :

Patient discharge has received critical attention because variation and delays in this process create ‘bottlenecks’ that ultimately delay most care pathways, especially new admissions from the ED. Recent studies have been conducted on delays in discharge process. Delays in discharging patients can impact hospital and emergency department (ED) throughput. The discharge process is complex and involves setting specific challenges that limit generalizability of solutions ^[1]. In 2015, a study was conducted in American University of Beirut Medical Center (AUBMC) is a tertiary care teaching hospital with 386 beds located in Beirut, Lebanon.

Studies have shown that by streamlining the discharge process the median LOS decreased and the average number of inpatient admissions increased.

A cross-sectional study was set in a 900-bed university affiliated hospital of the National Health Service, near Barcelona (Spain) in 2012 for standardizing the discharge process ^[2].

OBJECTIVES :

General objective: To study the reasons for delay in planned discharge of patients and to give recommendations to reduce the Turn Around Time in Fortis Escorts hospital, Amritsar.

Specific objectives:

- To monitor discharge process & identify the reasons for delay in discharge of the patients.
- To analyse the areas associated with delay in discharge.
- To ensure that the desired compliance level is achieved for IPD wards.

METHODOLOGY

- **Study Design :** observational and Descriptive study
- **Study Area :** Fortis Escorts Hospital , Amritsar
- **Study population :** Discharge patients of 3rd, 4th & 5th floor IPD wards
- **Study Method :** Prospective time motion Study
- **Sampling Method :** Simple random sampling method
- **Sample size :** 500 patients
- **Study Period :** 15th February to 15th May
- **Data collection Tools :** Questionnaire & HIS

RESULTS & DISCUSSION

- The result indicates that there is a delay in cash & TPA patient discharges in this hospital. Tedious discharge procedure also contributes to patient dissatisfaction .
- Length of discharge process was observed for all three types of patients .

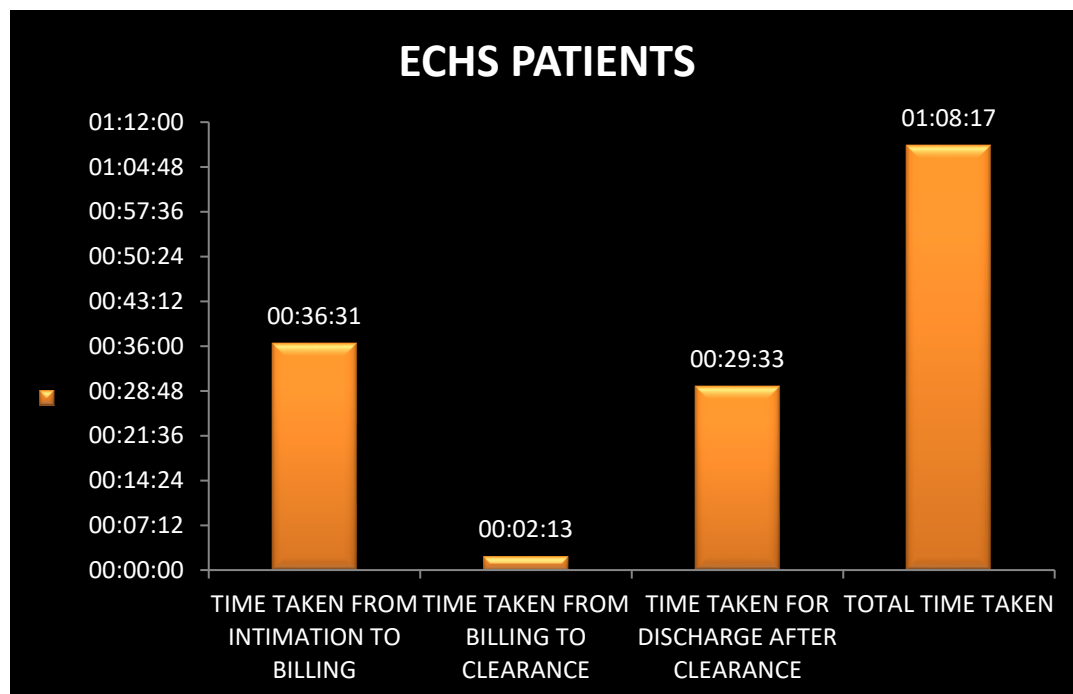


Figure 3 : Showing total time taken in length of discharge process for ECHS patients

- In ECHS patients , length of discharge process was observed to be 68 mins .
- Target for length of discharge process for ECHS patients was 120 mins.

