

**DISSERTATION**

**IN**



**SHALBY HOSPITAL AHMEDABAD, GUJARAT**

**(MARCH 5<sup>TH</sup> TO MAY 17<sup>TH</sup> 2014)**

**A STUDY ON**

**PATIENT DISCHARGE TURN AROUND TIME**

**BY**

**RAGHVENDRA MISHRA**

**PG/12/068**

**POST GRADUATE DIPLOMA IN HOSPITAL AND HEALTH  
MANAGEMENT**



**INTERNATIONAL INSTITUTE OF  
HEALTH MANAGEMENT RESEARCH**

**2012-2104**

**NEW DELHI**

**Internship Training**

**At**

**Shalby Hospitals, Ahmedabad**

**Study on Patient Discharge Turn Around Time**

**By**

**Raghvendra Mishra**

**Under the guidance of**

**Mr. Nimit Shah**

**Post Graduate Diploma in Hospital and Health Management**

**2014**



**International Institute of Health Management**

**Research**

**New Delhi**

The certificate is awarded to

**Raghvendra Mishra**

In recognition of having successfully completed his  
Internship in the department of

**Clinical Application**

And  
has successfully completed his Project on  
**Patient Discharge Turn Around Time**

**17/05/2014**

**Shalby Hospital, Ahmedabad**

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

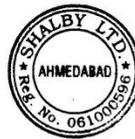
We wish him/her all the best for future endeavors



**Training & Development**



**Head-Human Resources**





Hereby certifies that

Dr. Raghendra Mishra

Student of PGD-IHM at International Institute of Health Management Research, Delhi

has successfully completed his dissertation in the

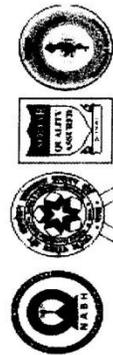
Clinical Application

as a part of academic curriculum during the period of

5<sup>th</sup> March 2014 to 17<sup>th</sup> May 2014

at our Organization.

VIKRAMSINH MAHIDA  
Sr. Vice President- HR & ADMIN.  
Issued on: 17/05/2014



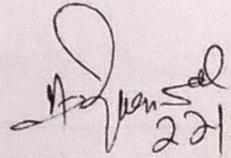
**CERTIFICATE**

**TO WHOMSOEVER MAY CONCERN**

This is to certify that **Raghvendra Mishra** 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 **Shalby Hospital, Ahmedabad** From **05/03/2014** to **17/05/2014**.

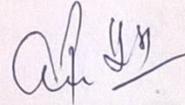
The candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The internship is in fulfillment of the course requirements. I wish him all success in all his future endeavors.



22/5/2014

Dr. A.K. Agarwal  
Dean, Academics and Student Affairs  
IIHMR, New Delhi



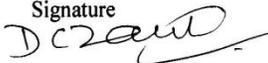
Dr. Preetha GS  
Associate Dean Professor  
IIHMR, New Delhi

**Certificate of Approval**

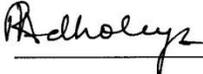
The following dissertation titled **“PATIENT DISCHARGE TURN AROUND TIME”** at **“SHALBY HOSPITAL”** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health 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 DR. D. C. JAIN

Signature  


Dr. Radhika S. Adhokeya



---

IIHMR DWARKA, NEW DELHI

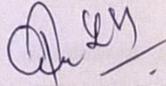
2014

Certificate from Dissertation Advisory Committee

This is to certify that **Dr. Raghvendra Mishra**, a graduate student of the **Post Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He is submitting this Dissertation titled **"Patient Discharge Turn Around Time"** at **"Shalby Hospital"** in partial fulfillment of the requirements for the award of the **Post-Graduate Diploma in Health and Hospital Management**.

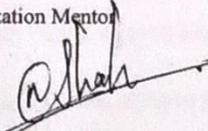
This dissertation has the requisite standards and to the best of our knowledge no part of this has been reproduced from any other dissertation, monograph, report or book.

Institution Mentor



Dr. Preetha GS  
Associate Dean Professor  
IIHMR DELHI  
Dwarka, New Delhi

Organization Mentor



Mr. Nimit Shah  
Assistant Manager  
(Clinical Application)  
Shalby Hospitals, Ahmedabad

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,  
NEW DELHI**

**CERTIFICATE BY SCHOLAR**

This is to certify that the dissertation titled "**Patient Discharge Turn Around Time**" and submitted by **Dr.Raghvendra Mishra** Enrollment No. PG/12/068 under the supervision of **Mr. Nimit Shah, Assistant Clinical Manager, Shalby Hospitals ,Ahmedabad and Dr.Preetha G.S , Asst. Dean, IIHMR, Delhi** for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 05/03/2014 to 17/05/2014 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.

  
**Raghvendra Mishra**

**FEEDBACK FORM**

Name Of the student: *Raghnveeka Mishra*

Dissertation Organization: *Shalby Hospital, Ahmedabad*

Area of dissertation: *Clinical Application*

Attendance: *100 %*

Objectives Achieved: *Yes*

Deliverables: *Yes*

Strengths: *Hardworking, Focused, good communication skills*

Suggestions for Improvement: *No.*

Signature of the office in charge *[Signature]* Organization Mentor (Dissertation)

Date: *16/05/2014*  
Place: *Ahmedabad*

**FEEDBACK FORM**

Name Of the student: Raghvendra Mishra

Dissertation Organization: Shalby Hospitals, Ahmedabad

Area of dissertation: Clinical Application

Attendance: 100%

Objectives Achieved: - yes

Deliverables: - yes.

Strengths: - Hardworking, sincere,

Suggestions for Improvement: not now.

*Bhuvosh Patel*  
Signature of the office in charge/organization Mentor (Dissertation)

Dr Bhuvosh Patel.

Date: 17.5.2014

Place: Ahmedabad.

## **PREFACE**

This is very crucial for the PGDHHM. student to learn process of hospital and has some research on that related to efficiency and effectiveness of current process which help to student to development analytical skill and evaluation of current process by providing conclusion in terms of recommendation and suggestion which shows how student has understood particular process that helps him/her in future.

This project report is consider as first step of student in the practical world because he/she is sole responsible to prepare and execute entire project and this helps him/her at time of joining various organization after the completion of this course because in this time student come across with various standard of departments and get the valuable knowledge regarding hospital grant policies and various norms. It provides some very good experience on our part as we are able to understand some real life situations in this globalization which help me in future.

The basic objective of the research is to learn a process thoroughly to get the mastery in that process and along with that develop various analytical skill which are the essential part of a manager for better medical, administrative and financial functions of the hospital.

## ACKNOWLEDGEMENT

Undertaking a project is never a one-person job. It's always involves help from other person who are either reviewing your work or teaching your things. It would have never been completed without the co-operation and sincere efforts of all the staff members of hospital who guided me throughout this project.

I want to express my gratitude and sincere thanks to **Dr MedhaviniAyachit (Medical Superintendent, Shalby Hospital, Ahmedabad), Mr.KuntalAcharya (Manager, Clinical Application) & Dr.Jasmin Baldha (Quality Head)** who permitted me to conduct the project in Shalby Hospital,Ahmedabad & for his time to time guidance & kind help in the completion of this project.

I would like to thank to all clinical application team **Dr.Ashish, Dr.Hemal, Mr.Nimit** of Shalby Hospital, Ahmedabad, who not only guided me every step, also motivated me to put sincere efforts despite various constraints Without that, this project could not have been completed.

