

FINAL DESSERTATION REPORT

**CARE HOSPITAL
BANJARA HILLS, HYDERABAD**

**By
SOUNDARYA TEJOMURTHULA (1217)**

MBA (HOSPITAL AND HEALTH MANAGEMENT)

2020 - 22



ACKNOWLEDGMENT

I would like to express my thanks to the placement cell as well as our principal who gave me the golden opportunity to intern with CARE hospitals, Banjara Hills, which has proven to be a great learning experience. I would like to express my sincere gratitude towards Ms. Deepa Khanka, Dr Deepali Prabhudas Mankar (Head of Quality) and her entire team of Quality Department, whose guidance at every step has been crucial for my understanding and learning. I was able to learn a great deal about internal audits of various kinds, which wouldn't have been possible without their support.

I'm thankful to my mentor Dr Kanika Jindal, Assistant Professor, her support throughout the project. I'm perceive this opportunity as a big milestone in my professional and career development.

I will strive to use the gained skills and knowledge on the best possible way, and will be continue to work on the improvement to attain the desired of career objectives.

Respectfully,

Soundarya Tejomurthula

Roll no. 1217

MBA-HHM

2020-2022

TABLE OF CONTENTS

SERIAL NO.	TITLE	PAGE NO.
1 A	Introduction of Key sector	6
2	Review of the Literature	7
3	Objectives	8
4	Roles and Responsibilities	10
5	Quality Exercises	11
6	Emergency Bed TAT	14
7 B	Methodology	14
7	Result and findings	15
7	Discussion and Conclusion	16
7	Reference	19
C	Certificate	20

TABLE OF FIGURES

Figure No.	Figure Name	Page No.
1	Teaching the staff	12
2	Staff attending the training	12
3	Taking Presentations on Safety and measurements	13
4	Emergency department	14

A. ABOUT THE HOSPITAL:

Care Hospital Banjara Hills, Hyderabad A top private hospital which is formed by two prime hospitals in Hyderabad, Telangana. The hospital is located in Banjara hills, which is 435 bed multi-speciality hospital, including 120 critical care beds, and serves

It ten operating rooms equipped with cutting-edge technology.

The transplant Unit is outfitted with cutting-edge technology and the most advanced equipment for performing liver and kidney transplantation procedures on both young and adult patients.

It focuses on a safe and comfortable working environment and encourage all ethical practices while providing a wide range of medical services.

However, in the view of high patient flow, or complicated cases, compliance of hospitals towards recording these informed consents might have to be assessed. Care hospital, Banjara Hills a 22-year-old, with around 50 surgeries happening every day, it becomes an important duty to check for the doctors, compliance towards taking and recorded informed consents, thereby gauging and improving quality of services of the hospital, as a whole.

INTRODUCTION OF THE KEY CONCEPT:

The ER, which termed as emergency room and the accident and emergency department to be known. It is specialising in emergency medicine, the patient with acute care with present with prior appointment with their own means or by an ambulance. The emergency department founds in hospital with primary care centre. The unplanned nature of the patient attendance, the department must provide with initial care treatment for a wide spectrum of wounds and injuries some may be life threatening and which requires main attention.

The emergency department of all the hospital sector works with all day and night varying with staffing it reflects patient value.

The first time the services was provided by workmen's compensation plan, and in UK and the USA by the late mid-19th century, but world's first specialisation trauma care centre was opened in 1911 in Louisville Hospital, Kentucky, USA. It was developed in 1930s by surgeon Arnold Griswold, who equipped police and fire vehicles to the medical supplies and trained all the officers to give care in emergency while en route to the hospital.

In the modern scenario, a hospital typically has an emergency department in its own pace of the ground floor or the front point of contact. As the patients can arrive at any point of incident and any time. It is based with key operations of clinical need.