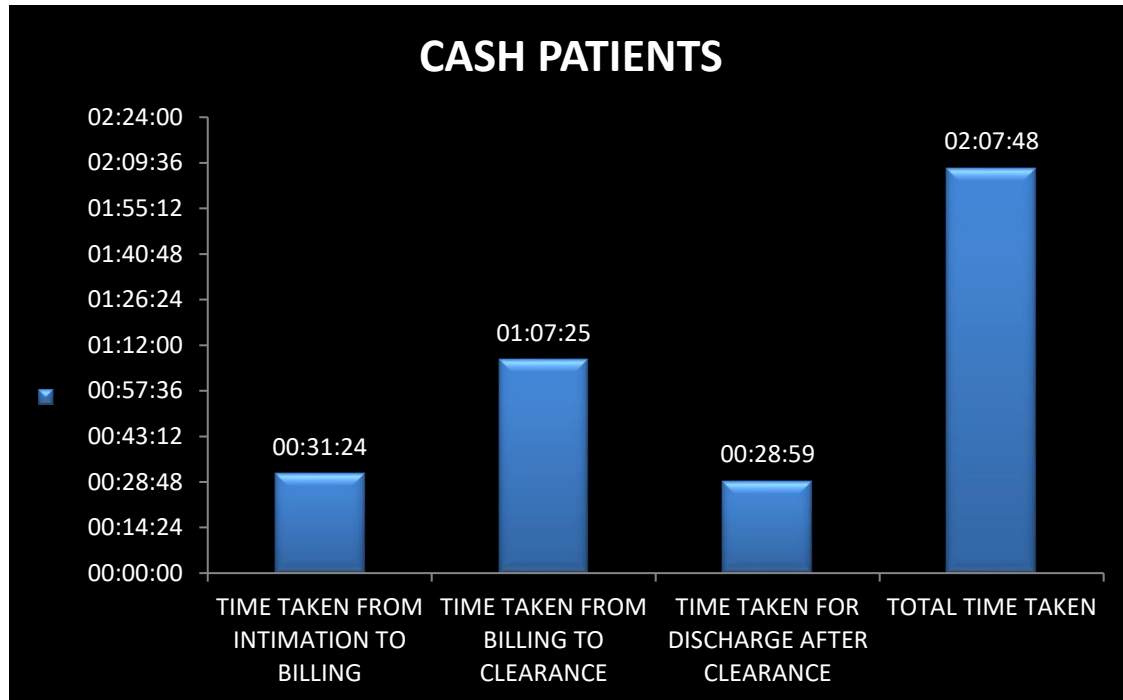


Figure 4 : Showing total time taken in length of discharge process for CASH patients

- In above graph of Cash patients , total time taken or length of discharge process was observed to be 127 mins .
- Target for length of discharge process for cash patients is 90 mins.

