

SUMMER INTERNSHIP PROGRAMME

Assessment of ALOS IN EMERGENCY DEPARTMENT

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About the Organisation

RUKMANI BIRLA HOSPITAL in Jaipur is a state-of-the-art multispecialty facility offering extensive inpatient and outpatient services. Since its inception, RBH has been dedicated to delivering comprehensive medical care to the patients, including gynecology, neurosurgery, gastroenterology, renal science, cardiology, orthopedics, joint replacement, and more.

HISTORY – As the first private hospital in the city, Rukmani Birla Hospital was founded by the late B M Birla and Y B Chavan. The hospital was established with the guiding principle of integrating research into clinical practice and providing high-quality medical care to all segments of society.

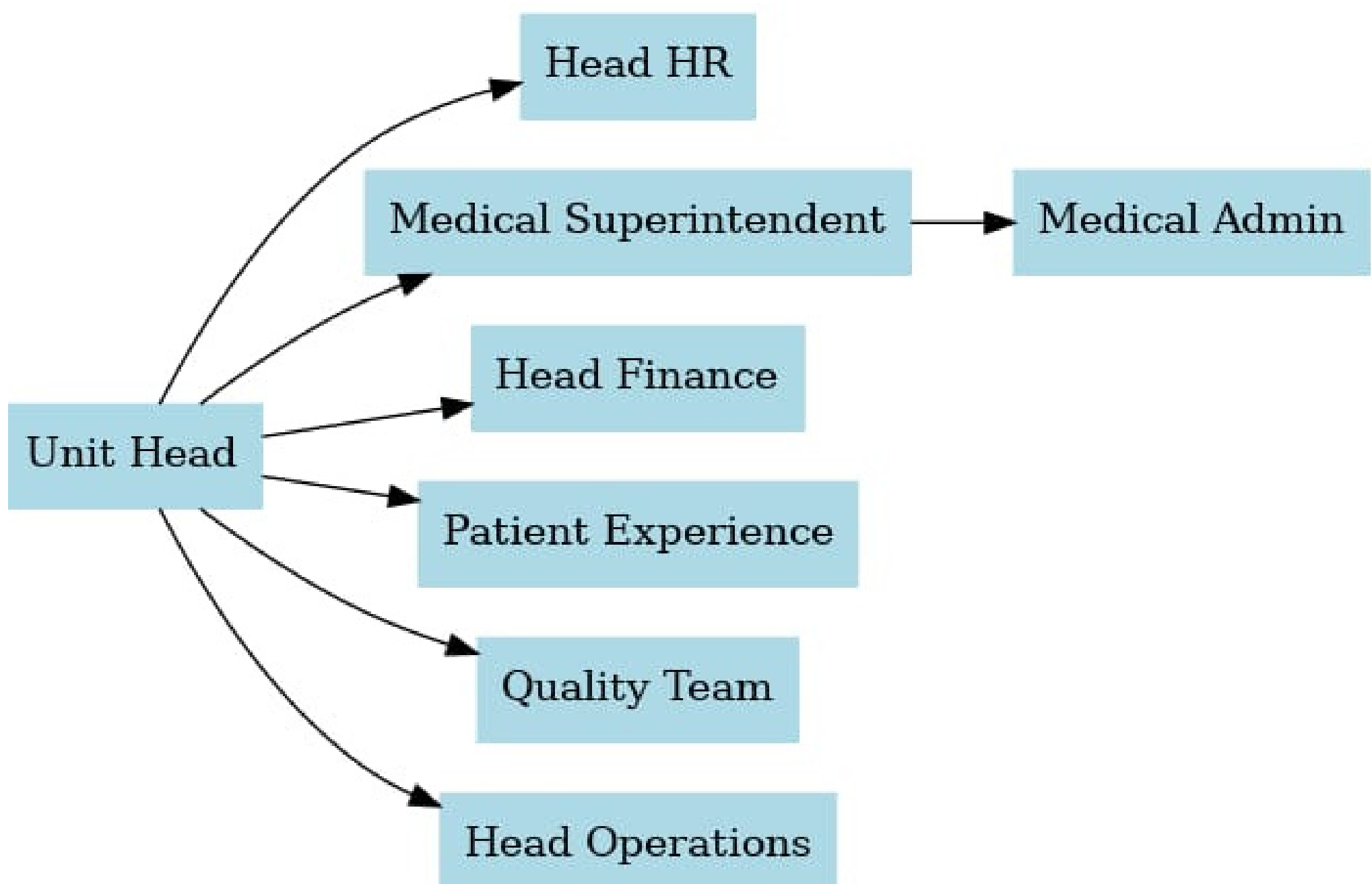
Vision

To provide best of Patient Service & Clinical Excellence.

