Study on The Delay in Discharge Process in Babylon Children Hospital, Jaipur

By

Renu Joshi

Dissertation submitted for the partial fulfillment of the

MBA Hospital and Health Management

Academic year, 2016-2018

The IIHMR University, Jaipur

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INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that **Dr. Renu Joshi**, student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at **Babylon Children Hospital, Jaipur** from **1st February to 1st May, 2018**.

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.

(Col.) Dr. Ashok Kaushik
Dean, Academics and Student Affairs
The IIHMR University, Jaipur

Dr. Anoop Khanna
Professor
The IIHMR University, Jaipur

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Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

Babylon

(A Unit of Babylon Hospital Pvt. Ltd.)

CHILDREN'S HOSPITAL & PERINATAL CENTRE

(ICMCH RECOGNISED CHILD HEALTH TRAINING INSTITUTE)

NNF Accreditated NICU

The certificate in awarded to

DR. RENU

In Recognition of having successfully completed her

Internship in the department of

MEDICAL ADMINISTRATION

and has successfully completed her project on

DELAY IN DISCHARGE PROCESS

FROM 1ST FEB 2018 TO 1TH MAY 2018

AT

BABYLON HOSPITAL PVT. LTD., JAIPUR

she comes across as a committed, sincere & diligent person who has a strong drive and zeal best learning

we wish her best for future endeavors

DIRECTOR

BABYLON HOSPITAL PRIVATE LIMITED
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311, Adarsh Nagar, Opposite Rajapark Gurudwara Crossing, Jaipur - 302 004 (Raj.) INDIA
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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation "**Delay in discharge process"** submitted by **Renu Joshi** Enrollment No- **IIHMR-U/01/2016-18/0480** under the supervision of **Professor Anoop khanna** for award of MBA in health and hospital Management of the University carried out during the period from **1st FEBRUARY 2018** to **01st may 2018** 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.

Renu Joshi

Signature

ACKNOWLEDGEMENTS

The success of any task would be incomplete without the expression of appreciation of gratitude to the people who made it possible . It is the pleasant aspect that I now have the opportunity to express my gratitude to all of them . This is the humble attempt in this regard. I would like to express my sincere thanks to **Babylon Children Hospital, Jaipur** for providing me such unique learning experience.

I sincerely thanks **Dr. Dhananjay Kumar Mangal (Director of Babylon Hospital, Jaipur**) and **Dr. Madhu Jain (Associate director of Babylon hospital, jaipur**) for giving me the opportunity to do my project at Babylon Children Hospital ,Jaipur.

I convey my deep and sincere thanks to **Dr. Ashok Kaushik (academic dean**) and my mentor **Dr. Anoop Khanna**, for being helpful , supportive and receptive.

Sincere especially thanks to all the staff of the Babylon Hospital, for helping me at each and every step of my work. Heartiest gratitude to them for making my stay and work at this place memorable one.

Last but not the least I would like to thanks to my Husband **(Dr.Manish Dev Sharma)** because of whom I am here and who is always there whenever I require his help.

Thanks to one and all

TABLE OF CONTENT

ACRONYMS / ABBRIVIATION

- **TPA** **Third party administrator**
- **GDA** **General duty attendants**
- **LAMA** **Leave against medical advice**
- **NICU** **Neonatal ICU**
- **KMC** **Kangaroo mother care**
- **NRP** **National resuscitation programme**

HOSPITAL PROFILE

Babylon Hospital proves its quality in the field of Children & Neonatal Care with completion of its glorious 10 years.

It was founded on 5th July 2007, aimed to provide best Neonatal & Child Care to the population of Rajasthan and surrounding states. Babylon Hospital is the most trusted Children Hospital in the State. This reputation was achieved because of its highly qualified and experienced Consultants, dynamic team of Resident Specialists, well Trained Nurses, Paramedical personnel's and highly motivated Supporting Staff.

Measure of our success is in the thousands number of smiling faces of Children & Parents.

Our Vision

To Provide Best Possible Quality of Neonatal & Child Healthcare Services at Affordable Cost

Services

- **Neonatal Care - New Paradigm**

NNF Accredited Advance NICU Provides Intensive Care for Extreme Premature, Pre term & Term Newborn for Birth Asphyxia, Sepsis, Neonatal Jaundice, Congenital Cardiac & Other Surgical Emergencies etc.

- **Neonatal Care - Advance Care for difference segment newborn**

- Extreme Premature Care NICU
- Intensive Care NICU for birth asphyxia, Sepsis Shock Newborn.
- Post-operative Neonatal Intensive Care Unit
- Isolation Nursery for highly infected Newborns.
- Step-down Nursery Care for Photo Therapy, O2 support, tube feed etc.
- Mother- baby Bonding Care rooms for KMC, Room in.

- **Neonatal Equipments**

- Cardiac LED Photo Therapy units.
- Transport Neonatal Incubator
- Ventilator - BUBBLE CPAP
- Dash- Multiple Monitor - Cold Light

- **Intensive Care**
  - Pediatric Intensive Care Unit is capable co handle all type of Pediatric Emergencies under Guidance of Pediatric Intensives.

