

INSURANCE PATIENTS DISCHARGE ANALYSIS

SUMMER TRAINING REPORT 2022



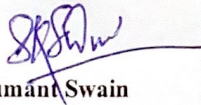
DR RIDHIMA KATARIA

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INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT AND
RESEARCH - DELHI

Certificate of Approval

The Summer Internship Project of titled **"INSURANCE PATIENT DISCHARGE ANALYSIS"** at **"SITARAM BHARTIA INSTITUTE OF SCIENCE AND RESEARCH"** 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 report only for the purpose it is submitted.



Dr. Sumant Swain

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SB/HR/INTERN/2022/3157

June 21, 2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Dr. Ridhima Kataria has done her voluntary internship with this Institute in the department of Operations (Patient Services & IT) from April 06, 2022 to June 07, 2022.

During the tenure of her internship with the Institute, she is found to have a good moral character/conduct and work ethics.

We wish her all success in her future endeavors.

For **Sitaram Bhartia Institute of Science & Research**

Beer Singh
Manager – Human Resources



(Completion of Summer Internship from respective organization)
The certificate is awarded to

Name DR. RIDHIMA KATARIA

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

Title PATIENT SERVICES

and has successfully completed her Project on

Title of the Project

Date JUNE 8, 2022

Organisation SITARAM BHARTIA INSTITUTE OF SCIENCE
& RESEARCH

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


Organization Supervisor


Head-HR/Department Head



FEEDBACK FORM

(Organization Supervisor)

Name of the Student: DR. RIDHIMA KATARIA

Summer Internship Institution: IIMR - DELHI
INTERNSHIP AT SITARAM BHARTIA INSTITUTE OF SCIENCE & RESEARCH

Area of Summer Internship: INSURANCE PATIENT DISCHARGE ANALYSIS

- Attendance: She has been very punctual and disciplined during the internship period.

Objectives met: She could successfully met with her objective of understanding management of insurance patients' discharge in Healthcare & addressed / acknowledged way of improving system as a whole.

Deliverables: Daily tracking of all insurance discharges and the suggestions/improvements suggested at intradepartmental level, interdepartmental level and multidisciplinary level helped for 'way forward' action plan.

Strengths:

1. Very keen observer.
2. Willingness to learn and believe in introspection at every level.
3. Holistic approach in understanding.

Suggestions for Improvement:

- She needs to hone her skills in statistical representation.

Signature of the Officer-in-Charge (Internship)



Date: JUNE 16, 2022

Place: DELHI

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ACKNOWLEDGEMENT

This paper and the research behind it would not have been possible without the exceptional support from all the Senior Managers, Managers and Employees at Sitaram Bhartia Institute of Science and Research. I am grateful to them for big-heartedly sharing their treasured insight and valuable time that helped me perform efficiently during my internship. I would like to show my sincere gratitude to the Dr. Shubra Verma (General Manager), Mrs Irina Sharma (Head Patient Services), Mr Kuldeep Singh (Deputy Manager Patient Services) and all other team members of Patient Services Department for sharing their pearls of wisdom and knowledge with me during the course of this research. Their enthusiasm, knowledge, experience and exacting attention to detail have been an inspiration and kept my work on track from my first encounter to the final draft of this report.

Mentors in IIHMR

I am obliged to Divya Aggarwal (Associate Dean IIHMR -Admissions, accreditation and marketing) , DR. Sumesh Kumar (Associate Dean IIHMR-Academics) for giving me this opportunity to learn and to add to my experience. I also want to give my sincere gratitude to Dr. Sumant Swain, without their cooperation and guidance, it would not have been possible to conduct my study and complete my training at such prestigious organisation.



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SITARAM BHARTIA INSTITUTE OF SCIENCE AND RESEARCH

HOSPITAL PROFILE

Sitararam Bhartia Institute of Science and Research is an integrated health care provider and medical research center, established in year 1990. It provides care in a wide range of medical specialties and offers diagnostic and inpatient facilities. It is recognized for its outstanding panel of doctors, many of who come from India's leading teaching institutions.

Sitararam Bhartia's research focuses on collecting health-related data for our population, developing quality improvement interventions, and highlighting neglected aspects of medical care.

The facility offers 70 beds, Operation theatres, ICU, NICU and other essential services. It provides care in wide range of medical specialties and offers superior diagnostic and inpatient facilities. Ethical, reliable, supportive and effective care is some of the words that are used to describe treatment at Sitararam Bhartia Institute of Science and Research. Eminent professors and other senior doctors from various disciplines make up the faculty and serve as role models for the second generation of doctors in the organization.

International Patients

Treatment outside your country and away from home can be a real physical challenge and an emotionally stressful experience for both you and your loved ones. At Sitararam Bhartia Institute of Science and Research, New Delhi we understand this concern; and that is why we have established a dedicated competent international patient care team. The patient care team at Sitararam Bhartia Institute of Science and Research ensures that every international patient's visit is comfortable, pleasant and hassle-free. The International centre takes care of minutest details, to make you feel at home, because we know if you feel better, you will heal better.