Mostly, emergency departments have a dedicated area for the process to take patients and also the staff dedicated to perform the emergency triage. In the other departments the role is filled by the triage nurse and although depended in training levels in the area, other professionals also perform the sorting triage, includes paramedicine and physicians.

REVIEW OF LITERATURE

Flow of patient and allocation of bed and the resource utilisation in hospitals takes through the application of waiting of patients and also simulation models have been extensively done,

Shahani and other Harper argued with the hospital system is very complex and reduces its complexity does not result in any ideal mode.

Several studies which deal with bed allocation and hospital flow utilisation queuing theory. Cochran et al. approximates in the impatient demand by the employing a queuing technique for making a decision.

They both identifies as; in general patients the data has been collected at midnight was not sufficient due to the variance that occurs during the day time. The march month was selected for analysing data because it has been considered the busiest month in the hospital industry. The research was found to be that financial data plays with vital role for in patient bed capacity with planning and where the data should be utilized for any kind of analysis.

Where it is developed an advanced focused model using the census data. The model determined with the frequency of distribution in usage with hourly census information to interrupt with bed management. The other took another approach by using the queuing theory to identify the patient flow to below an approach for advancement of utilisation of hospital resource in order to increase the care.

It is suggested that the finding of flow level of 10-15% bed vacated is important to maintain the administered data productivity. Utley et al. has also proposed the creation of an intermediate care unit in the process with the emergency to specific wards has taken place. This approach has been reduced the excess flow of patients into acute care and reduces the loss due to admission cancellation.

Models of simulating has been utilised in healthcare and operations widely due to ability to model dynamic of the the systems. Largren have been proposed the utilisation of simulation to modern scenarios that don't exist. Which are making it possible to predictions of outcomes. It also has a capacity to model of unexpected in the situations which are very expensive to [reform within the hospital and explained as stimulation was better in analysing other cases. The limitation of main is that the simulation use is complex and a simpler and faster simulation should be taken.

Jacobson et al described the benefits of optimization and simulation usage tools in healthcare making decisions. They also proposed with simulation models, many other performance measures which analyses and which also helps in understanding and relationship between various inputs of the system.

MODE OF DATA COLLECTION:

I have collected the information from the organisation by visiting each department and took an overview from respective department heads and staff and learned the working that how the different departments are run by the organisation.

Posted in various departments and data was collected based on the observation for 1 week to 10 days. A sample is small for some departments and large for others. All this includes the quantitative analysis.

SPECIALITIES:

1. Accidents and Emergency
2. Anaesthesiology
3. Bariatric surgery
4. Intensive care medicine
5. Laboratory medicine
6. Nephrology
7. Neurology
8. Neurosurgery and Spine Centre
9. Gynaecology
10. Paediatrics and neonatology
11. Pain and palliate medicine
12. Paediatric surgery
13. Physiotherapy
14. Plastic surgery
15. Podiatry
16. Psychology and wellness
17. Pulmonology
18. Radiology and imaging
19. Rheumatology
20. Urology

DEPARTMENTS:

1. Outpatient department
2. Inpatient department
3. Emergency department
4. CSSD
5. CRM
6. Billing department
7. Operation theatre
8. Dialysis
9. Radiology department
10. Pharmacy
11. Housekeeping
12. Maintenance and engineering
13. Intensive care unit
14. HDU
15. CICU
16. MICU
17. NICU
18. Laboratory department
19. Blood bank
20. CT ICU
21. Cath lab
22. Casualty
23. Dietary services
24. Physiotherapy
25. Security
26. Anaesthetics
27. Specialised departments (egg- cardiology, urology, ENT, etc.)
28. Medical record department
29. Information technology
30. Human resources
31. BME (Biomedical engineering)
32. Procurement stores.

FACILITIES

1. Emergency and trauma services
2. ICU and NICU
3. Diagnostic services
4. Hospital rooms
5. Pharmacy services
6. Ambulance services
7. Cath lab
8. Neurophysiology
9. MRI services
10. Housekeeping

OBJECTIVES:

1. To access the relevance of types of entries and registries.
2. To identify the time of being admitted.
3. To access the completeness, appropriate and time taken for each patient.