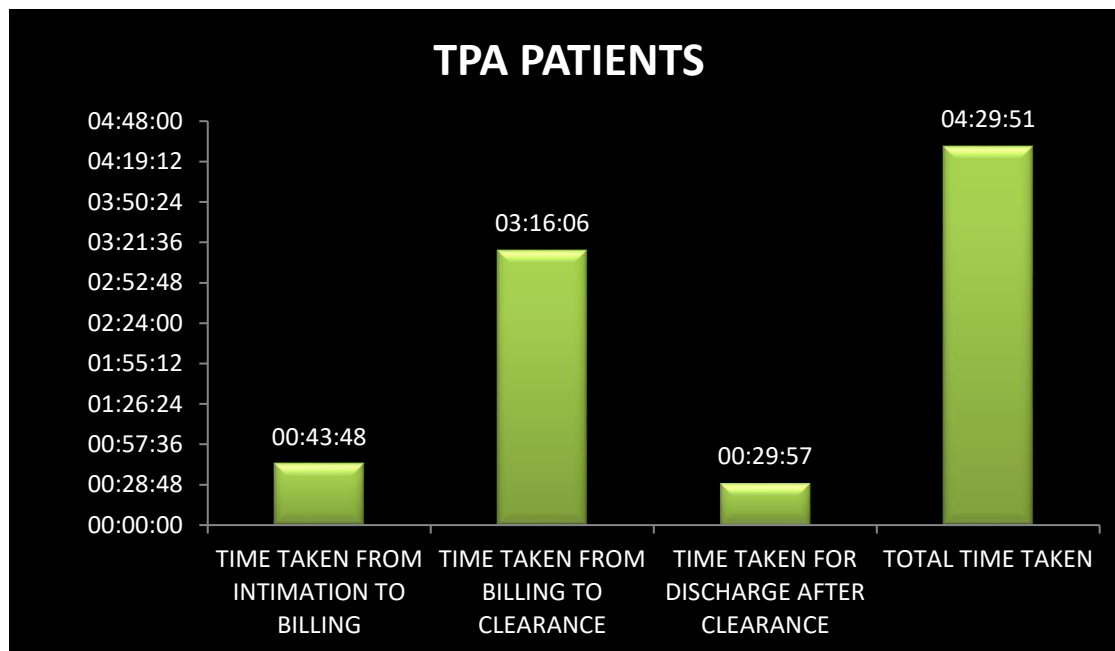


Figure 5 : Showing total time taken in length of discharge process for TPA patients.

- In above graph for TPA patients , length of discharge process was observed to be 269 mins.
- According to FOS metric , Target for length of discharge process is 240 mins.
- Physical movement of patient from the room is observed to be delayed by 29 mins.

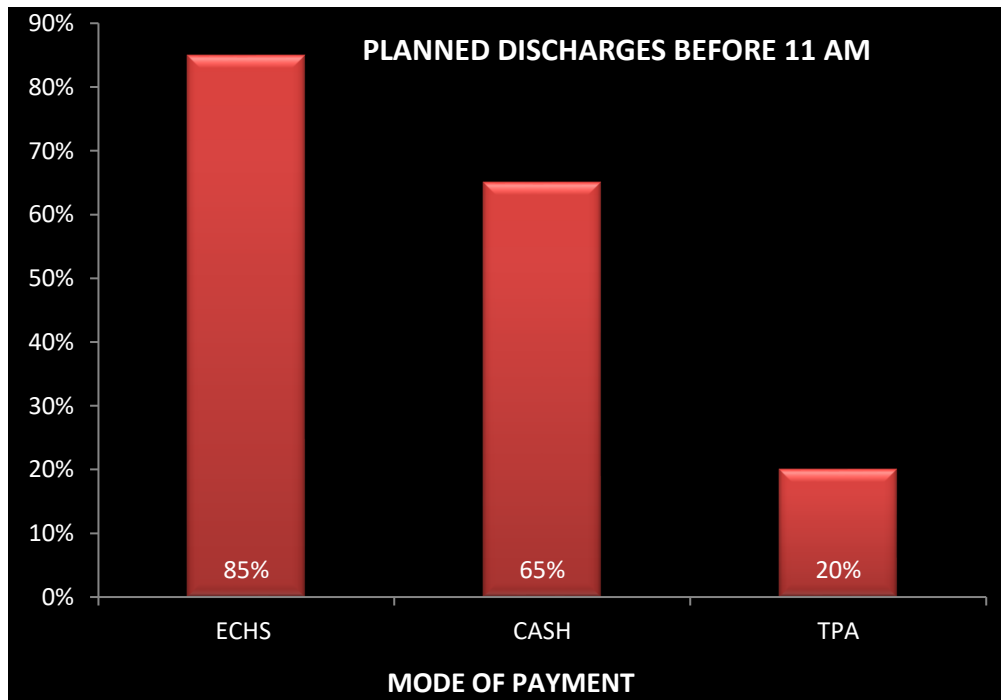


Figure 6 : Showing % discharges according to mode of payment of patients leaving before 11am

- According to FOS metric , target % discharges before 11 am for :