- Cardio respiratory support for any terminal illness, available in term of invasive & noninvasive ventilation, intense hemodynamic Monitoring with advanced equipment's as ventilator, Dash monitors, pulseoxymeter , Bubble c pap Machine, ABG Machine, Cardiac Defibrilator, Peritoneal dialysis setup, Central live insertion etc.
- Along with the Advance PICU infra-structure, dedicated, sensation & special skilled nursing staff available around the clock.
- 24x7 laboratory for all types of investigations required for intensive management of critical children as Blood counts, Biochemistry, Serology, Culture, Acid-Base Status, Bed side X-ray, Sonography, ECHO & Doppler, ECG, EMG, NCV etc.
- Central Monitoring & Concealing.
- Bed side X-ray, Sonography, EEG, ECG, 2D ECHO, Doppler etc.

➢ **High Risk Neonatal Follow up Clinic**

- Comprehensive care by the team of Neurologist , Pediatrician, Retina specialists, Audiologist, Speech therapist, Neurologists, Psychologist, Physiotherapist, Occupational therapist, Nutritionist, Vaccinator etc.

Academic & Achievements

- World's one of the smallest surviving preterm baby weight of 447gm only & 26-27 wks gestation, Non completed 9yr. of age him now.
- NRP Training Courses regularity organizers.
- Neonatal Training
- Post Graduate DCH Course

Neonatal Transport

- Dedicated Neonatal Critical Care Ambulance equipped with Transport Incubator & Ventilator along with Hemodynamic Monitoring by Multiple monitor, Pulse Oxymeter. Infusion Pumps, Audited Emergency Drug-Kit .Ambulance equipped for Emergency Lab Test also.
- Intensive Neonatal care is to be provided by Specialist & Trained Nursing staff under continuous guidance of Neonatologist who supervise them through real-time Telemedicine during transport

STUDY ON

DELAY IN DISCHARGE PROCESS IN BABYLON CHILDREN HOSPITAL,

JAIPUR

DISCHARGE PROCESS

DEFINITION OF DISCHARGE: It can be defined as the released of the hospitalized patient from the hospital after providing the necessary medical care to the patient by the healthcare professionals of the hospital.

PATIENT DISCHARGE PROCEDURE: This is the final step of treatment procedure during patient 's length of stay.

Timely discharge: when a patient is discharged home or shifted to an appropriate level as soon as they are clinically stable or fit for the discharge.

Discharge process is the final contact between patient and health professional of the hospital and the whole treatment process and their outcomes undergone on patient is recorded at this stage.

Improving the discharge process by any hospital lead to more patient satisfaction in that hospital.

Unnecessary delay in discharge lead to unnecessary occupied beds and rooms in the hospital which in turn lead to low hospital bed turnover rate which represents the waste of health care resources in the hospital leading to rise in the organizational cost.

Fast and on time discharge process lead to early availability of patient bed and reduce waiting time of admission of patient.

The patient and its relative are eager to return to their normal or routine life and in any undue delay in the discharge of the patient definitely caused dissatisfaction of patient and family members and also pull down the image of the hospital, even after successful and satisfactory treatment experience from the hospital.

The process consist of clinical ,financial , legal and administrative and recordkeeping aspects start right from the consultant order of discharge to settlements all kinds of hospital bills is a time consuming process. if this whole process is capitalized in a organized way and with a proper coordination between trained medical ,paramedical and the administrative staff, the discharge process can be completed as per standards of hospital.

CLINICAL PART:

It comprises of order of the attending consultant physician / surgeon that the patient has attained the level of good relative health and the patient is fit for the physical discharge from the hospital or it can be patient's own demand of discharge.

Following steps involved in this:

- Review of the latest reports of the investigations and also physical examination of the patient by consultant.
- Providing information regarding discharge and follow up prescription

- Preparation of discharge summary by junior/senior resident.
- Dressing and minor procedure done by the resident doctor or nursing staff.

NON CLINICAL PART:

It comprises of following:

- Last day billing activity sheet process signed by nursing staff mentioning last cross referrals, any investigations done and a circle around the discharge column and handed over the billing department. Basically it is scheduled immediately after discharge order is given by the consultant but actually it is done between 0-15 min after discharge order.
- If any medicine return then it is mentioned and indented and returned physically to pharmacy store
- A discharge summary is prepared by resident and corrected by senior consultant and handed over to nursing staff.
- Nursing staff explained to the patient about medicines and other things.