We take pride for offering multidisciplinary medical care and service excellence, which is achieved through an ideal blend of medical brilliance, personalized care and research, which focus on developing quality improvement interventions. Qualified Doctors, our trained nurses, allied health and paramedics, backed by our state of the art facilities and equipment, are made available to provide you with the best quality patient care.



Abhishek Bhartia

Director Of Sitaram Bhartia Institute Of Science And Research

Core purpose / Vision

To serve society as a well-spring of excellence in healthcare delivery, research and education

Core Ideology / Core Values

- Putting the interest of the patient first
- Treating others as you would want to be treated yourself
- Continuous learning and improvement
- Institution building

Envisioned Future / Mission

We will be a prolific medical center that will be known for its commitment to practicing evidence-based medicine and providing world-class care. We will have well established research programs that will focus on gaining a better understanding of the health care needs in our communities and developing practical solutions for addressing those needs. We will be seen as pioneers who will have successfully taken up those healthcare challenges that may otherwise have remained poorly addressed. We will have collaborative

arrangements with leading institutions from around the world and be in the forefront of providing training to health professionals. Donor agencies and individual philanthropists will recognize our work by generously supporting our initiatives. We will be widely acknowledged as an institution that serves as a symbol of excellence in our society.



FACILITIES AVAILABLE

Operation Theatres

Sitaram Bhartia has three modern operation theatres that are equipped with anaesthesia, machines A international standards, cold operating lights, advanced air filtering system, central gases and suction, image intensifier, electrosurgical units, laparoscopic and endoscopic equipments. The theatres are staffed by an experienced team of anesthesiologists, technicians and nurses and follow strict protocols for infection control.

These ensure high standards of patient safety during and after surgery.

Intensive Care Unit (ICU)

The intensive care unit has sophisticated equipments for continuous intensive monitoring of critical patients.

Emergency

Emergency Services are available 24-hours. Resident doctors from all major specialties ensure prompt attendance to all casualty patients and a qualified pediatrician attends to children who require urgent attention.



Laboratory

The laboratory is NABL accredited and functions round-the-clock and conducts tests in biochemistry, hematology, immunology, clinical pathology, microbiology and serology. It participates in an external quality proficiency program and follows internationally accepted best practices.

Radiology

Radiology services include X-ray, ultrasonography, mammography and bone densitometry (DEXA Scan).

Investigations are carried out using equipment with superior specifications for providing high quality images.

They have an in-house facility for computed tomography (CT). There is a close link with partner organizations for providing efficient services for magnetic resonance imaging (MRI).

Cardiopulmonary Investigations

Cardiopulmonary investigations provided are electrocardiography (ECG), treadmill test (MT), echocardiography, and pulmonary function test (PFT).

Infertility and IF Services

Sitaram Bhartia offers the entire range of medical and surgical (minimally invasive) facilities for the diagnosis and treatment of infertility patients. However, 8% of these couples will fail to get pregnant with the conventional infertility treatments, and require specialized artificial reproductive technology to attain this goal. To meet this demand, Sitaram Bhartia has successfully launched an IF unit in August 2010. Hospital offer an ethical and transparent IF treatment, which meets the highest international standards.



Birthing Complex and Neonatal Intensive Care Unit (NICU)

The Institute's birthing complex provides an aesthetically soothing environment for the birth of a child momentous event in a family's life. It is complemented by the neonatal intensive care unit that has state-of-the-art equipment for attending to premature and other critical babies.

Inpatient Rooms

Each room provides a comfortable environment for patients and their attendants. Quality nursing, continuous resident doctor cover, and efficient housekeeping and diet services enhance patient experience.

Special Care Centers and Programs

The Institute has special programs for diabetes, pregnancy and delivery, weight management, and male sexual health. In each of these programs, a team of health care providers follow a structured protocol for comprehensively addressing individual needs.

Diabetes Center

The Institute has a dedicated diabetes center that has achieved world-class outcomes and earned a reputation of being one-of-a kind in the country. The center provides care that emphasizes comprehensive investigations, regular follow-up, explicit goals for metabolic control, involvement of the family, and extensive education for diabetes self-management.

Birthing Program

The Birthing Program is founded on the belief that childbirth is not a medical or surgical procedure to be performed on a patient but a normal physiological and psychological milestone in a woman's and her family's development. Consistent with WHO recommendations, the Birthing Program promotes natural childbirth to "achieve a healthy mother and child with the least possible level of intervention that is compatible with safety."

A special feature of the program is a series of antenatal workshops that allows women and their partners to learn from the experience of other expectant couples.

Weight Management Program

The Weight Management Program has been designed to improve overall health, fitness and wellbeing through a holistic approach that emphasizes lifestyle change. The Program is medically supervised with a team consisting of a physician, dietician and a personal exercise advisor. A unique feature of the Program is that it provides support for overcoming social and emotional barriers and problematic behaviors that often hinder weight loss.

Preventive Health Checkups

To meet the need for timely health checkups for individuals of all age groups, the Institute offers different packages for adults, teenagers, and children. These checkups provide a thorough health assessment, address individual concerns, and give proactive advice on various health-related issues.