Last but not the least I would like to thank my institution, my faculty members and my mentor **Dr.Preetha G S (Associate Dean, IIHMR)** without whose guidance this project would have been a distant reality.

Making a project gives you very difficulties as input but output is a realize you that you have solved a problem using what you have learned till now.

**Dr. Raghvendra Mishra**

Signature

## **ABBREVIATIONS**

TAT: Turn Around Time

IPD: In Patient Department

OPD: Out Patient Department

OT: Operation Theater

C.C.U: Cardiac Care Unit

M.O: Medical Officer

M.I.C.U: Medical Intensive Care Unit

S.I.C.U: Surgical Intensive Care Unit

C.S.S.D: Central Sterile and Storage Department

I.C.C.U: Intensive Critical Care Unit

IP No: Indoor Patient Identification Number

DAM: Discharge Against Medical Advice

PRO: Patient Relation Officer

MOD: Manager on Duty

MT: Medical Transcripitor

## CONTENT

S.NO	Table of Content	Page No:
1	Hospital Profile	1
2	Department in Shalby Hospital	3
3	Auxiliary Services	4
4	Layout of Hospital	5
5	Executive Summary	6
6	Introduction	7
7	Review of Literature	8-9
8	Rationale of the Study	10
9	Objectives of the Study	11
10	Research Methodology	12
11	Discharge Module	13
12	Discharge Process	14-15
13	Data Analysis	16-17
14	Findings	18-21
15	S.W.O.T. Analysis	22
16	Conclusion	23
17	Recommendation	24
18	Bibliography	25
19	Annexure	26-31

## LIST OF FIGURES & TABLES

Table 1	Total No Of Patient Of Each Category Of Discharge
Figure 1	Total No Of Patient Of Each Category Of Discharge
Table 2	HOSPITAL DISCHARGE TIME Approx. (As Per Hospital Policy)
Figure 2	HOSPITAL DISCHARGE TIME Approx. (As Per Hospital Policy)
Table 3	Defined Time For Each Steps Of Discharge
Figure 3	Defined Time For Each Steps Of Discharge
Table 4	Total Average Discharge Time (All Types) Against Defined Time
Figure 4	Total Average Discharge Time (All Types) Against Defined Time
Table 5	Avg. Discharge Time Taken For Corporate Patients At Each Steps
Figure 5	Avg .Discharge Time Taken For Corporate Patients At Each Steps
Table 6	Avg. Discharge Time Taken For Corporate Patients At Each Steps
Figure 6	Avg. Discharge Time Taken For Corporate Patients At Each Steps
Table 7	Discharge Time Taken For Mediciam Patients At Each Steps
Figure 7	Discharge Time Taken For Mediciam Patients At Each Steps

## **HOSPITAL PROFILE**

Shalby is the leading multi-speciality tertiary care healthcare institutions in Western India. We provide world class treatment for all types of diseases at the most affordable rates. Patients come from all over India and the world for treatment in Shalby Hospitals.

**Modest Beginning:** Shalby began its journey as a Joint Replacement Centre in 1994 by Dr. Vikram Shah. It has made tremendous progress in this field, as can be seen by the fact that **the highest number of joint replacement surgeries done in a single hospital anywhere in the world are done in Shalby Hospitals' S G Road, Ahmedabad Unit [Main Branch]**. Till date, over 40,000 joint replacement surgeries of different types have been done by the in house surgeons of Shalby Hospitals.

**Quality:** We render the best patient care through a professional approach. We believe in continual improvements in quality of our services. We implement quality improvement programs across all the departments of our hospitals with the aim of offering the best services to our patients.

The quality of our healthcare services has been certified by accreditations bodies like the **NABH, NABL and ISO 9001:2008** and recognised by most prestigious awards like the **Rajiv Gandhi National Quality Award, the FICCI award** and many more.

**Dental Cosmetic & Implantology Centre:** Shalby's 'Dental Cosmetic and Implantology Centre' established in 1995 is a state of the art unit in the field of dental implants and all other comprehensive dental treatments. It offers world class dental care in all aspects of dentistry. People from all over the world regularly visit Shalby's dental clinic for high end procedures, especially dental implants.

**Expansion:** Shalby now has multi-speciality hospitals in Ghuma [Ahmedabad], Vapi [Gujarat] and Mapusa [Goa]. The 30 bed hospital where Shalby began now houses a state of the art Assisted Reproductive Technologies [IVF] centre.

Shalby offers OPD services in all major cities of India like Mumbai, Delhi, Kolkata, Surat, Vadodara, Jaipur, Jodhpur, Indore and in African countries like Kenya [Nairobi].

**Future-**It is the vision of Shalby to continually improve and grow and fulfill its mission ‘**TO PRESERVE AND SUSTAIN QUALITY HUMAN LIFE**’.

### **Chairman’s Message**

Our objective is to provide high quality healthcare to people across the world. We aim to improve the quality of life of patients through compassion and dedication. We are geared to offer the best of healthcare services at competitive costs to people from across the globe. We are proud to have put Ahmedabad on the medical tourism map.

### **Vision**

To be among the best Joint Replacement centers of the world, and a preferred medical institution for treatment of Cardiac, Spine, Oncology, Trauma and other medical conditions through world class technology, human expertise and highest professional standards at competitive costs.

### **Mission**

To preserve and sustain quality human life as humanely as it can be done through painless processes, facilitation of speedy recovery, and indigenization of medical technology and to promote wellness & awareness through best practices at the highest value for all concerned.

## DEPARTMENT IN SHALBY HOSPITAL

Arthroscopy	Neuro surgery
Bariatric Surgery	Nephrology
Cardiology	Nutritional diet
Cardio thoracic Surgery	Orthopaedics
Critical care	Oncology
Cosmetic surgery & cosmetology	Onco surgery
Dental science	Ophthalmology
Dermatology	Pain clinic
Diabetology	Pathology
Eyes, Nose & Throat surgery	Physiotherapy
Endoscopy & Laparoscopy	Pulmonology
Kidney transplant	Plastic surgery
General surgery	Gynaecology & obstetrics
Gastroenterology	Rheumatology
G.I. Surgery	Radiology
Joint Replacement surgery	Spine surgery
Internal medicine	Trauma surgery
Infectious disease	Urology
Minimal invasive surgery	Vascular surgery
Neurology	

## AUXILIARY SERVICES

- ❖ Ambulance Services
- ❖ Emergency Services
- ❖ Health check-up service
- ❖ CSSD
- ❖ Linen Services
- ❖ Stores
- ❖ Medical gases
- ❖ Security
- ❖ Kitchen & Cafeteria
- ❖ Bio-medical Engineering
- ❖ Maintenance & Engineering
- ❖ Mortuary services
- ❖ Medical Record Department
- ❖ Administrative Services
- ❖ Hospital Management Information system
- ❖ Clinical Research
- ❖ Bio-medical Waste Management
- ❖ Hospital infection control
- ❖ Pharmacy

## LAYOUT OF HOSPITAL

Conference hall, Library, Doctor's lounge, Clinical Research room, Kitchen, Cafeteria, Cosmetic OPD	9 <sup>th</sup> floor
Twin Deluxe Room	8 <sup>th</sup> floor
VIP suite, Deluxe Room	7 <sup>th</sup> floor
Premiere Rooms	6 <sup>th</sup> floor
AC twin Room, Economic Room	5 <sup>th</sup> floor
Twin room, Cafeteria	4 <sup>th</sup> floor
OT, MICU, POD	3 <sup>rd</sup> floor
Corporate Block ,CSSD	L floor
OT, SICU	2 <sup>nd</sup> floor
OPD, CCU, Cath lab	1 <sup>st</sup> floor
Ortho OPD, Dental OPD, Reception, Admissions, Mediclaim ,OP pharmacy, Prayer room, Billing, Corporate help desk, Travel desk, Cafeteria, Ophthalmology OPD, other POD	Ground floor
ER room, X-ray, Sonography, CT scan ,Mammography, MRI, Pathology, Health check-up, Dialysis, ER Billing	Basement 1
Bio-medical engineering, Mortuary, Medical Records department, Linen Store, General store, IPD pharmacy	Basement 2

## **EXECUTIVE SUMMARY**

This project on Discharge process is helpful to me to understand various processes in the corporate hospital such as Discharge process, Discharge file documentation, Pharmacy indent and return, about Discharge summary, billing process.