Cash patients is 75%

ECHS patients is 50 %

TPA patients is 50%

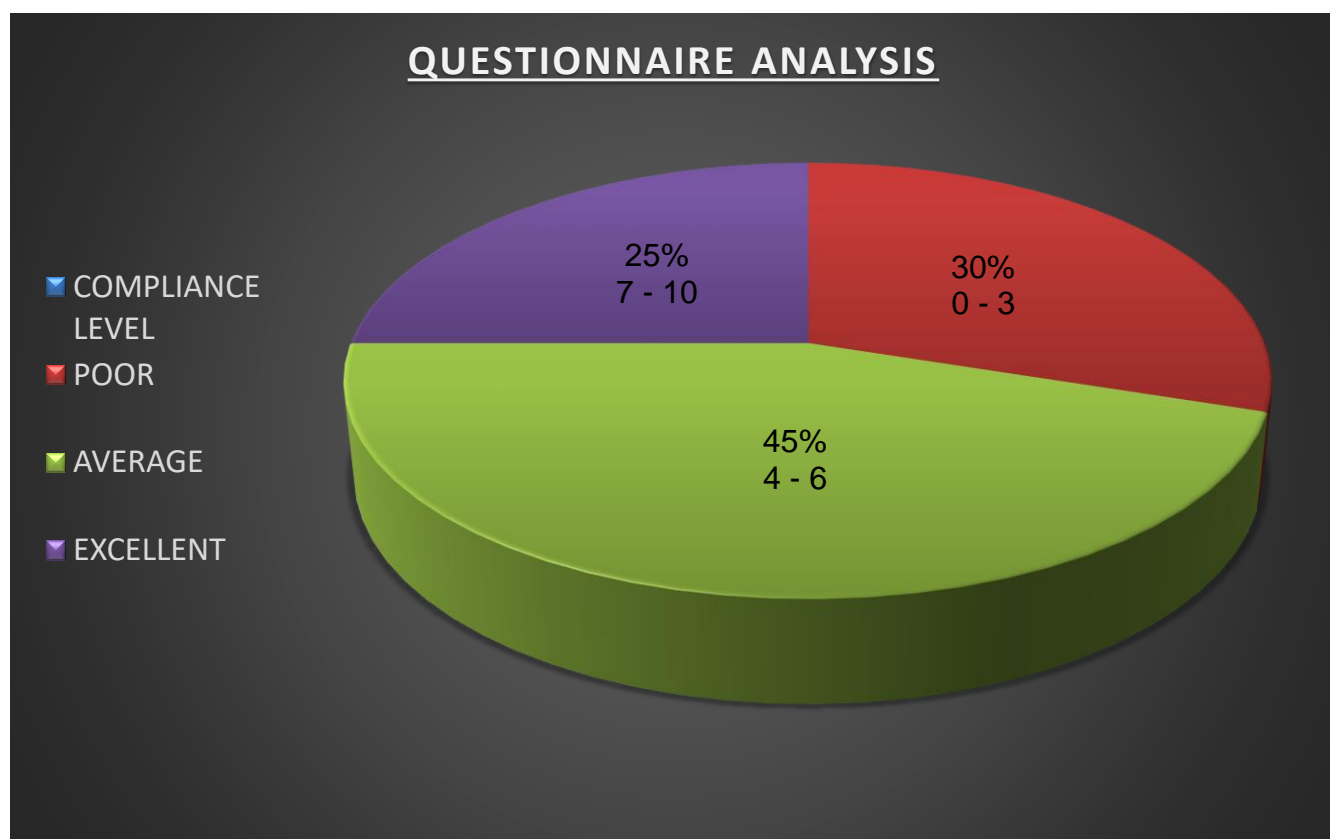


Figure 7 : pie chart depicting compliance level of the staff for discharge process through questionnaire analysis

COMPLIANCE LEVEL	SCORING CRITERIA	COMPLIANCE%
POOR	0 – 3	30 %
AVERAGE	4 – 6	45%
EXCELLENT	7 - 10	25%

Pie chart above depicts the compliance level of the stakeholders involved in discharge process. It indicates that only 30 % scored below average marks as

they were new joiners and were not directly related to the discharge process.