All activities are performed with the patient/client interest in focus.

Patient feedback is taken as an important input for continuous improvement of the organizational functioning.

As a mark of its commitment for accuracy & reliability, our equipments are under annual maintenance contract in-house / outsourced with the equipment supplier. They are regularly calibrated to ensure that the equipment are working in the best of the conditions and thus will ensure superior quality of results.

QUALITY HEALTHCARE AT SITARAM BHARTIA INSTITUTE OF SCIENCE AND RESEARCH

QUALITY OBJECTIVES

Meet international benchmark for process and outcome measures used for judging excellence in healthcare operations.

Achieve high level of patient satisfaction and physician satisfaction.

Support organizational core value of caring for people, institution building, continual improvement, honesty and integrity.

Comply with prescribed standards of facility and patient safety through periodic preventive maintenance and calibration of medical equipment according to stated standardized methods.

Ensure that all the personnel recruited are trained to a level of familiarity with the quality system appropriate to the individual's degree of responsibility.

QUALITY POLICY

The Institute commits to good professional practice, quality of care and compliance with the quality management system as well as statutory and regulatory requirements.

Commits to maintain the quality of all the services provided by the Institute as described by NABH and* constantly strive to improve them.

Will recruit individuals with technical expertise in various aspects of clinical areas and provide them with the tools necessary for the completion of accurate and timely work.

Evaluate data for continuous improvement and all other requirements for functioning in compliance with required standards.

Provide state of the art equipment with annual maintenance contracts and calibration of all equipment with preventive maintenance services. Honor all legal and statutory requirements as required by central and state regulatory bodies.

TPA DISCHARGE DELAY AND RECOMEDATION: PROJECT REPORT

INTRODUCTION

Patient satisfaction is a common and important indicator for measuring the quality of healthcare in a health setting. Patient satisfaction affects clinical outcome, patient retention and the over all image of the hospital.

One of the factor that affects patient satisfaction is timely discharge of in patient from the hospital care. Hospital discharge process may seem relatively simple and straightforward, but it involves various layer of services provided by multiple health and social care workers , who need to co-ordinate their specialist activities to make the process possible.

When a discharged is processed it basically consists of 2 types of patients 1. Cash patients (who pay the hospital bill by cash) 2. Insured patients (covered under health insurance scheme).

India has witnessed a marked increase over a decade in the number of insurance patients availing healthcare services. In the year 2021, nearly 514 million people were covered under health insurance schemes, while the gross direct premium income of the Indian health Insurance Industry in the year 2020 was 470 billion. Clearly, hospitals are now experiencing increased load of patients who are covered under health insurance policies.

These individuals who pay large sum of money for health policies have high expectations for quality of health service and low tolerance for poor quality health services. Also, after staying at the hospital the patient and there families looks forward going back home as soon as possible and reunite with there dear ones.

Discharge time taken by hospitals is an important indicator to access the efficiency and quality of hospital, hence maintaining an acceptable level of discharge time is very important. It is usually judged by turn around time (TAT). Studies have shown that TAT for patients who are insured is more than uninsured patients, as there is involvement of different departments unlike in cash patients. The standard TAT for discharge of Insurance patient is usually 5-6 hours but it is observed that a marked delay in the prescribed TAT. Every hospital has a designated in house TPA (Third Part Administrator) department that collects and presents all the necessary documents in front of External Third Party Administrator. The External Third Party Administrator reviews the discharge summary and final bill and either approves or raises “query” against the case. If query is raise by the External Third party administrator, the hospital in house Third party administrators answers and resolves the query for the insurance approval. Many at times, due to query raise the discharge TAT is increased and there is delay in discharge. There are various others reasons also for the delay in TPA discharge which will be covered in the study report.

OBJECTIVE OF STUDY

The main aim of the study is to study the following aspects in Sitaram Bhartia

1. Study the work flow of discharge process of TPA patient.
2. Find out reason for the delay in the discharge of TPA process.
3. To recommend measures to reduce discharge time in TPA patients.

LITRATURE REVIEW

1. Kasturi Shukla , Shweta Mehta, Jatesh Nair, Sunil Rao published an article on January 2015 on Discharge time, a crucial quality indicator, is dependent on several other factors like clearance time and patient-related issues. The study analyzed determinants and presented measures to control the discharge time. The cross-sectional study was conducted during May-June 2013 at a large multispecialty hospital. For the main study, discharges were classified as planned/unplanned and patients as insured and uninsured. Results of pilot study and main study were compared. The patient-related factors like, delay in bill payment, request for discounts further increased the discharge time were also analysed in the study. Conclusions were made like Planning the discharges to reduced the total time of discharge process. Discharge time was

substantially high for insured patients that need to be controlled. Departmental clearance and patient-related factors also impact the discharge time.