1. KEY ACTIVITIES/ PROJECTS UNDERTAKEN:

1. Volunteered in the various activities conducted by the Quality Department ongoing in the hospital.
2. Med Blaze Software.
3. Performed Quality Audits exercise
4. Volunteered in quality department trainings.
5. Posted in inpatient, went on rounds and collected the data for required audits.
6. Performed Audit in Pharmacy.
7. Trained the staff for some implementations of new ideas.
8. Trained staff nurses for documentations and checklist.
9. How to handle the pressure. Working under pressure
10. Making decisions to satisfy the patients need and keeping the process efficient.

2. OTHER SERVICES:

1. Cafeteria
2. Home lab sample collection
3. Home care
4. Home delivery medicines
5. International insurance
6. International patient care
7. Parking
8. Preventive health check-up

QUALITY EXERCISES

Quality exercises are the assessment which deals with daily base internal auditing within the organisation.

Auditing includes

1. PNDT – Pre Natal-Diagnostic Technique
2. MTP – Medical Termination of Pregnancy
3. Narcotics
4. Doctor's handover sheets

GENERAL OBSERVATIONS:

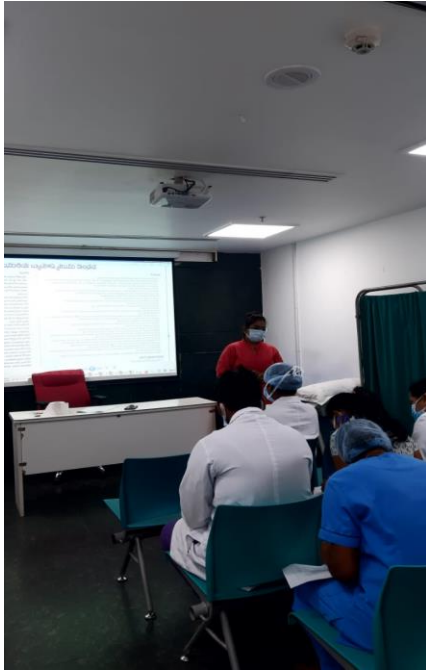
1. Learned how to Audit for PNDT in radiology department, checking the registers and the forms of each and every patient on regular intervals and schedules.
2. Learned how to do the MTP audit from Gynaecology department and registrations for the patient coming for the Termination of pregnancies and performed cases.
3. Learned how to collect the data.
4. Learned the procedure for the audit for licence and other departments.
5. Learning the audit for doctor's handover sheet.
6. Learned how to manage various works at stipulated time.
7. Learned how to do the verifications.
8. Learned how to interact with staff/nurses and guided them
9. Learned to coordinate with people.
10. It has helped me to communicate with the citizens and how to handle the situation.

SUGGESTIONS AND FINDINGS:

1. Some of the staff nurses were not aware of the doctor's timings, and doctor's signature were not mentioned clearly for particular PNDT forms.
2. Not mentioning the proper sign of licenced doctors for MTP.
3. Asking them to maintain a proper track sheet to avoid the glitch with audits
4. Scheduling is done properly by the CRM people then the crowd could be avoided.
5. If the patient condition is very serious should give them the preference.
6. If the patient is a senior citizen and is not aware of calling and all then the screen should be displayed in the waiting area for more information.