REASONS FOR DELAY -

In order to find out the root causes for the delay in planned discharges , a Root Cause Analysis (RCA) was done to know the primary & root causes for delay in planned discharges .

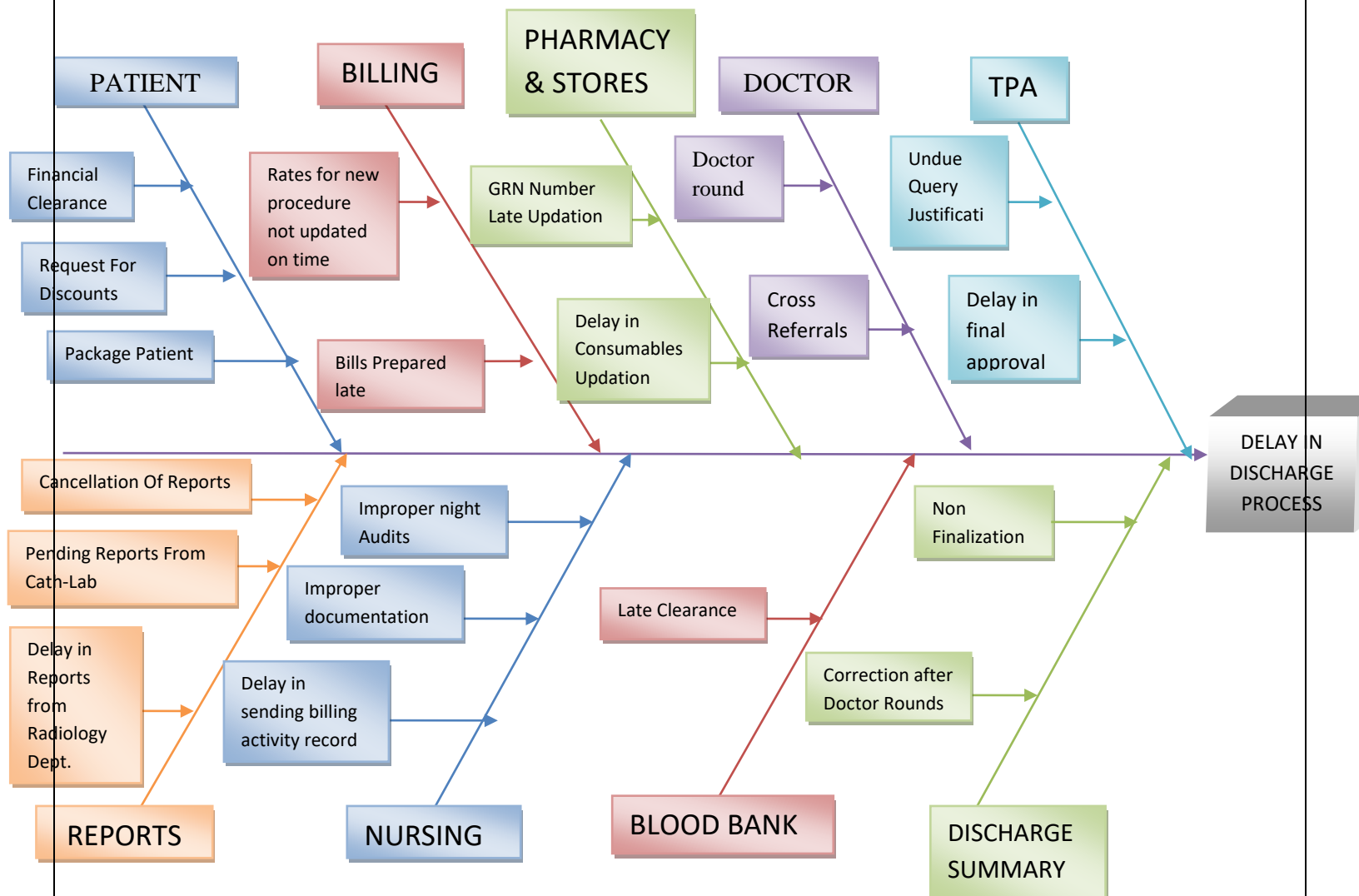


Figure 8 : fish bone diagram

Fish bone diagram (cause effect diagram) depicts the root causes of delay in discharge process of Cash & TPA patients

CHALLENGES FACED

- In changing the attitude of doctors regarding discharge process .
- Lack of accountability in the staff
- Many stakeholders are involved in the process so lot of efforts have to be put to maintain the network.