The discharge process is likely to be well remembered by the patient. Slow and frustrating discharge process can result in low patient satisfaction and reduction in effective bed capacity.

The first part of the project is introduction of hospital and after that project report is starts with proper light on the significance of project and at last, analysis along with my observation. This project helps to reduce the unnecessary wasting time in discharge of the patient.

The whole analysis was done through proper process mapping of the existing system.

## **INTRODUCTION**

The events of admission and discharge are pivotal in an integrated approach to bed management, together with the central position of the patient in the decision making process. This requires an integrated multidisciplinary team approach to care delivery, necessitating the development of care pathways, clinical protocols and standards, which can be audited and evaluated to demonstrate clinical effectiveness /patient outcomes.

Discharge from hospital is a process, not an isolated event. It involves the development and implementation of a plan to facilitate the transfer of an individual from hospital to an alternative setting where appropriate. Components of the system (family, carers, hospitals, primary care providers, community services and social services) must work together. Activity and performance standards should be frequently monitored and there should be openness to innovative solutions. This will ensure that the whole systems approach to admissions and discharges is positively reflected in the patient's experience. All hospitals should have their own operational policies for discharge planning. Staff should to be involved in the development and regular review of these policies. As with admissions, the standard of discharge management impacts on hospital efficiency, quality and safety of patient care.

## REVIEW OF LITERATURE

Discharging patients in a timely manner is an issue that plagues most large hospitals. Patient and family complaints were frequent and had started to adversely affect the hospital's reputation. Delayed discharges also blocked beds for new admissions and artificially drove up bed occupancy rates and average length of stay.

- 1) A study "Improving Turn around Time (TAT) for Patient Discharges" conducted by Dr Parag R Rindan, et al. Ltd in sterling hospital, Ahmedabad in June 2011. The study reveals that TPA (Third Party Administrator), corporate and cash patients revealed that TPA patients were particularly dissatisfied by the extensive time required for discharge. On an average, TPA patients accepted a norm of three hours for discharge, post consultant instructions. However, the reality is that the discharge process typically takes five hours. The results were gratifying. The overall **TAT for the patient discharge process was compressed from 300 minutes to 150 minutes**. This enhanced the capacity of the hospital for **admitting additional patients by 80**. The hospital **increased its profitability by approximately Rs 32 lacs per annum**.
  
- 2) An case study on "Process Improvement Reduced Hospital's Bed Turnaround Time 75%" by Richard Samson in Magnet, large metropolitan hospital, Detroit, Michigan in 2010. The objective of the study to reduce the average bed turnaround time (the elapsed time between one patient being discharged from a room and another admitted to the same room) which was more than six hours. The study found that Registered Nurses sometimes had to delay making the computer entry for several hours. The working hours for most of the housekeeping staff did not match the peak

workflow of patients discharged in the late afternoon and ED patients were assigned to an inpatient bed when the room was empty but not yet cleaned

- 3) Mapping Turn Around Time (TAT) to a generic timeline: A systematic review of TAT definition in clinical domain by Martin Dugas et al., in 2011. Studies were included if precise definitions of turnaround times were available. A generic timeline was designed through a consensus process to provide an overview of these definitions. The results of the study consensus process resulted in the following 15 terms: admission, order, biopsy/examination, receipt of specimen in laboratory, procedure completion, interpretation, dictation, transcription, verification, report available, delivery, physician views report, treatment, discharge and discharge letter sent. Based on this analysis, several standard terms for turnaround time definitions are proposed.
  
- 4) An another study conducted by GE healthcare at Wishaw General Hospital (U.K.) the study results show that the turnaround time is more in hospital due to Time taken to generate the prescription after discharge decision, to transfer the prescription to the dispensary, within the dispensary and to transport the drugs back to the patient.

## **RATIONALE OF THE STUDY**

The purpose behind conducting such project is to diagnose and analysis of Turnaround time in discharge process. This project helps hospital to reduce the time in discharge process which further leads to most important part that is patient satisfaction.

Turnaround time of discharge process is defined as the “time Discharge advice by consultant and Discharge With the file”. TAT helps us

1. To improve the quality & standard of the hospital.
2. To improve patient satisfaction
3. To increase patient flow.

Major steps had been taken to decrease TAT. . It is in fact one of the key performance indicator of the organization which is assessed quarterly and major steps are taken to keep it to as minimum as possible. Hence the study is undertaken to estimate the TAT in all Shalby hospitals and also find out the impact of this on the patients.

## **OBJECTIVES OF THE STUDY**

### **General objective:**

To study turnaround time and find out the root causes to highlight areas of potential process improvements in Discharge process.

### **Specific objective:**

- To study process flow of patient Discharge of different paying methods.
- To find out time taken for individual patient Discharge of different paying methods.
- To observe actual time taken for completion of discharge.
- To analyze gap between the standard and actual time taken for discharge

## **RESEARCH METHODOLOGY**

Study design: • Project design is descriptive and exploratory in nature.

Project is carried out as per rules and regulation based on medical record department and existing condition of the department.

Study Setting: • The study is done during time period from March to May at Shalby Hospitals, S.G.Highway, Ahmedabad, Gujarat.

Sample size: • Random purposive sampling method is used for assessment of discharge.