2. Ms.S.Arthi and S.Divya published an article on 4 April 2020 ON The major area that needs to be streamlined in hospital is discharge process of patients which is directly related to patients satisfaction. The aim of the study was to find out the root cause for delay, highlight the areas that needs improvement and provide suggestions. The study was done in one of the prominent hospitals in Tamil Nadu for a period of 3 months. From this study, it was evident that high percentage of delay is due to vacating the room which consequently increases the waiting time of inpatients for bed allotment. Based on the findings proper training in communication skills for staff, adequate staffing and framing of policy for patients discharge are some of the recommendations given. The study concludes that delayed discharge is one of the prime factor and have an impact on ability to cut the waiting lists and deliver healthcare effectively and efficiently.
3. Ankit Singh, Priya Ravi, Kursongmit Lepcha published a report on Patients availing insurance with commercial insurance providers constitute just 3.6 percent. These insured patients become prime targets of private hospitals. Thus, satisfaction of these patients is of prime importance. Yet, many hospitals struggle to manage the one key process, which could spoil the overall favorable experience that patients have during their stay in the hospital, i.e., the discharge process. In the study, time tracking for the discharge process of insured patients was done, using the shadowing technique, with the objective of finding out the major causes of delay, and to recommend solutions for reducing them.
4. Dr. Niloy Sarkar , and Ms. Tatini Nath published study report August 2016 on Waiting time for hospital admission and discharge process is a common problem existing in all the hospitals, whether it is a small or a big set- up. The main objective of the study is to identify the gaps, highlight those areas where delay can be eliminated and recommend accordingly, so that the hospital admission and discharge process can be managed smoothly. This paper explained both the hospital admission and discharge process in a simple way and has tried to find out the root causes for the delay in discharge process. This paper concludes with a list of suggestions. The set-up of the study was Apollo Hospitals, Greams Lane

STUDY DESIGN AND SETTING

This study was conducted and data was received for patients who were TPA discharge for the month of March and April 2022 at Sitaram Bhartia Institute of Science and Research. The data was sensitive and confidential, so prior approval was received from the hospital authorities.

MODE OF DATA COLLECTION

“SECONDARY” Mode of collection of data. Data was tracked and maintained using excel sheet.

SAMPLE SIZE

This is a cross sectional study which is retrospective and was carried out at Sitaram Bhartia Institute of Science and Research a multi-specialty 75 bedded hospital in New Delhi. The study was conducted on TPA discharges which were done in the period of March 2022 and April 2022. On an average about 4-5 TPA discharges were done in the hospital, hence a feasible sample size of 240 insured patient were taken to carry out the study having 150 discharges in March and 90 discharge in April.

STUDY PROCEDURE

This is a cross sectional study which is retrospective. In the initial first week, an observation study was conducted to identify the various departments and variables that stimulated timely discharge of patient. A work flow table (Appendix 1) was then prepared highlighting the steps and involvement of department during TPA patient discharges. For step of analysis was to find total number of TPA discharges which were planned and unplanned. Analysis was done and recorded in tabulated form. Then A track sheet was then prepared to record the data of TAT during various steps of discharge process. The whole discharge process was sub divided according to the TAT for the respective step.

TAT 1 : Time taken from advice of discharge by doctor to mark of discharge. This process is executed by nursing and pharmacy. This will give delay due to **nursing and pharmacy**

TAT 2: Time taken from mark of discharge to bill ready to settle. This step is executed by **IPD and billing department**, and will give the figure of delay due to billing.

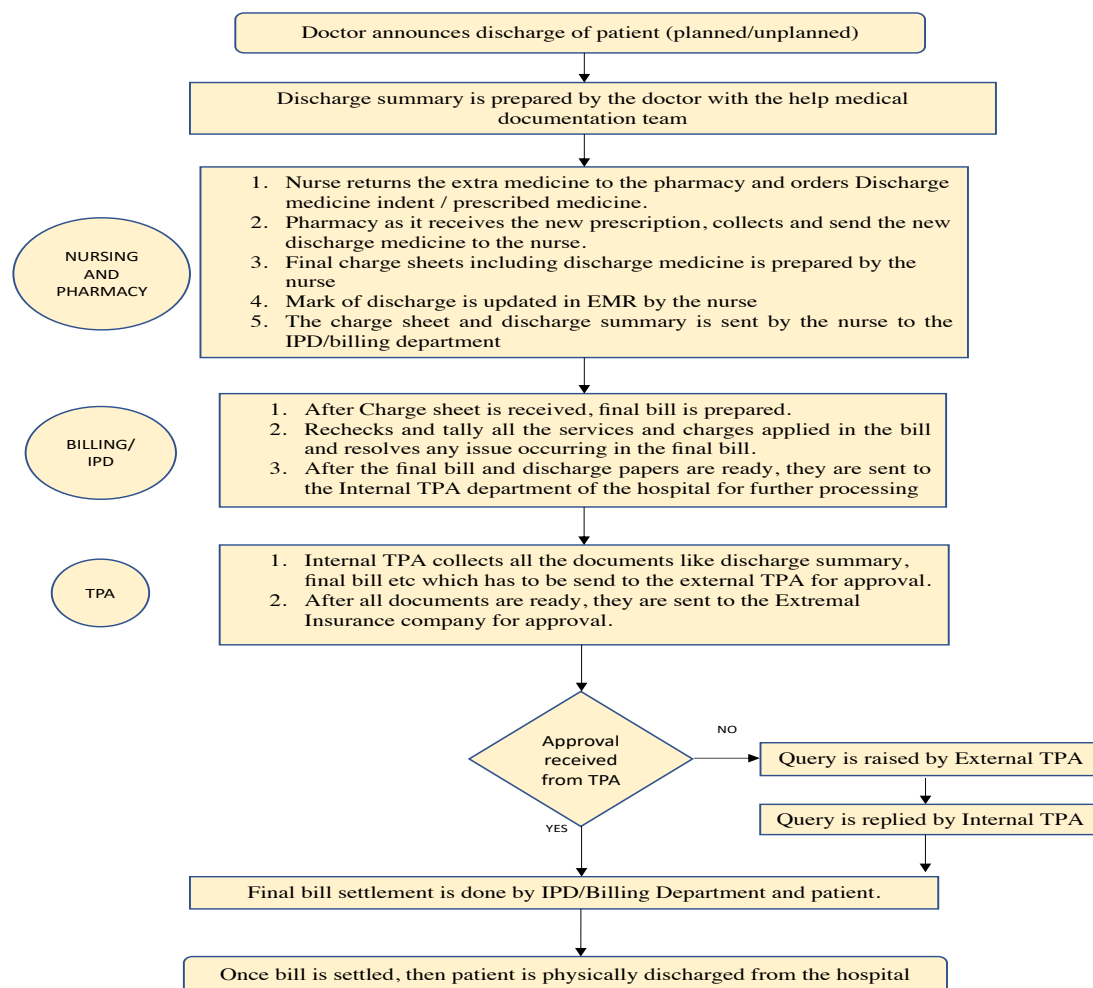
TAT 3 : Time taken from sending TPA approval by internal TPA department until approval is received by external TPA. In the research this TAT gives data for delay in discharge due to **TPA processing**.