People & services that may support the discharge process

Hospital team:

- Medical staff
- Nursing staff
- GDA(helping staff)
- Directors
- Managers

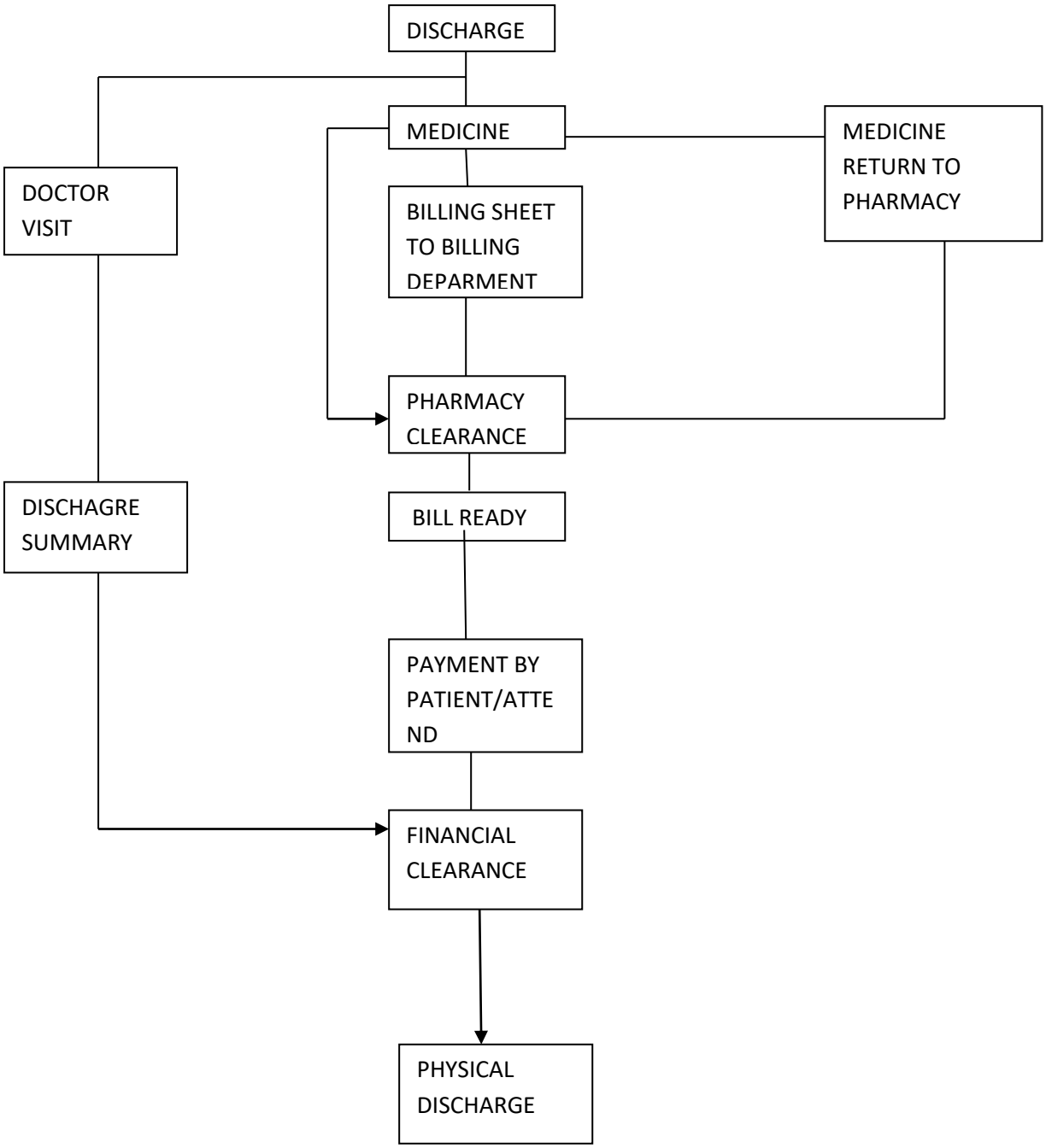
Pharmacy:

- Medicine management

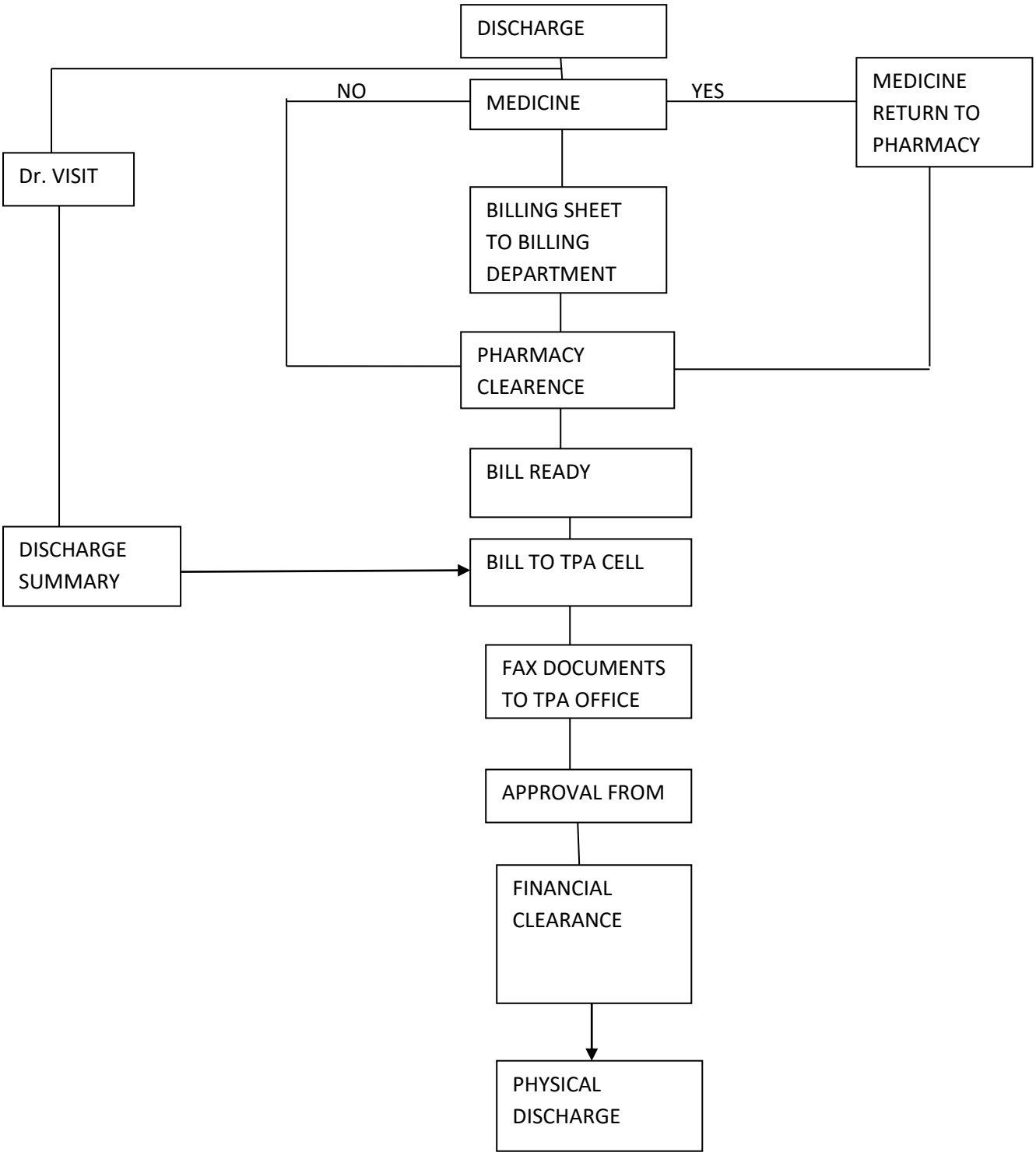
Transport:

- Ambulance transport
- Hospital transport service

FLOW CHART OF DISCHARGE PROCESS



DISCHARGE PROCESS OF TPA PATIENTS



Litrature Reivw:

- **Article from hospital patient discharge process: an evaluation by sally bullock ,Charles w morecroft and Rachel mullen**

This study shows medication discrepancies for patients after discharge from hospitals. They cause unnecessary harm to patients and results in hospital readmission. To improve patient discharge, from hospital needs to determine where and why medication issue occurs. This study aim and evaluate the discharge process across the north west of England.

Hospitals involved in this study were found to have similar discharge process with issues common to all. one significant finding was a lack of patient involvement in the discharge process.

- **Improving the discharge planning process :a system study by charity mukotekwa, ewart carson**
  Discharge process is complex and it is difficult to achieve in a effective and efficient manner. this study shows that adoption of soft system methodology shows that the major issues to be addressed related to need for a seamless service provision.
  This study shows the need for greater co- operation between the many healthcare professionals involved, enhancing the utilization of nursing staff.

- **Patients rights and the admission and discharge process by reneta klop, france cb.van wijmen, hans philipsen**
  This study focuses on the rights of patients and the rights and duties of nurses working in a genral hospital and in the community . the information standard is introduced consisting of three components:
  Informed consent, informed referral and informed discharge.

- **Cleaning up the discharge process : a number of components-and personnel are crucial to success.by Huber charlotte msn, rn, blanco**
  Transition out of hospital is a vulnerable time for patients,the lack of continuity of care at the time of hospital discharge.

NEED OF THE STUDY

- Discharge process has been always the topic of research and there was continuous struggle to overcome the problem of delay in discharge.
- If patient in hospital are dissatisfied most of the reason was delay in discharge.
- It is the need of the hour in this competitive world to achieve 100% patient satisfaction and to find out factors responsible for delay in discharge and try to rectify them.

OBJECTIVE OF THE STUDY

- To study the discharge process.
- To find out the reasons for delay in discharge process.

RATIONAL E OF STUDY:

- THIS study is done to know the activities involved in the discharge process of the patient in a hospital.
- This study is also done to know the whole discharge process and time taken in each step of discharge process so that the loopholes of the process can be identified.
- This study is also done for in-depth knowledge of the reason for delay in discharge process and find out the solutions for it.

STUDY TYPE:

This study is both qualitative and quantitative.

- Qualitative study is basically a exploratory study. It is used to gain information and to get understanding of underling reasons and helps to develop an ideas or hypothesis for potential quantitative research.
- Quantitative research is used to quantify the problem in forms of number by way of generating the numerical data.