Total no of samples: 100

Research tool: • Quantitative method was used (primary data), check list

- MS excel

### **DATA COLLECTION METHOD:**

There are mainly two methods for collection of data

1. Primary data
2. Secondary data

#### **1. Primary data**

Observation

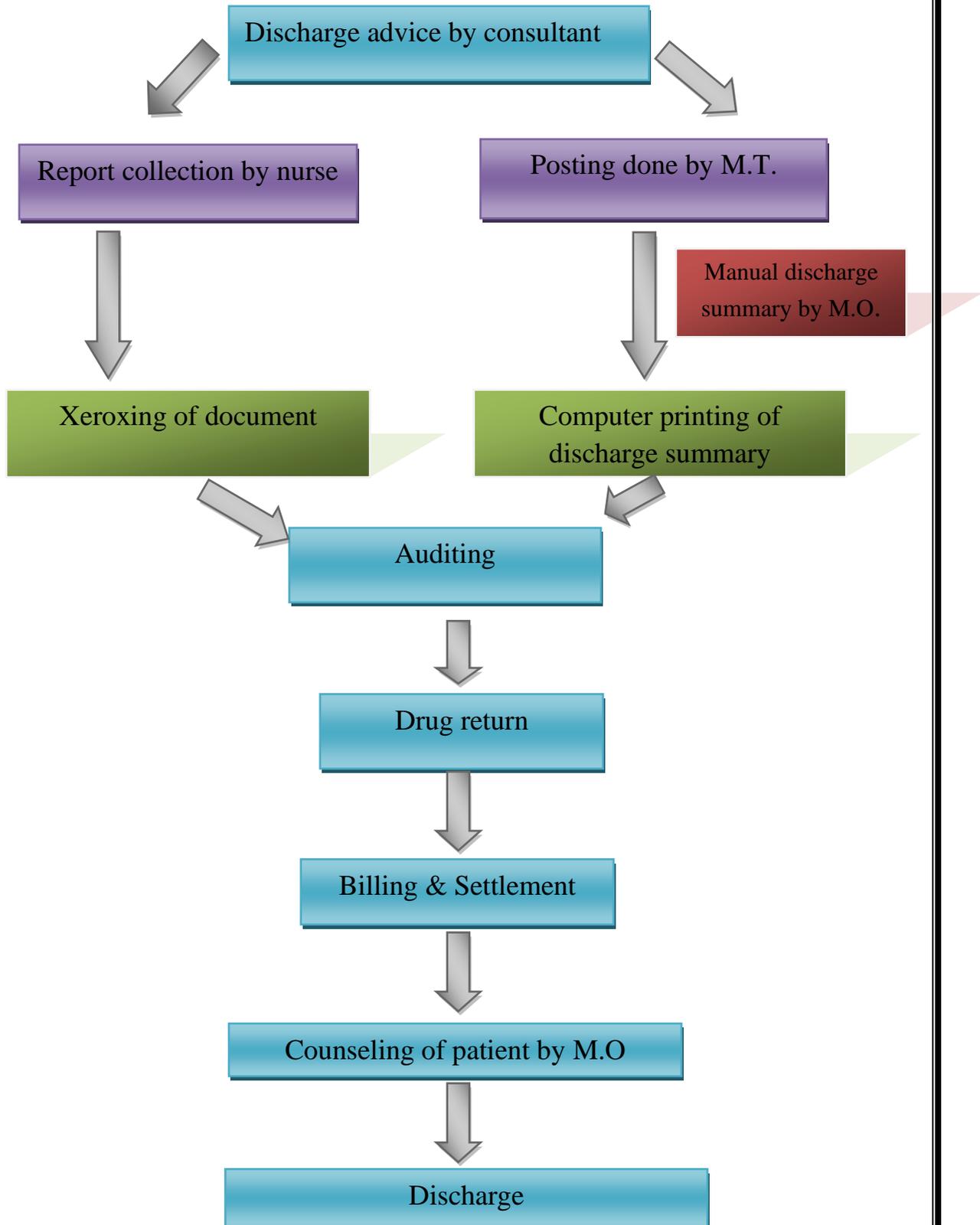
#### **2. Secondary data**

Hospital records

### **Process analysis:**

Process analysis by SWOT Analysis

## DISCHARGE MODULE



## **DISCHARGE PROCESS**

### **Discharge Decision:**

Decision regarding discharge the patient taken by the primary treating consultant after sure it that patient condition is better and patient fit for discharge, after then consultant communicate to the patient, relatives and medical officer and concern ward nursing staff.

### **Preparation of Discharge Summary:**

After final decision to discharge the patient is taken, the medical officer prepares the discharge summary manually then medical transcriptor do charge posting and prepared discharge summary, patient/relatives are instructed by medical officer.

### **Pharmacy Return:**

After preparing the file it send to pharmacy for drug return. After pharmacy return the ward staff takes the file to billing department.

### **Billing Process:**

Billing department prepares the final bill of the patient adjusting the advance paid by the patient/relative at the time of admission,

### **Patient/Relative Counseling:**

During the final discharge of the patient from the hospital the medical officer counsels the patient /relative regarding the diet, medication and follow up etc.

### **DAMA (Discharge Against Medical Advice)**

Incase patient/relative want to get discharged against medical advice, the same is indicated in the patient case record by the primary treating consultant/medical officer. Records are entered in DAMA register of the respective patient ward and a written consent is taken from the patient/relatives.

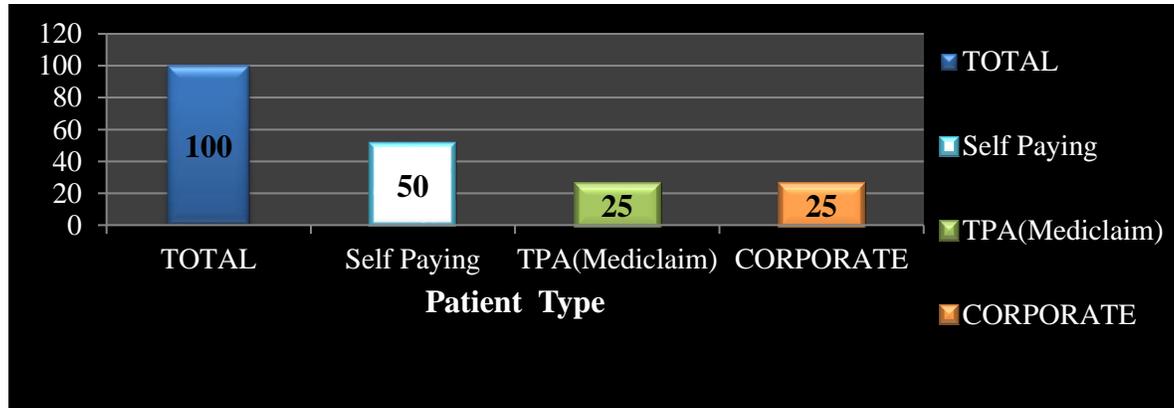
**For Insured Patient:**

At the time of admission if patient is insured, TPA desk intimate respective insurance agency for confirmation of the service provided to the patient. And at the time of the discharge of the patient after preparing the bill the bill amount document send through fax or scan to the insurance company , inform to patient relative/relatives and same procedure followed as above.

## DATA ANALYSIS

PATIENT TYPE	NO.
TOTAL	100
Self Paying	50
TPA(Mediclaim)	25
CORPORATE	25

Table: 1 Total No of patient of each Category of discharge



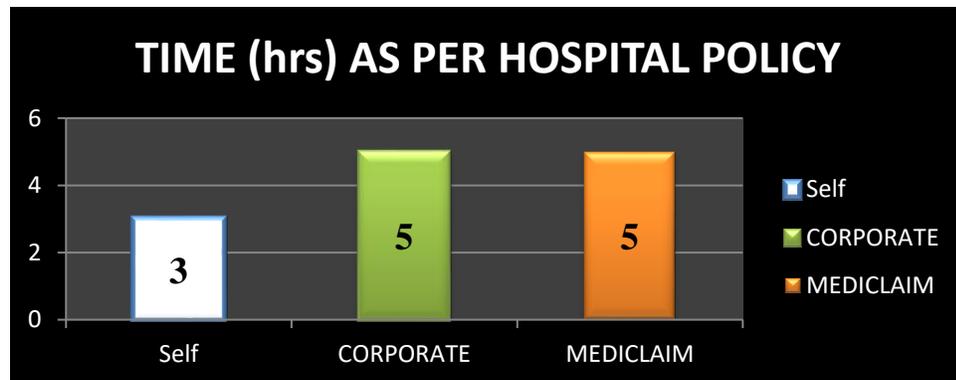
(Figure: 1) Total No of patient of each Category of discharge

Table: 1 and Figure: 1 shows the total no. of patients of each category.