CONCLUSION

After completing this project , I will conclude that discharge process is a very important process as any delay in it will directly lead to patient dissatisfaction & affect the rapport of the hospital. Planned discharges should be on time & our planning should be above 85 %.

Discharge process is started when the patient is stable and is in a condition to get discharged. This process is also time consuming as it includes many processes in itself. TPA patients has to go through a long process as they have to wait for the approval of the insurance company.

Through some changes in the organization these issues can be sorted out.

RECOMMENDATIONS

➤ FOR CASH PATIENTS

- Patients should be properly counselled at the time of admission regarding financial clearance by 10:30 am.
- Patients paying cash after 10:30 am should be charged with half day room rent.
- Request for discount should be made through doctor one day prior
- Bill should be ready for discharge patients by 8:30 am.
- Investigation Reports should be made and signed by consultant one day prior to discharge or on priority basis if the same day discharge.
- For Cross references doctor should take round on time to avoid any delay in discharge

➤ FOR TPA PATIENTS

- Bill of patient & discharge summaries should be ready by 8:00am
- Reports and summaries of the patients should be faxed to the TPA before 9:am.
- Daily a mail should be put on every nursing station for TPA patients planned discharges to avoid any confusion for the discharge nurse regarding mode of payment.
- Patients should be informed prior to discharge regarding clearance after final approval to avoid any further delay.
- Ideally we can define TAT for TPA .

ANNEXURE: QUESTIONNAIRE

1. Target % for discharges before 11am for cash patients is

- ☐ >50%
- ☐ 75%
- ☐ >72%
- ☐ >65%

2.Target % for discharges before 11am for ECHS/Corporate patients is :

- ☐ 50%
- ☐ 70%
- ☐ 65%
- ☐ 60%

3.. Target % for discharges before 11am for TPA patients is:

- ☐ 50%
- ☐ 55%
- ☐ 60%
- ☐ 65%

4. Delay in discharge of patients leads to :

- ☐ Patient dissatisfaction
- ☐ Bed unavailability
- ☐ Patient satisfaction
- ☐ Patient dissatisfaction & bed unavailability

5. Outlier in length of discharge process for cash patients is :

6. Type of discharges:

- ☐ Planned & unplanned discharges
- ☐ Discharge on request
- ☐ LAMA
- ☐ All

7. Length of discharge process for Cash patients :

- ☐ 90 mins
- ☐ 120 mins
- ☐ 60 mins
- ☐ 30 mins

8. Length of discharge process for ECHS patients:

- ☐ 120 mins
- ☐ 140 mins
- ☐ 60 mins
- ☐ 90 mins

9. Length of discharge process for TPA Patients :

- ☐ 100 mins
- ☐ 120 mins
- ☐ 240 mins
- ☐ 200 mins

10. % of discharge planning should be more than:

- ☐ 75%
- ☐ 70%
- ☐ 80%
- ☐ 85%

REFERENCES :

1. <http://www.ihl.org/resources/Pages/Changes/ScheduletheDischarge.aspx>
2. <http://www.fiercehealthcare.com/story/study-hospital-discharge-processes-still-need-work/2013-08-21>
3. <http://www.uptodate.com/contents/hospital-discharge-and-readmission>
4. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2655791/>
5. Hendrich AL, Lee N: Intra-Unit Patient Transports: Time, Motion, and Cost Impact on Hospital Efficiency. Nurs Econ. 2005, 23: 157-64. [PubMed](#)
6. <http://bmb.oxfordjournals.org/content/95/1/33.full>
7. Strang IW, Boddy FA, Jennett B: Patients in acute surgical wards: a survey in Glasgow. Br Med J. 1977, 1: 545-548. 10.1136/bmj.1.6060.545.
8. Lim SC, Doshi V, Castasus B, Lim JK, Mamun K: Factors causing delay in discharge of elderly patients in an acute care hospital. Ann Acad Med Singapore. 2006, 35: 27-32.