DATA COLLECTION FOR THE STUDY:

The method of the data collection used in this study are:

- Primary data: the primary data was collected by observational method, interaction with hospital staff on nursing stations.
- Secondary data: secondary data was collected from the hospital, organizational patient discharge policies.

SAMPLING TECHNIQUE:

Technique for sampling was simple random sampling.

RANDAM SAMPLING-simple random sampling is the basic technique of sampling in which we select a sample or group of subjects from a larger group or population for the study.

Each one of the individual chosen by chance and has equal probability of getting selected in the sample.

TOOL USED:

- Tables
- Percentage
- Bar diagram
- Pie diagram

Name of the patient	IPD no.	DOA	DOD	TIME OF DR ROUND	DISCARGE SUMMARY	BILLING SHEET SENT TO THE RECEPTION	PAYMENT RECIVED	PHYSICAL OUT

- Name of patient:- this shows the name of patient who was going to discharge that day. collected from hospital system.
- IPD no.:- this is the no which is generated at the time of admission. collected from system.
- DOA :- this is the date on which patient get admitted in hospital. collected from hospital system.
- DOD:- this is the date on which patient got discharged from hospital. this is collected after doctor round.
- Dr. round:- this shows the time of doctor round when he says about the discharge of the patients.
- Discharge Summary:- this is the time when discharge summary was made by the doctor .
- Billing sheet sent to the reception:- this is the time when billing sheet was sent to the reception for preparation of final bill of the patient.
- Payment received:- this time when financial clearance to the patient was done.
- Physical out:- this is the time for physical out of the patient from the hospital.

SAMPLE SIZE OF THE STUDY:

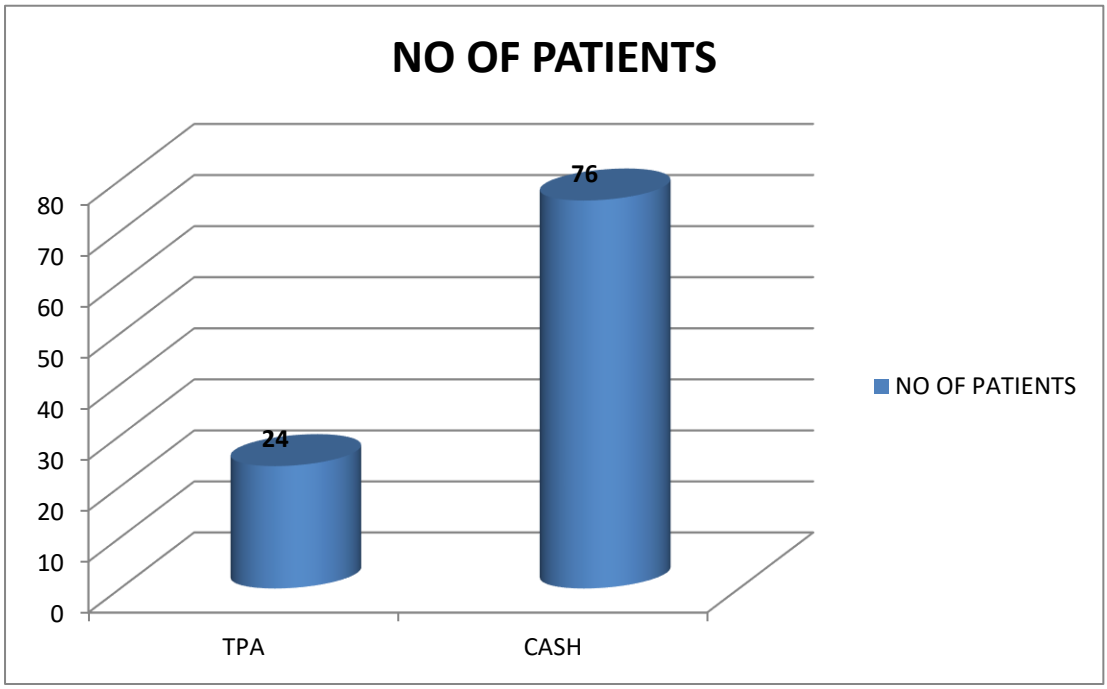
SAMPLE SIZE TAKEN FOR THE STUDY IS 100 PATIENTS.(CASH,TPA)