### HOSPITAL DISCHARGE TIME Approx. (As per hospital policy)

PATIENT TYPE	TIME (hrs)
Self	2-3
CORPORATE/ Mediclaim	4-5
TPA	4-5

Table: 2 TIMES (hrs) AS PER HOSPITAL POLICY



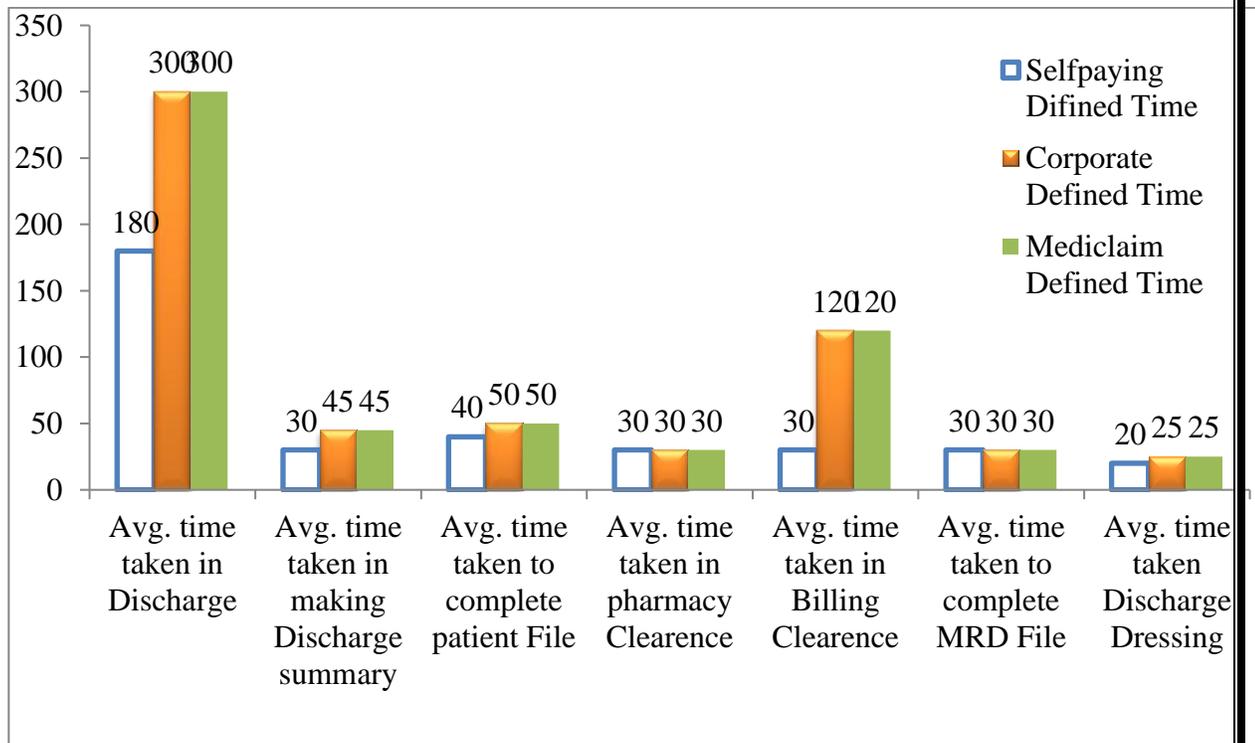
(Figure 2)

Table 2 shows defined time of patient discharge according to the hospital policy. For self paying patient it is 3 hrs, for corporate & Medclaim patients it is 5 hrs.

**Defined Discharge Time Schedule for Each Type of Discharge**

Steps	Self paying Defined Time	Corporate Defined Time	Mediclaime Defined Time
Avg. time taken in Discharge	180	300	300
Avg. time taken in making Discharge summary	30	45	45
Avg. time taken to complete patient File	40	50	50
Avg. time taken in pharmacy Clearance	30	30	30
Avg. time taken in Billing Clearance	30	120	120
Avg. time taken to complete MRD File	30	30	30
Avg. time taken Discharge Dressing	20	25	25

**Table: 3** Defined Time for Each steps of discharge



(Figure: 3) Defined Time for Each steps of discharge

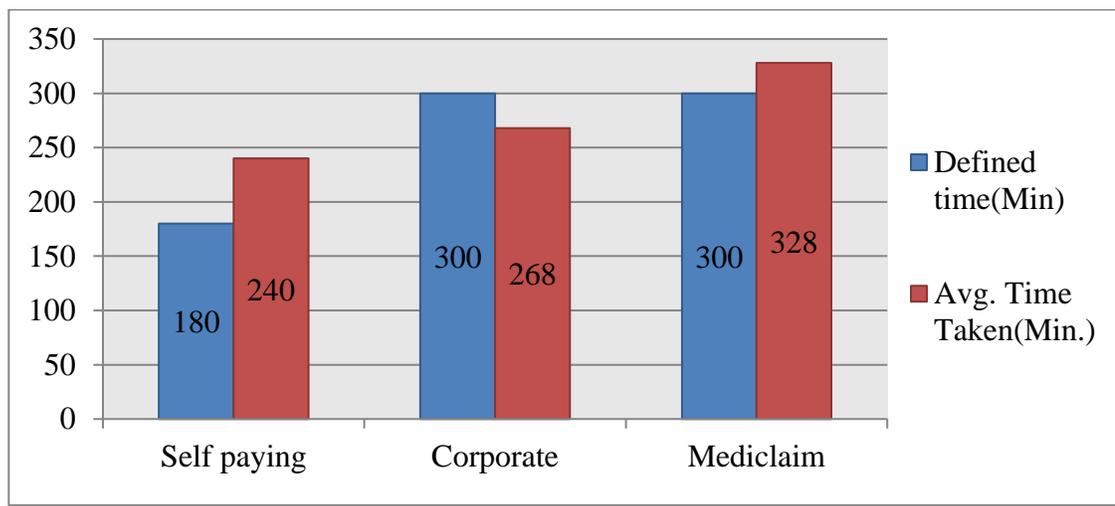
Table 3 and figure :3 shows the defined time as per hospital policy for each steps of discharge processes like time taken to making discharge summary, time taken in pharmacy and billing clearance & time taken to complete MRD file etc.

## **FINDINGS**

### **Total Average Discharge Time (All Types) Against Defined Time**

Type Of Discharge	Defined Time	Time(Min.)
Self Paying	180	240
Corporate	300	268
Mediclaim	300	328