TAT 4 : Time taken by the patient to vacate the bed and do final settlement post TPA approval received. This TAT will provide data for **delay due to patients**.

The collected data was analysed using simple percentage and simple average analysis and quality tools. From the study, percentage of delay in each process and average time taken insurance patients was calculated and recommendations were given.

APPENDIX 1

STEPS IN TPA DISCHARGE AT SITARAM BHARTIA



DATA ANALYSIS:

Data was transcribed and tabulated in Excel and analysis was done in excel using formulae

Ideally total time taken Insurance patient discharge should be completed within 5 hours from the advice of discharge by doctor till the patient vacates the bed. But delays are commonly seen. So, another descriptive analysis was done on total time taken in the whole discharge process.

The total time taken is divided into 4 categories and each number is represented in Table 1 and Figure 1

TABLE 1 : Total time taken and number of discharges in a specific period of time

TOTAL TIME TAKEN FOR DISCHARGE	MARCH	APRIL
LESS THAN 2 HR	14	12
2-5 HR	99	51
5-7 HR	24	20
MORE THAN 7 HR	13	7

FIG 1 : Percentage showing total time taken in the discharge process

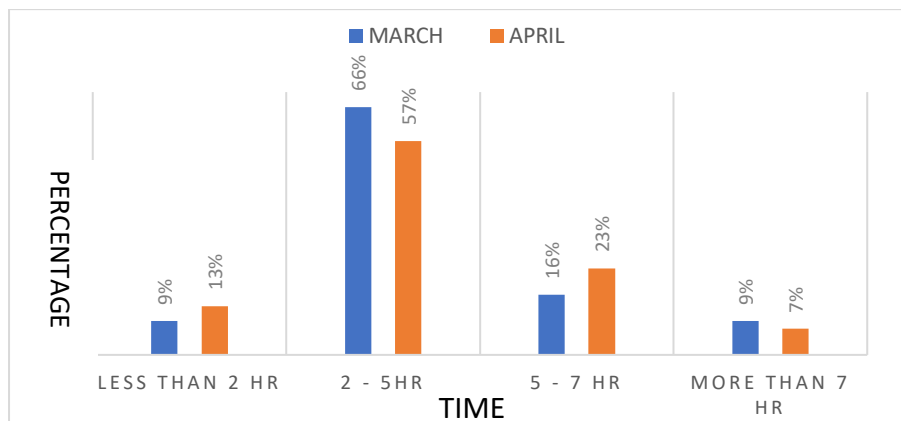


Fig 1 : The above bar graph shows that in March and April , 9% and 13% of patient discharges were done in less than 2 hours, 66% and 57% was done in 2-5 hours, 16% and 23% was done in 5-7 hours , 9% and 7% was done in more than 7 hours respectively.