STUDY TIME PERIOD:1 FEB to 30 APRIL

DATA ANALYSIS AND INTERPRETATIONS

No. of patients according to type of paying mode

TYPE OF PAYOR	TOTAL NO OF PATIENTS(N=100)
Cash	76
TPA	24

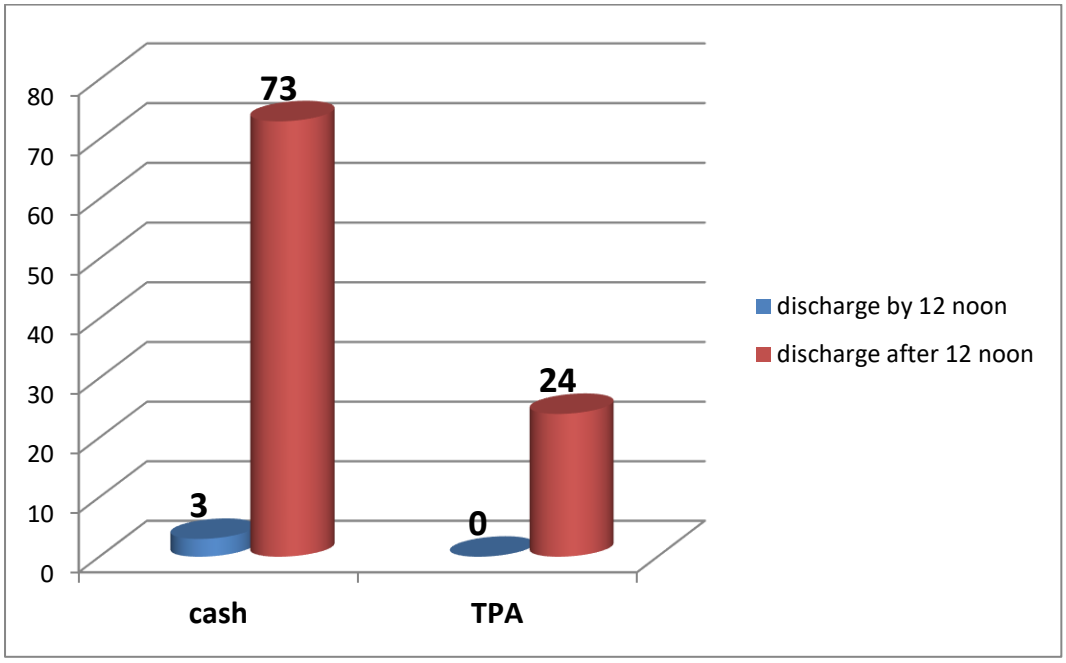


Interpretations of this graph:-

Out of 100 patients only 24 patients are TPA patients and majority of patients are CASH patients**.**

I am studying the data according ,discharge by 12.00 noon. According to which the patients which are decided in morning for discharge should be physically out of hospital by 12.00 noon.

The reason for analyzing the data for 12.oo noon because out time for hospital is 12 noon ,after 12.00 room charge will be start for next day.



TURNAROUND TIME: Time elapsed between time when the operation starts and time when the operator finish operation. There are many types of TATs in discharge process.

TAT for cash patients

Time for bill sent to reception to get financial clearance is **45** min

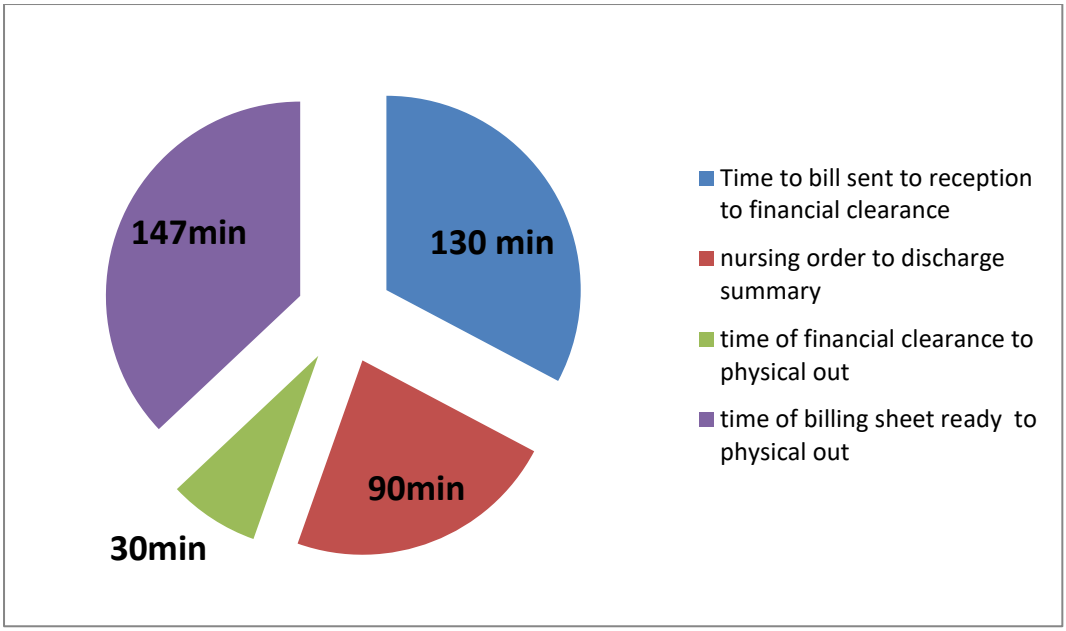
Time taken for nursing order to discharge summary is **45 min**