Table: 4 Total Average Discharge Time (All Types) Against Defined Time



**(Figure: 4)** Total Average Discharge Time (All Types) Against Defined Time

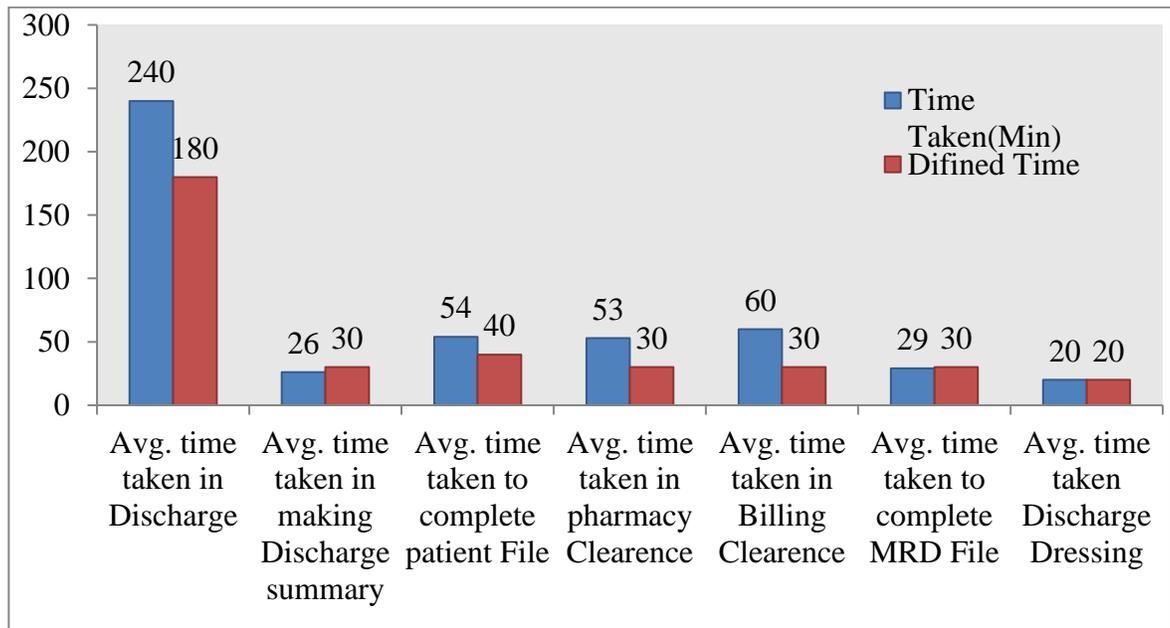
Table: 4 shows total avg. defined time for discharge according to hospital policy in minutes and total avg. Time taken presently to discharge in each type of patients in minutes.

## AVERAGE DISCHARGE TIME

### 1. SELF PAYING PATIENT

Self Paying	Time Taken(Min)	Defined Time(Min)
Avg. time taken in Discharge	240	180
Avg. time taken in making Discharge summary	26	30
Avg. time taken to complete patient File	54	40
Avg. time taken in pharmacy Clearance	53	30
Avg. time taken in Billing Clearance	60	30
Avg. time taken to complete MRD File	29	30
Avg. time taken Discharge Dressing	20	20

Table: 5 Avg. Discharge time taken for self paying patients at each steps



(Figure: 5) Avg. Discharge time taken for self paying patients at each steps

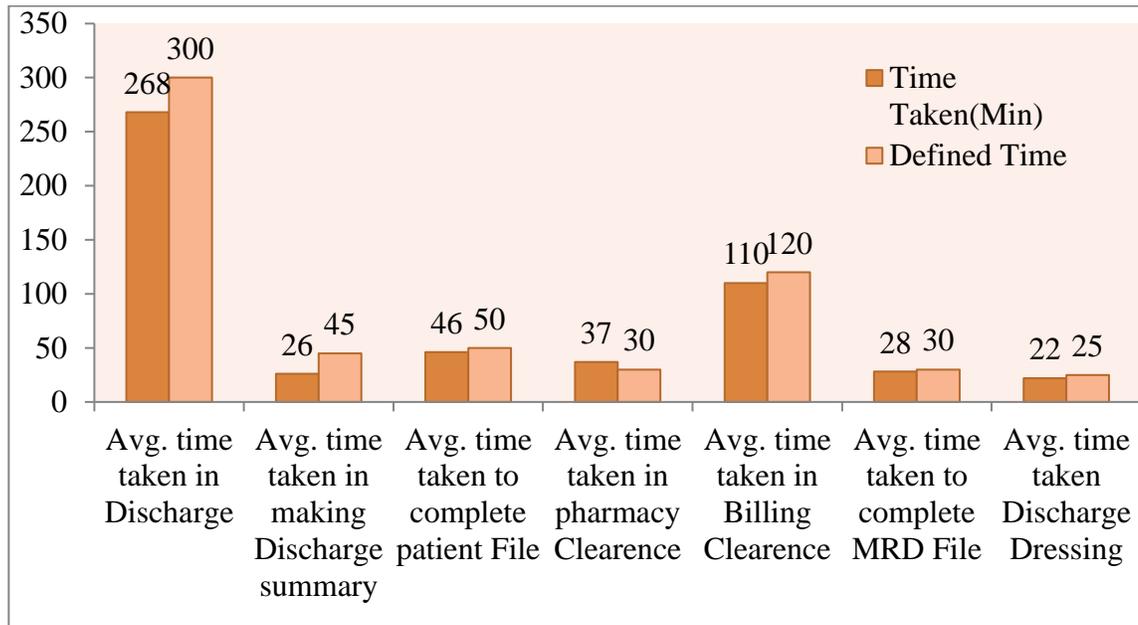
Table 5 reveals that avg. time of discharge off self paying patients are more than the defined time by the hospital policy and the more time is taken in the completing patient files, pharmacy clearance and in billing. The time is more in completing files is because of pathology reports of patients are not timely send by the pathology

department, photo copy machine starts at 10 pm so the copying of papers is not done prior to 10 so and there is one photo copy machine and so long there is long que for the photocopy.

## **2. CORPORATE PATIENT**

Corporate	Time Taken(Min)	Defined Time(Min.)
Avg. time taken in Discharge	268	300
Avg. time taken in making Discharge summary	26	45
Avg. time taken to complete patient File	46	50
Avg. time taken in pharmacy Clearance	37	30
Avg. time taken in Billing Clearance	110	120
Avg. time taken to complete MRD File	28	30
Avg. time taken Discharge Dressing	22	25

Table: 6 Avg. Discharge time taken for corporate patients at each steps



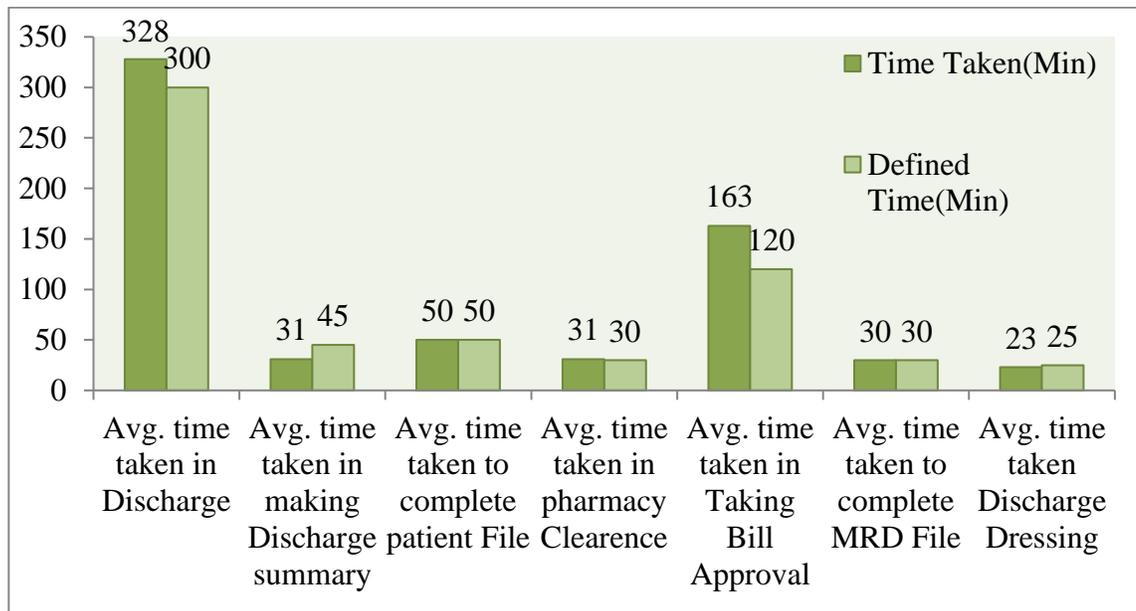
**(Figure: 6)** Avg. Discharge time taken for corporate patients at each steps

Corporate patients are discharged within the defined time period as we can see in the table 6.