IMPLEMENTATIONS:

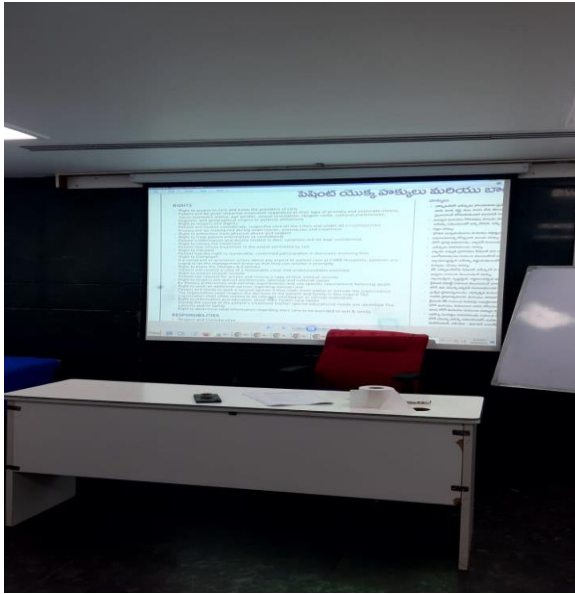
1. Gave trainings to the Nursing staff on various learnings like safety measurements for patients, First Aid treatment for road accidents for emergency patients
2. Gave learnings on initial program for staff
3. Took assessment on their knowledge on safety measurements



1. Teaching the staff on safety measurements



2. Staff learning and giving assessments.



3. Presenting the presentations to show and explains the various parameters for safety and measurements.

B. PROJECT:

EMERGENCY BED TIME TURN OVER OF THE PATIENT

It is examined and determined to be the overall round of patient between the arrival to the discharge or hospitalisation.

“Turnaround time is an important parameter that strongly influences patients and staff satisfaction in the emergency department and there are early reports considering this important issue.”

“Turnaround Time (TAT) of patients shifted to ICU from Emergency department is of outmost importance as delay in transfer is associated with increasing mortality as shown in different studies.

The longer the patient stays in ER the more likely their care could be compromised.”

The lengthy long stay of the patient in emergency department leads to decreasing of patient satisfaction, also loss of revenue of the hospital, patients compromise with the care and acute illness and dissatisfaction in employment.

Importance of TAT:

The turnaround time role plays very important and crucial in healthcare and hospital industry.

It helps with the increase in the effective ness of the working with the industry and laboratories in healthcare and hospital and also leads to strengthen the customers relationship with the industry authorities and the management.



AIM AND OBJECTIVE OF THE STUDY:

To identify the length of stay/To determine TAT of patients at Emergency Department

METHODOLOGY

STUDY DESIGN: Prospective Objective only.

SETTING:

CARE Hospitals, Hyderabad has been established in the year of 2000.

It is a multi-speciality hospital with 435 beds, with an annual of inflow in between 1,80,000 outpatients to 16,000 in-patients.

STUDY POPULATION:

- **Criteria:** Case data of patients admitted in emergency and discharged within the months of April and May 2022
- **Study Tools:** Microsoft Excel

DURATION OF STUDY: 1st April 2022 to 31st April 2022.

SAMPLE SIZE: 366

SAMPLING TECHNIQUE: Simple random sampling

DATA COLLECTION PROCEDURE: Case files and Foot fall registers from the Emergency department are picked at random and data regarding documentation, completeness and appropriateness of relevant consent forms is recorded in Microsoft Excel.

RESULTS AND FINDINGS

The average of 366 cases recorded a turn-around time with an average of more than 4 hours.

Where the maximum time taken for 366 cases in the span of 2 months. i.e.; April 2022 and May 2022, and the total time taken from the arrival of the patient to discharge of the patient in different intervals has been mentioned.

The different sections for the calculation are under name of the patient, age and sex, arrival time, ER Doctor time, Admission advised time, shifted time, Received in ward/ICU

Through, this criterion of different columns, the turnaround time is estimated of a patient by the time entering to the emergency department to exit time of a patient/

By taking the average mean of total time taken is 4 hours 26 minutes, in which median is 0.159722 and mode is 0.125 as mentioned. The standard deviation is calculated around 0.125206. the total sum is 67.64861.