Time taken for nursing order to physical out is **120 min**

Bill clearance to physical out is **15 min**

AVERAGE TIME TAKEN FOR CASH PATIENTS	**TIME(in minutes)**

Time for bill sent to reception to get financial clearance	130
Time taken for nursing order to discharge summary	80
Time taken for billing sheet to physical out	147
Bill clearance to physical out	30



Delay in discharge process for cash patients

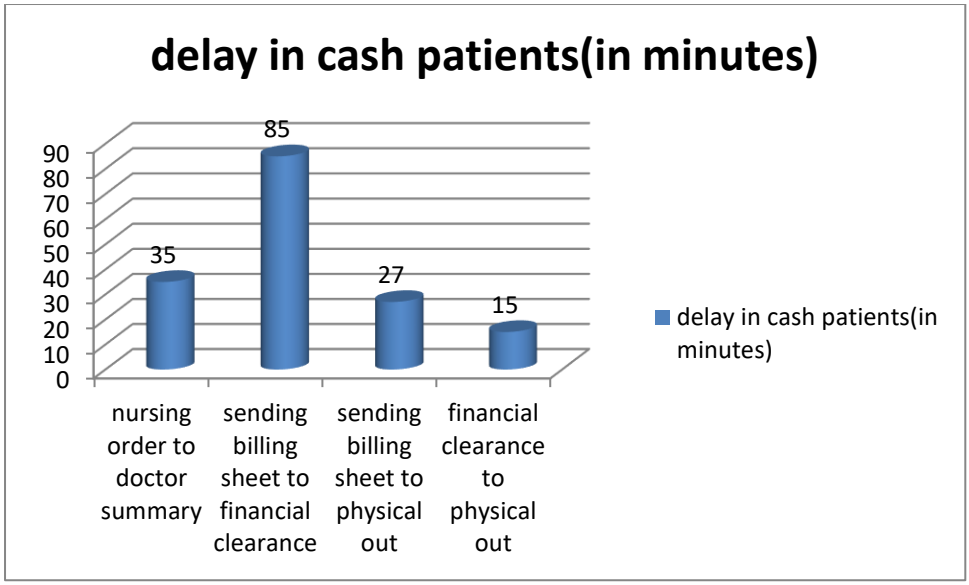
Delay in Time for bill sent to reception to get financial clearance is **85 min**

Delay in Time taken for nursing order to discharge summary is **35 min**

Time taken for sending billing sheet to physical out is **27 min**

Bill clearance to physical out is **15 min**

Graphical representation of delay in discharge process:-



TAT For TPA patients discharge process :-

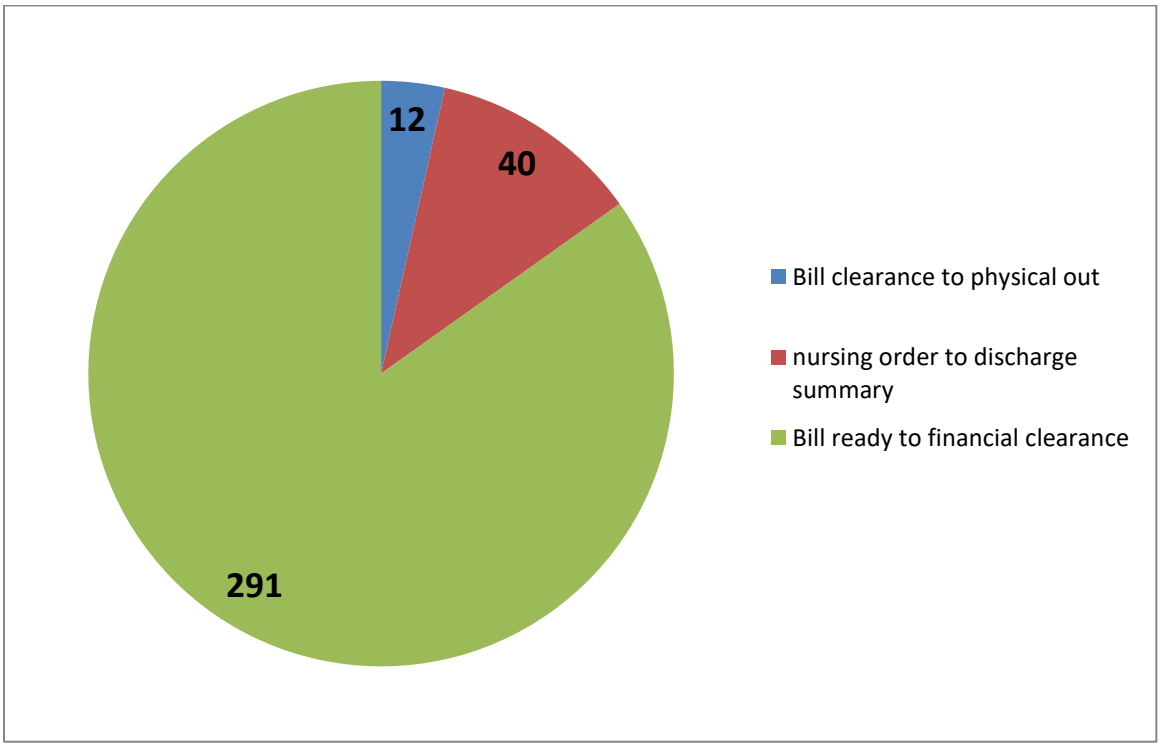
Billing sheet ready to financial clearance **180 min**