Analysis was carried out on all the stakeholder TAT's and non compliance output in each of the TAT is shown in Table 1 and percentage of non compliance in each TAT is represented in Table 2 & Fig 2

Table 2 : Number of non compliance in each tat after analysis

Turn Around Time (TAT)	MARCH'22	APRIL'22
TAT 1 (Nursing and Pharmacy)	38	15
TAT 2 (Billing)	10	9
TAT 3 (TPA processing)	47	40
TAT 4 (Patient)	54	25

Fig 2 : Percentage of non compliance in each TAT after analysis

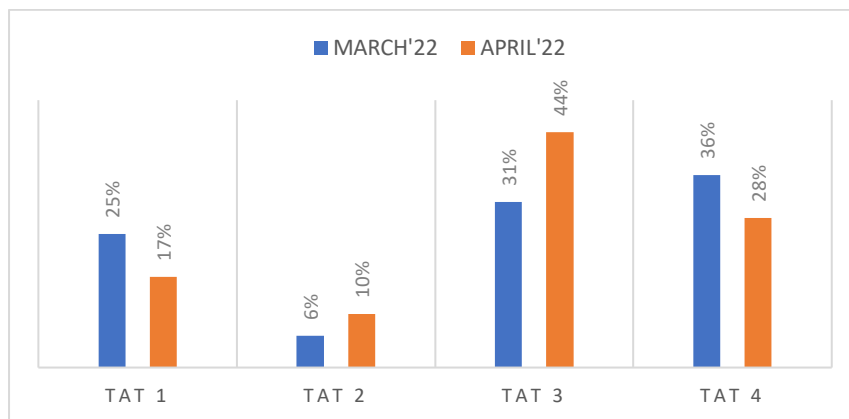


Fig 2 : The above bar graph shows that non compliance for March and April for Nursing and Pharmacy was 25% and 17%, in Billing was 6% and 10%, in TPA processing was 31% and 44% and from patient side was 36% and 28% respectively.

Insurance patient/TPA discharge is a lengthy process and various stakeholders are involved in the process. Delay from one end can totally change the final Discharge TAT. Hence its important to analyze the gap. An analyses was done using the data that was collected and an Average of the delay from each stakeholder was then calculated for the 2 months which is represented in Fig 3

Showing the percentage of delay from the side of each stakeholder

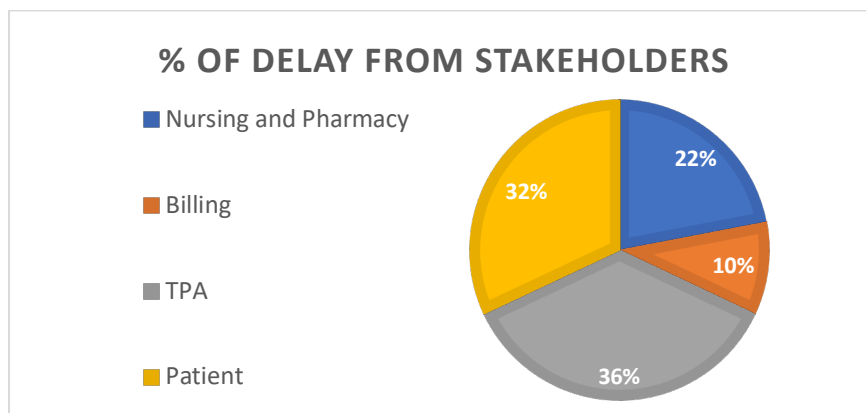


Fig 3 : The above pie chart shows that 22% of delay was due Nursing and Pharmacy, 10% was due to Billing, 36% was due to TPA processing (includes both internal and external TPA), 32% delay was from patients side.

During in depth analysis on reasons for delay in TPA discharges an aspect of “time of advice for discharge by doctor” was also considered to see the impact on total discharge time. This was done to compare the delay in morning or evening discharges. Advice of discharge by doctor was divided into 3 time zones mentioned in Table 3.

Table 4 In the March and April patients who were discharged before 2pm were 112 and 70, patients who were discharge between 2pm-5pm were 27 and 10 , patients who were discharged after 5pm were 11 and 10 respectively.

DISCHARGE TIME	MARCH	APRIL
Before 2pm	112	70
Between 2pm 5pm	27	10
After 5pm	11	10

After obtaining the above data , delayed discharges in the 3 time zones were squeezed out and is stated in Fig 5.

Fig 4 : Data of showing delayed discharges in the 3 time zones

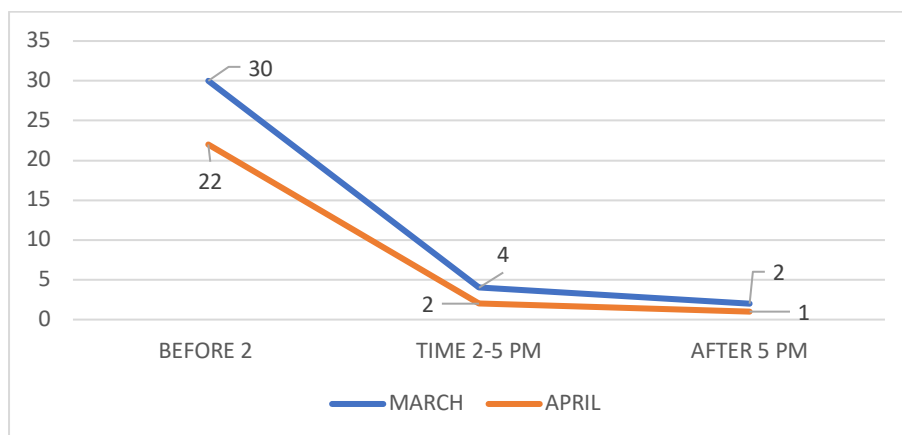


Fig 4 : Delayed discharges In month of March and April which were processed before 2 pm were 30 and 22, discharges processed between 2-5 pm were 4 and 2 , processed after 5pm were 2 and 1 respectively.