Mean	04:26:10
Standard Error	0.006545
Median	0.159722
Mode	0.125
Standard Deviation	0.125206
Sample Variance	0.015677
Kurtosis	5.870885
Skewness	2.181551
Range	0.724306
Minimum	0.010417
Maximum	0.734722
Sum	67.64861
Count	366

Bed turnover time indicates with the time elapse between the patient discharged with the next admission. The term with bed cleaning time is also involved.

The additional beds in other departments can reduce the patients with waiting time in the emergency department.

RECOMMENDATION

1. The doctors and staff need to be educated rigours about the importance of registers.
2. The format of registering the data can be modified into different templates, each specific for the most columns.
3. The reason of the delays deals with the Turnaround time of the patients entering to ER were non availability of sufficient beds.
4. When the investigation delays, and the communication fails between the staff and nurse of ER, while others like nursing staff or housekeeping further delays with shifting of patient from ER, leads to increase in the total length of stay of the patient.
5. By pointing the factors which are faced would lead to result with decrease in total time taken at optimum level.

DISCUSSION AND CONCLUSION

The average of 366 cases recorded a TAT with an average TAT of 4 hours.

The major factors which are identified for an increase in Turnaround Time

- In sufficient of beds
- Investigation delay
- Failure of communication between administer staff and the nursing staff

Patient delay majorly cause with unstuffiness of beds and irregular nursing staff and the nurses deals with housekeeping issues.

It is observed that there is a lack of communication in administered staff and the nursing department.

The complexity issue of bed management in healthcare system deals with current literature has tackled the issues with the multiple perceptions.

It has been investigated with several ways which has to be solved by bed management using the research in operations, simulation and both the other techniques which involved.

The other documents with are examples documented in solving the overall of the bed management using the different techniques.

Therefore, the research exists which is relevant to mention the successful of bed management strategy with the complex and should be handled with utmost care.

To apply the best practices for bed management are to be continued the more research has to be performed.

REFERENCES:

<https://aihms.in/blog/role-of-quality-manager-in-hospital-for-excellent-hospital-service/#:~:text=Being%20a%20quality%20assurance%20manager,procedures%20to%20include%20regulatory%20changes.>

<https://expresshealthcaremanagement.blogspot.com/2017/05/checklist-emergency-NABH-accreditation.html>

<https://relyhealthtech.com/readnews?id=41&Checklist of Quality Indicators for NABH accreditation preparation>

<https://www.nabh.co/images/Standards/1.%205th%20Edition%20Hospital%20Std%20April%202020.pdf>

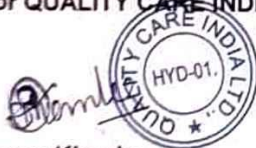
Date: 20-06-2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Soundarya Tejomurthula** has done her internship in **Quality Department**, during period from 01/04/2022 to 18/06/2022.

We wish her all the best in her future endeavors.

For **QUALITY CARE INDIA LIMITED**,



Deepa Khanka
Asst. General Manager
Human Resources

QUALITY CARE INDIA LIMITED

CIN: U85110TG1992PLC014728

evercare group

CARE HOSPITALS

Barangar Hills: G-3-2A8/2, Road No. 3, Hyderabad - 500034, Telangana. T: (040) 61656565, F: (040) 30418488
Barangar Hills: CARE Outpatient Centre, Road No. 10, Hyderabad - 500034, Telangana. T: (040) 61656565, F: (040) 39310140
E: info@carehospitals.com | W: carehospitals.com

REGISTERED OFFICE

Plot No. 4, G-3-2A8/2, Road No. 3, Barangar Hills, Hyderabad - 500034, Telangana
T: (040) 61656565, (040) 23334444 | F: (040) 30418488
E: info@carehospitals.com | W: carehospitals.com

CORPORATE OFFICE

Plot No. 8, G-2-1208/10, 1st Floor, Krishnaee building, Road No. 2, Barangar Hills,
Hyderabad - 500034, Telangana
T: (040) 61656565 | E: info@carehospitals.com | W: carehospitals.com