Time taken for discharge summary **20 min**

Bill clearance to physical out **15 min**

Billing sheet ready to physical out **240 min**

TAT s	TIME (in minutes)
Bill sheet ready to financial clearance	291
Time taken for discharge summary TAT	40
Bill clearance to physical out	12
Billing sheet ready to physical out	300

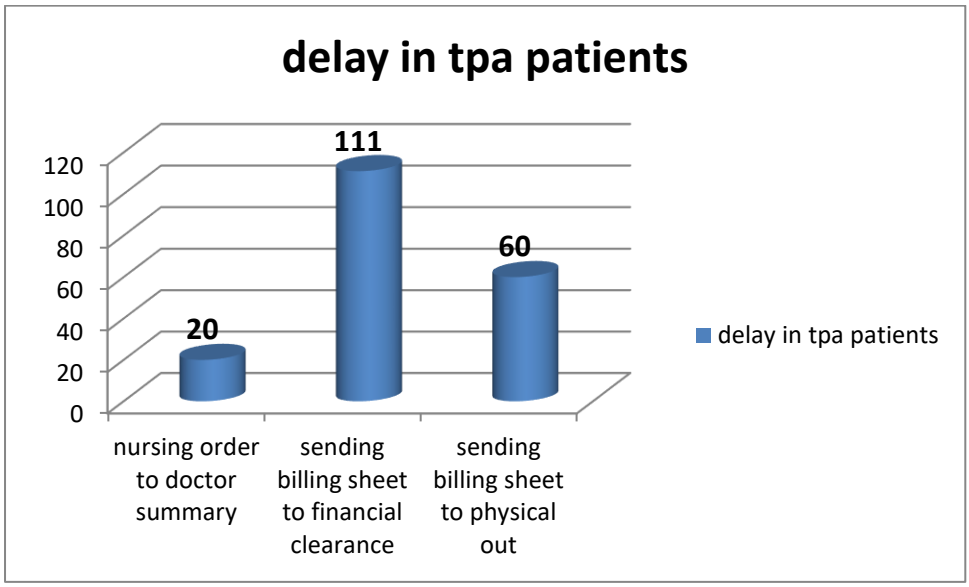

12
40
291
Bill clearance to physical out
nursing order to discharge summary
Bill ready to financial clearance

Delay in discharge process for TPA patients:-

Billing sheet ready to financial clearance **111 min**

Time taken for discharge summary **20 min**

Billing sheet ready to physical out **60 min**



OBSERVATIONS:

- Most of the delays in discharge process ,due to the discharge summary which was not ready on time.
- TPA patients discharge process is already a time taking process ,due to which most of the times they were delay up to second half and there was delay in their physical out also.
- Bill is send to bill counter by GDA ,and we know that GDA is provided other work which they does first and then submit the bill to the counter leading to the delay in bill receiving.
- Sometimes delay due to patients they wait for their vehicles or ambulance ,till the vehicle come the do not move out of the room.
- Sometimes delay happens due to medicine return at pharmacy
- Sometimes patient get delayed because of improper coordination among staff of hospital leads to delay in discharge process.
- Discharge process is a complex one and the patient is not properly informed about the procedure and leading to time waste in bill clearance leading to delay in discharge.
- Delay is also observed in the preparation of bill at reception counter.

RECOMMANDATION OF THE STUDY:

- DOCTORS VISIT SHOULD BE DONE BY 9.00 AM.
- DISCHARGE summary should be completed one day before, for planned patients.
- Medicine should be returned one day before discharge.
- Discharge checklist for patient and caregivers should be made and implemented.
- Priority should be given to TPA patients.
- There should be proper counseling of TPA patients.
- Education and training of all the staff involved in discharge process is required.
- Timely intimation of bill to the patients and should be explained to the patents in details on timely basis.
- While making the bill the things should be properly checked and verified.
- To ensure that the bill is not over estimated than the factual values.
- The billing counter staff should be thorough and should have all desired knowledge of all billing items.
- Before bill settlement the attendant of the patient should know about the medicine return properly.
- There should be priority basis cannula removal of the patient (if required)
- With proper planning and coordination it should be ensured that there should always be availability of GDA staff for assisting the patient to see off them.so that the patient do not delay due to the absence of GDA.

CONCLUSION:

Patient discharges are commonly delayed. Reason behind the delay in discharges was analyzed and then recommendation for reducing the delays in discharges of patients were suggested. if the recommendations are consider as valid and practice and can be applied in the process than the delays in discharge can be reduced to a much extent.

Delay in discharge is considered as one of most common reason for patient dissatisfaction so improving the discharge process can lead the more patient satisfaction.

for an effective discharge process all hospital staff including doctors, nurses, GDA staff, family of patients should coordinate properly and work together .