Result and Discussion

The study aimed to identify the key factors that affect the hospital discharge time. One of the key factors that affected discharge is lack of planning.

We found that clearance time by different departments, nursing , pharmacy , billing, TPA processing and patient were all different variables which effect the delay in discharge process for inpatient. As expected by the hospital the TPA discharge process should consume 5hr (300 mins) this time includes all the process from discharge announcement to patient doing final bill settlement. But, during the study we found delay in 24% cases in March and 20% cases in April from all patients.

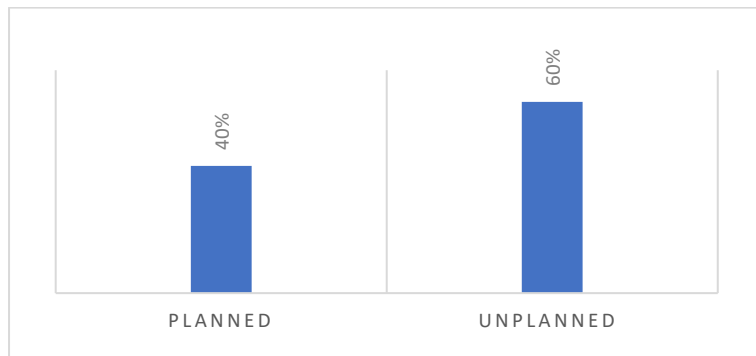
Digging deep into each department for TAT analysis and reasons for delay we inferred that delay in March and April from Nursing and Pharmacy was 25% and 17%, in Billing was 6% and 17%, in TPA processing was 31% and 44% and from patient side was 36% and 28% respectively. In this study we also found out the reasons for delay from each department for gap analysis and recommendation.

Expected TAT breakdown for various department

1. Nursing and Pharmacy : 45 mins
2. Billing : 45 mins
3. TPA processing (internal and external TPA processing, includes TPA approval) : 180 min
4. Patient (for final bill settlement) : 30 mins

TOTAL TAT 300 mins (5 hours)

One potential reason for the delay is less planned discharges which were happening in the hospital. In the month of March and April only 40% discharges were planned and 60% were unplanned represented in Fig 5



Showing that out of all discharges in March and April only 40% discharges were planned while 60% was unplanned.

Also, The expected TAT for Nursing and Pharmacy clearance is 45 mins, the gap between expected and actual TAT was of 22%. While doing research we found following reasons for **delay from Nursing and pharmacy** :

1. Delay caused by Changes in discharge summary by primary doctor
2. Delay caused by post dressing and medicine after the discharge is been made
3. Delay is mostly seen in multi-speciality cases where there is involvement of primary and secondary doctor
4. Delay in discharge summary finalising due to doctor unavailability, or sometimes when the primary is busy in OT
5. After medicine indent delay due to pharmacy
6. Delay in discharge is sometime also seen in surgery patient due to delay in OT clearance.

Similarly the expected TAT for bill clearance is 45 mins and we could see the delay in actual TAT from expected TAT by 10% , **reasons for delay caused due to billing** were

1. Change in medicine, medicine indent in discharge summary
2. 3-4 discharges at same time caused delay in billing process
3. delay in receiving OT chargesheet
4. Emergency transfers are giving priority which causes delay in on going discharges
5. Man power shortage after 6 pm. billing department has the job of billing as well as internal TPA, overload of work causes delay.
6. Delay due billing changed to insurance rates after final approval is received generally happens in delivery cases (paediatric coverage)
7. Delay due to billing changes to current rate if case is denied from external TPA
8. Delay in billing is usually seen in surgery packages.
9. Delay due to discharge summary

A common problem we noticed in both the departments was **delay due to discharge summary**. Preparing discharge summary and finalising takes the the maximum time because firstly for getting the discharge summary reviewed and signed by doctors, it takes a lot of time, as for most of the time after morning rounds, doctors are in their OPD chambers, seeing patients. Secondly, something doctors are busy in OT and mostly surgery patient discharge are held back because of doctors unavailability. Thirdly, when doctors review and do corrections, it has to go back to the medical transcriptionist, and after the corrections have been made, final review needs to be done again. Then only doctors put in their signatures. Thus, there is a lot of rework and redo, which is the major cause of delay.

The third department is TPA (internal and external) and the expected TAT for TPA processing is set as 180 mins that is 3 hours. In the research we inferred The **maximum delay in discharge is due to TPA processing** ie delay by 36%. This factor is considered as an external factor and an uncontrollable factor, as it is the time taken by external TPA to give approval of the submitted bill and the discharge summary.

1. Most of the time, the delay is also due to the communication gap between the in-house TPA department and External TPA .
2. External TPA sends “QUERY” which has to be answered by internal TPA. This process is very time consuming and can shoot up the total TAT for discharge. Still this time can be reduced from the hospital side by reducing the number of queries put by external TPA.