### 3. MEDICLAIM PATIENT

Mediclaim	Time Taken(Min)	Defined Time
Avg. time taken in Discharge	328	300
Avg. time taken in making Discharge summary	31	45
Avg. time taken to complete patient File	50	50
Avg. time taken in pharmacy Clearance	31	30
Avg. time taken in Taking Approval/Billing Clearance	163	120
Avg. time taken to complete MRD File	30	30
Avg. time taken Discharge Dressing	23	25

**Table: 7**



**(Figure: 7)** Avg. Discharge time taken for Mediclaim patients at each steps

As we can see in table 7 the discharge time is more than the defined time for Mediclaim patients

## SWOT ANALYSIS

	<b>Strength</b>	<b>Weakness</b>	<b>Opportunity</b>	<b>Threat</b>
<b>Hospital Name</b>	✓			
<b>Bed occupancy rate</b>	✓			
<b>Planned discharge</b>	✓			
<b>Staff availability</b>		✓		
<b>Discharge module</b>	✓	✓		
<b>Time management</b>		✓		✓

## **CONCLUSION:**

The discharge process is in accordance to the rules and regulation of the accreditation bodies. They are the number of people and department involved in the discharge process, as far by my study to find lacunae during the unplanned discharge process it was concluded to:

- The main reason for the delay was the pharmacy clearance & billing clearance take more time mainly in self paying patient.
- In Medclaim patient the delay was because of delay in final approval from TPA department.
- Sometimes staffs were unaware of the number of the discharge and nurses don't have enough time in the morning to fill up the file.
- Nursing staff has to wait for the Xerox which starts at around 10:00 a.m. So there is more time taken to complete the patient file.
- Pathology/CT/MRI reports are not collected on time.
- The auditors do not come on time for audit.
- Shortage of attendant for carrying the files.
- They wait for other file for completion so they can send it together.
- Sometimes patient's relative is not present for billing.
- P.R.O doesn't informed by the billing department after billing.
- Poor communication between staff.
- Implementation of discharge monitoring module is not was not done.

## **RECOMMENDATIONS**

- Discharge module should be properly followed.
- Implementation of discharge monitoring module.
- P.R.O. should consult the patient and inform them about the time taken in discharge process, and should follow up the file.
- The patient to be discharged should be given same priority as the inpatient.
- Pneumatic shaft system should be used to increase the work efficiency.
- Training of other staff on photo-copy machine so coping of papers can done timely
- Medclaim Patient and corporate patient discharge should be declare one day advance so delay could be reduced
- Use of technology can increase the work efficiency.
- Discharge planning begins at admission - Create a care plan for all elective patients within 24 hrs of admission
- Update the discharge card daily
- Return discontinued medications daily in the Pharmacy.
- Send an automatic SMS to patients and families when the bill is generated
- A patient's use of a hospital bed and their discharge should be planned before their admission, where possible.
- The estimated date of discharge should be documented and communicated to the patient  
and relevant personnel within 24 hours of admission.
- Discharge should be "streamlined" (e.g. prescriptions and letter should be completed in a  
Timely manner, transport booked and test results made available promptly).

## **REFERENCES**

1. www.shalby.org
2. Shalby hospital discharge module
3. [http://www.qimpro.com/nabh/project\\_sterling.php](http://www.qimpro.com/nabh/project_sterling.php)
4. [www.gehealthcare.com/euen/services/performance-solution](http://www.gehealthcare.com/euen/services/performance-solution)
5. [www.iriconsultants.com/content/iri-resources/iri-case-studies/process-improvement-cuts-bed-turnaround-75](http://www.iriconsultants.com/content/iri-resources/iri-case-studies/process-improvement-cuts-bed-turnaround-75).
6. <http://www.ncbi.nlm.nih.gov/pubmed/8990606>
7. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3125312/>

## ANNEXURE

Sr .No	CONSULT ANT DECLAR E	DISCHAR GE	TOTA L TIME (Hrs)	Total Time (InMin)	Discharge Summary	Patient File Record/Original Documents	Pharmac y Clearanc e	Billing Clearanc e	MRD File	Dischar ge Dressin g
1	09:45AM	03:25PM	5:40	340	10:15	11:20am	12:30pm	02:15pm	03:00pm	03:25pm
2	10:30AM	02:20PM	3:50	230	10:55	11:50	12:35	1:35	2:05	2:20
3	10:35AM	03:10PM	4:35	275	10:59	12:05	1:19	2:25	2:50	3:10
4	11:44AM	03:00PM	3:16	196	12:04	1:59	2:42	3:12	3:37	3:00
5	11:40AM	04:00PM	4:20	260	12:05	1:20	2:05	3:18	3:45	4:00
6	10:10AM	05:00PM	6:50	410	10:45	12:20	2:10	4:10	4:40	5:00
7	10:44AM	02:30PM	3:46	226	11:06	12:03	12:48	1:45	2:15	2:30
8	12:08PM	04:00PM	3:52	232	12:34	1:29	2:29	3:12	3:37	4:00
9	10:35AM	02:00PM	3:25	205	0:14	11:46	12:34	1:20	1:45	2:00
10	11:15AM	03:00PM	3:45	225	11:45	12:40	1:29	2:12	2:42	3:00
11	11:30AM	05:30PM	6:00	360	12:00	1:25	2:40	4:30	5:15	5:30
12	10:30AM	03:30PM	5:00	300	11:00	12:11	1:25	2:41	3:10	3:30
13	10:50AM	02:50PM	4:00	240	11:16	12:14	1:01	2:00	2:30	2:50
14	10:45AM	02:40PM	3:55	235	11:11	12:06	12:52	2:00	2:25	2:40
15	11:33AM	03:26PM	3:53	233	12:11	1:06	1:52	3:00	3:25	3:40
16	10:45AM	01:30PM	2:45	165	11:08	11:35	12:10	12:48	1:12	1:30
17	10:15AM	02:30PM	3:15	195	0:00	0:00	0:00	0:00	0:00	0:00
18	09:30AM	01:00PM	3:30	210	9:52	10:37	11:24	12:10	12:40	1:00
19	10:00AM	12:30PM	2:30	150	10:20	10:44	11:14	11:49	12:13	12:30
20	09:00AM	02:00PM	5:00	300	9:30	10:45	11:55	1:11	1:40	2:00
21	11:00AM	02:00PM	3:00	180	11:20	12:00	12:42	1:12	1:37	2:00
22	11:00AM	01:45PM	2:45	165	11:21	11:48	12:23	1:01	1:25	1:45
23	10:00AM	02:00PM	4:00	240	10:28	11:27	12:17	1:12	1:42	2:00
24	11:15AM	03:00PM	3:45	225	11:40	12:30	1:15	2:15	2:45	3:00
25	10:05AM	03:00PM	4:55	295	10:35	11:39	12:57	2:05	2:40	3:00
26	11:05AM	03:15PM	4:10	250	11:35	12:25	1:20	2:30	2:55	3:15
27	11:00AM	03:30PM	4:30	270	11:30	12:20	1:25	2:29	3:05	3:30
28	10:15AM	02:00PM	3:45	225	10:35	11:35	12:20	1:10	1:40	2:00
29	10:45AM	012:45PM	2:15	125	11:05	11:35	11:55	12:15	12:30	12:45
30	10:40AM	03:00PM	4:20	260	11:10	12:00	1:05	2:15	2:40	3:00
31	10:30AM	02:00PM	3:30	210	10:55	11:40	12:25	1:20	1:45	2:00
32	11:00AM	02:15PM	3:15	195	11:20	12:14	12:57	1:30	1:55	2:15

