

TITLE- A Study on Turnaround Time (TAT) in Shifting Patients from Emergency Department to ICU/Ward at Medanta – The Medicity, Gurugram

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1. INTRODUCTION:

Efficient patient transfer from the Emergency Department (ED) to inpatient care units such as ICU and general wards is vital for timely medical intervention and overall hospital performance. Delays in this process can lead to increased patient morbidity, overcrowding in emergency areas, and suboptimal resource utilization. Medanta – The Medicity, Gurugram, with one of the busiest EDs, serves as an ideal case study for evaluating and enhancing the turnaround time (TAT) during such transitions. This study aims to identify bottlenecks, measure the average time taken for transfers, and recommend strategies to reduce delays and improve operational efficiency.

2. RESEARCH QUESTION:

What are the factors that contribute to turnaround time in emergency department and how can these be reduced to improve efficiency and patient outcomes?

3. OBJECTIVES:

- To study the current process of patient transfer from the ED towards /ICU/ Cath Lab at Medanta Hospital.
- To identify factors affecting TAT in patient shifting.
- To trace the reason for delays, if any.

4. MATERIAL AND METHODS:

- Study Design: Cross-sectional observational study
- Setting: Emergency Department, Medanta – The Medicity, Gurugram
- Study Population:
 - Inclusion Criteria: Patients admitted from emergency department between 9 am to 5:30 PM.
 - Exclusion Criteria: Brought-dead cases, patients arriving outside 9:00 AM to 5:30 PM, and Sunday.
- Study Tools: Excel tracking
- Duration of Study: 1 Month (april 2025)
- Sample Size: 100 patients
- Sampling Technique: Purposive sampling from ED dashboard admissions

- Data Collection Procedure: Observation of patient flow from admission advice to physical shifting. Time points recorded: Admission advice, billing completion/panel approval, and shift time.

Turnaround Time (TAT) for shifting = Time at which patient was physically shifted - Time at which admission was advised

5. DATA ANALYSIS PLAN:

Data analysis was done with the help of Microsoft Excel software, using descriptive statistics like mean, median, and standard deviation, to summarize the TATs and show the striking patterns or trends.

6. ETHICAL CONSIDERATIONS:

Patient identities will remain anonymous. No direct intervention or breach of confidentiality will be performed. Consent will be sought for any real-time data collection or interviews, in compliance with Medanta and IIHMR ethical norms.

7. IMPLICATIONS OF RESEARCH:

This research will help Medanta's Emergency Department enhance patient transfer workflows, optimize resources, reduce ED congestion, and improve critical care access times. The results can inform hospital policy, digital SOPs, and training protocols.

8. REFERENCES:

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