It is found that 60% of queries were about submission of all investigations reports, past treatment papers, complete in-patient case papers and progress notes, the exact aetiology of ailment ETC. Thus, considering it, if a checklist is prepared and put to uses as to ultimately help in collecting all the relevant documents from the patient at the time of admission, number of queries and query response time can be significantly reduced.

In the study we found that 32% **delay in discharge was due to patients side**. The TAT for patient to do final bill Settlement is 30 mins after approval is received but a huge delay is seen from patients side which prolongs the final discharge TAT.

CONCLUSION

Discharge of patients is one of the important area that needs improvement in hospital. In order to reduce the delay in discharge ,the hospital needs proper cooperation and coordination of other department staffs. The cause of delay in the discharge process of insured patients is the time taken for discharge summaries to reach the in-house TPA department, and the time taken by external insurance companies to give the approval after submitting the final bills and discharge summaries. The second cause is considered as external but up to some extent, it is controllable if pre authorisation form and query replies are done in correct way. Vital information can be revealed, which can be used to develop an improvement tool such as “Check list”. Check lists developed in such a way and properly put into action can significantly reduce the number of queries and also the response time. The study also indicated that increasing the number of planned discharges can help reduce the total TAT for discharge and can make the process smooth and well planned. A clearance charts and hospital planning checklist must be regularly monitored to keep a track of all delays and control these immediately.

RECOMMENDATION

Almost 40% of patients discharge time takes about more than 5hrs which is not according to the standard set by the hospital.

Nursing And Pharmacy

1. The first cause of discharge delay is discharge planning by the consultant that is done on the day of discharge which delays further process. Discharge planning should take place generally at the time of admission. Consultant, patient and other department involved in the discharge process should be aware of the tentative date of discharge, for a smooth workflow. In cases where tentative discharge date cannot be estimated or cases which have surpassed that date, pre planning the discharge atleast 24 hours prior can be done by the consultant. Also, the consultant may be asked to take rounds for likely discharge patients first and then to others. Discharge planning is a major aspect and improvement which can be imbibed by the organisation to improve the discharge process. The ways suggested for it is
 - Planning discharge at the time of admission

- Early identification of patient for possible discharge at least 24 hrs in advance
 - Preparation of discharge summary
 - Checking of labs, consults equipment 24 hrs in advance
 - Patients for discharge are seen first during morning rounds
 - Discharge orders and home prescriptions are written by 10 am.
2. The discharge process is an interdepartmental process and requires combine effort of all the departments, to achieve on timely discharges. There should be one point of contact during discharge for all departments therefore, a Discharge Manager for each floor/nursing station should be appointed who will take care of the entire discharge procedure for getting ready with the discharge summary. He should be able to approach any department either it is operation theatre or typing pool. If the consultant is in the operation theatre, he could go there and take the sign from the consultant. Sometimes it happens that the rough summary or fair summary is ready but due to unavailability of transport boy it is kept aside in the typing pool. So for every floor there should be one typist so that we can avoid the delay due to this transportation.
 3. Good coordination between primary and secondary doctors in multi speciality cases.
 4. Pharmacy Information system should be updated with mark of discharge which is not updating until now

Billing

1. The time taken for the final bill preparation and final discharge summary are major contributors to the overall time taken for discharging a patient. Interim Bill must be adequately updated time to time in the HIS. This can help to reduce the time taken by billing when final bill settlement is done and to avoid last minute changes in the final bill.
2. Integrating new Health Information System to fasten and ease the discharge.
3. Increase in the man power specially post 6 pm to reduce the work load on single person and to fasten the discharge and billing process,

TPA Processing

1. A designated doctor should to appointed for TPA department around the clock for assisting and working for all TPA discharges.
2. Delays are seen due to “Query Raise” so training modules to be available to train new/junior doctors to fill in the pre authorisation form, query replies.
3. Vital information can be revealed, which can be used to develop an improvement tool such as “Check list”. Check lists developed in such a way and properly put into action can significantly reduce the number of queries and also the response time Also, The insurance companies must be instructed to do their process in less time and there should be an upper limit of process time.

Patient

1. Hospital tend to setup there own standards in reference to TAT however this information are not or poorly communicated to the patient and attendants. So, during room orientation ward secretary should be instructed to explain and inform the patient and attendants about the importance of vacating the room on time and request them to do so during discharge.
2. Awareness about TAT and timely room vacating can be done by putting information posters in the nursing area.
3. Patient and attendant should be informed well in advance the estimated date and time of discharge to avoid any further delays.

A clearance charts and hospital planning checklist must be regularly monitored (every month) to keep a track of all delays and control these immediately.

LIMITATIONS OF THE STUDY

In this study, only time is considered as a measure of efficiency. Similarly, other factors such as nursing, training in discharge, planning and management, role of pharmacists in discharge management and communication within the discharge process are not considered. due to the limitation of time. In a future study, all these factors when clubbed with me as an outcome measure, might give more insightful results.

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