33	10:00AM	02:50PM	4:50	290	10:25	11:30	12:47	1:55	2:30	2:50
34	09:51AM	02:07PM	4:16	256	10:21	11:21	12:18	1:17	1:47	2:07
35	11:15AM	03:30PM	4:15	255	11:44	12:38	1:33	2:32	3:10	3:30
36	10:45AM	03:10PM	4:25	265	11:15	12:10	1:07	2:15	2:45	3:10
37	10:15AM	04:15PM	6:00	360	10:45	12:10	1:25	3:15	3:55	4:15
38	11:00AM	02:45PM	3:45	225	11:20	12:05	1:00	1:55	2:25	2:45
39	10:15AM	02:50PM	4:35	275	10:45	11:40	12:45	1:49	2:25	2:50
40	12:55PM	03:15PM	3:20	200	1:20	1:55	2:45	3:35	3:00	3:15
41	09:00AM	01:00PM	4:00	240	9:30	10:15	11:10	12:15	12:40	1:00
42	10:45AM	02:10PM	3:25	205	11:10	11:45	12:35	1:25	1:50	2:10
43	12:40PM	05:00PM	4:20	260	1:08	2:02	3:05	4:12	4:40	5:00
44	10:30AM	01:40PM	3:10	190	10:55	11:40	12:15	12:55	1:20	1:40
45	10:30AM	02:15PM	3:45	225	10:53	11:46	12:33	1:31	1:56	2:15
46	12:05PM	03:20PM	3:15	195	12:32	1:20	1:50	2:35	3:00	3:20
47	11:30AM	03:40PM	4:10	250	12:00	1:45	2:37	3:45	4:20	4:40
48	01:00PM	06:00PM	5:00	300	1:30	2:31	3:16	5:01	5:35	6:00
49	11:00AM	02:15PM	3:15	195	11:26	12:11	12:46	1:26	1:55	2:15
50	12:40PM	04:35PM	3:55	235	1:04	1:49	2:44	3:52	4:17	4:35
51	10:35AM	03:00PM	4:25	265	11:05	11:50	12:25	2:15	2:40	3:00
52	11:05AM	03:55PM	4:50	290	11:35	12:25	1:10	3:05	3:35	3:55
53	10:00AM	02:00PM	4:00	240	10:25	11:05	11:40	1:10	1:38	2:00
54	11:30AM	03:20PM	3:50	230	11:58	12:46	1:16	2:36	3:02	3:20
55	09:00AM	02:00PM	5:00	300	9:28	10:20	11:07	1:10	1:40	2:00
56	11:00AM	03:20PM	4:20	260	11:30	12:15	12:50	2:35	3:00	3:20
57	11:00AM	03:45PM	4:45	285	11:30	12:20	1:05	2:55	3:25	3:45
58	10:10AM	02:35PM	4:25	265	10:33	11:21	11:59	1:47	2:17	2:35
59	11:15AM	03:35PM	4.2	260	11:43	12:33	1:15	2:45	3:15	3:35
60	10:05AM	03:00PM	4:55	295	10:35	11:25	12:10	2:10	2:40	3:00
61	11:05AM	03:35PM	4:30	270	11:25	12:15	12:45	2:50	3:15	3:35
62	11:00AM	03:45PM	4:45	285	11:24	12:12	12:47	2:57	3:22	3:45
63	10:15AM	02:50PM	4:35	275	10:40	11:28	12:08	1:56	2:26	2:50
64	10:00AM	02:16PM	4:16	256	10:25	11:13	11:55	1:25	1:53	3:50
65	11:15AM	03.25PM	4:10	250	11:40	12:20	12:55	1:35	2:03	2:25

66	10:05AM	03:00PM	4:55	295	10:33	11:31	12:01	2:11	2:36	3:00
67	11:05AM	03:15PM	4:10	250	11:30	12:10	12:40	2:30	2:57	3:15
68	11:00AM	03:30PM	4:30	270	11:22	12:10	12:40	2:40	3:05	3:30
69	10:15AM	03:00PM	4:45	285	10:41	11:29	12:06	2:14	2:38	3:00
70	10:45AM	02:10PM	4:25	265	11:10	11:56	12:34	2:20	2:48	3:10
71	10:40AM	03:00PM	4:20	260	11:10	11:56	12:34	2:10	2:36	3:00
72	10:30AM	03:30PM	5:00	300	10:55	11:39	12:19	2:35	3:05	3:30
73	09:50AM	02:00PM	4.1	250	10:15	10:55	11:25	1:11	1:38	2:00
74	12:55PM	03:55PM	4:00	240	1:20	2:00	2:35	3:05	3:33	3:55
75	09:00AM	01:00PM	4:10	250	9:25	10:05	10:40	12:20	12:48	1:00
76	10:05AM	05:55PM	6:50	410	11:45	12:50	1:45	5:00	5:30	5:55
77	10:36AM	04:54PM	6:18	378	11:11	12:26	1:11	3:56	4:31	4:54
78	11:27AM	06:47PM	7:20	440	12:05	1:15	2:03	5:45	6:22	6:47
79	10:30AM	05:52PM	7:21	441	11:08	12:18	1:06	4:48	5:26	5:51
80	09:00AM	02:00PM	5:00	300	9:28	10:20	10:50	1:15	1:40	2:00
81	11:00AM	04:00PM	5:00	300	11:25	12:17	12:47	2:52	3:37	4:00
82	11:00AM	03:45PM	4:45	285	11:25	12:05	12:35	2:57	3:25	3:45
83	10:00AM	03:35PM	5:35	335	10:25	11:10	11:40	2:35	3:10	3:35
84	11:15AM	03:35PM	4:20	260	11:43	12:23	12:53	2:43	3:11	3:35
85	10:05AM	03:00PM	4:55	295	10:40	11:20	11:50	2:12	2:38	3:00
86	11:05AM	04:15PM	5:10	310	11:33	12:23	12:45	3:35	4:00	4:15
87	11:00AM	03:30PM	4:30	270	11:30	12:00	12:20	2:35	3:05	3:30
88	10:15AM	02:40PM	4:25	265	10:45	11:15	11:35	1:50	2:20	2:40
89	09:45AM	02:10PM	4:25	265	10:15	10:45	11:05	1:20	1:50	2:10
90	10:40AM	03:50PM	5:10	310	11:05	11:45	12:15	3:05	3:30	3:50
91	10:30AM	04:00PM	5:30	330	11:05	11:55	12:20	3:00	3:35	4:00
92	11:00AM	04:15PM	5:15	315	11:30	12:25	12:55	3:15	3:50	4:15
93	10:00AM	03:50PM	5:50	350	10:35	11:35	12:00	2:55	3:25	3:50

94	09:51AM	03:07PM	5:16	316	10:21	11:16	11:46	2:08	2:43	3:07
95	11:15AM	03:55PM	4:40	280	11:40	12:10	12:25	3:00	3:30	3:55
96	10:45AM	04:10PM	5:25	325	11:15	12:10	12:35	3:20	3:50	4:10
97	10:15AM	04:15PM	6:00	360	10:50	11:40	12:15	3:20	3:50	4:15
98	11:00AM	05:45PM	6:45	405	11:35	12:45	1:20	4:45	5:20	5:45
99	10:15AM	03:50PM	5:35	335	10:50	11:35	12:00	2:55	3:25	3:50
100	12:55PM	06:05PM	5:10	310	1:20	2:00	2:30	5:20	5:45	6:05