Mission

To create Clinical Centers of Excellence on a strong backbone of research, academics and evidence based medicine for best clinical and patient outcomes.

Organisation Structure



Introduction

ALOS refers to the total time a patient spends in the hospital from the moment of arrival to the point of physical departure, whether through discharge, admission, or transfer. It serves as a key performance indicator reflecting the efficiency, responsiveness, and quality of emergency care services.

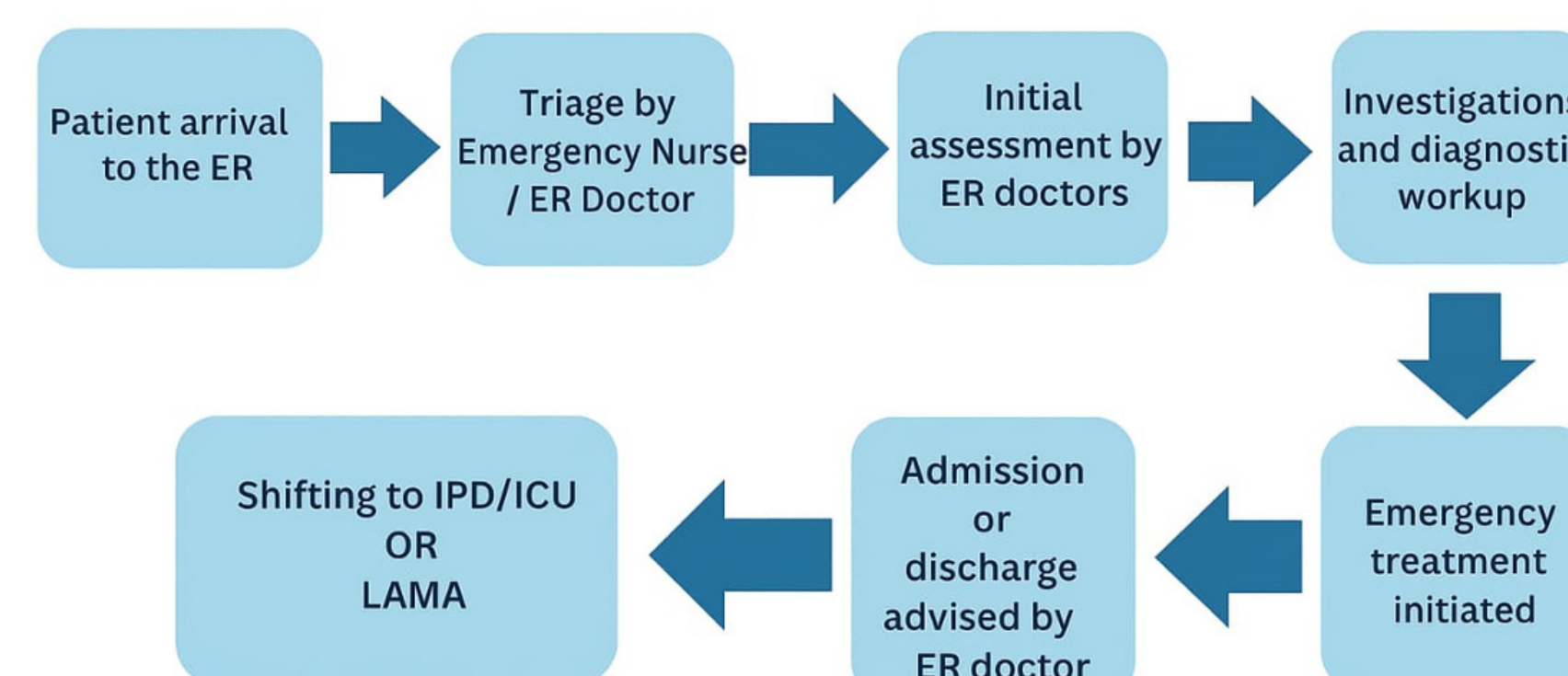
Objective

- To assess ED ALOS and identify cases exceeding the 4-hour limit
- To identify recurring causes for delay in patient movement.
- To propose practical, data-driven solutions for optimizing patient flow and enhancing ED efficiency.

Methodology

- Design: Descriptive observational study using quantitative primary data.
- Data Source: Manually collected real-time data of admitted patients in the ER.
- Sampling: Convenient sampling; 100 patient cases.
- Duration: 6 weeks (19th May – 28th June).
- Data collection process:
- Real-time observation of patient flow from arrival to discharge.
- Manual recording of key time stamps: arrival, assessment, and exit.
- Tools used :
- Microsoft Excel for ALOS calculation and basic stats.
- Delayed cases categorized for root cause analysis.

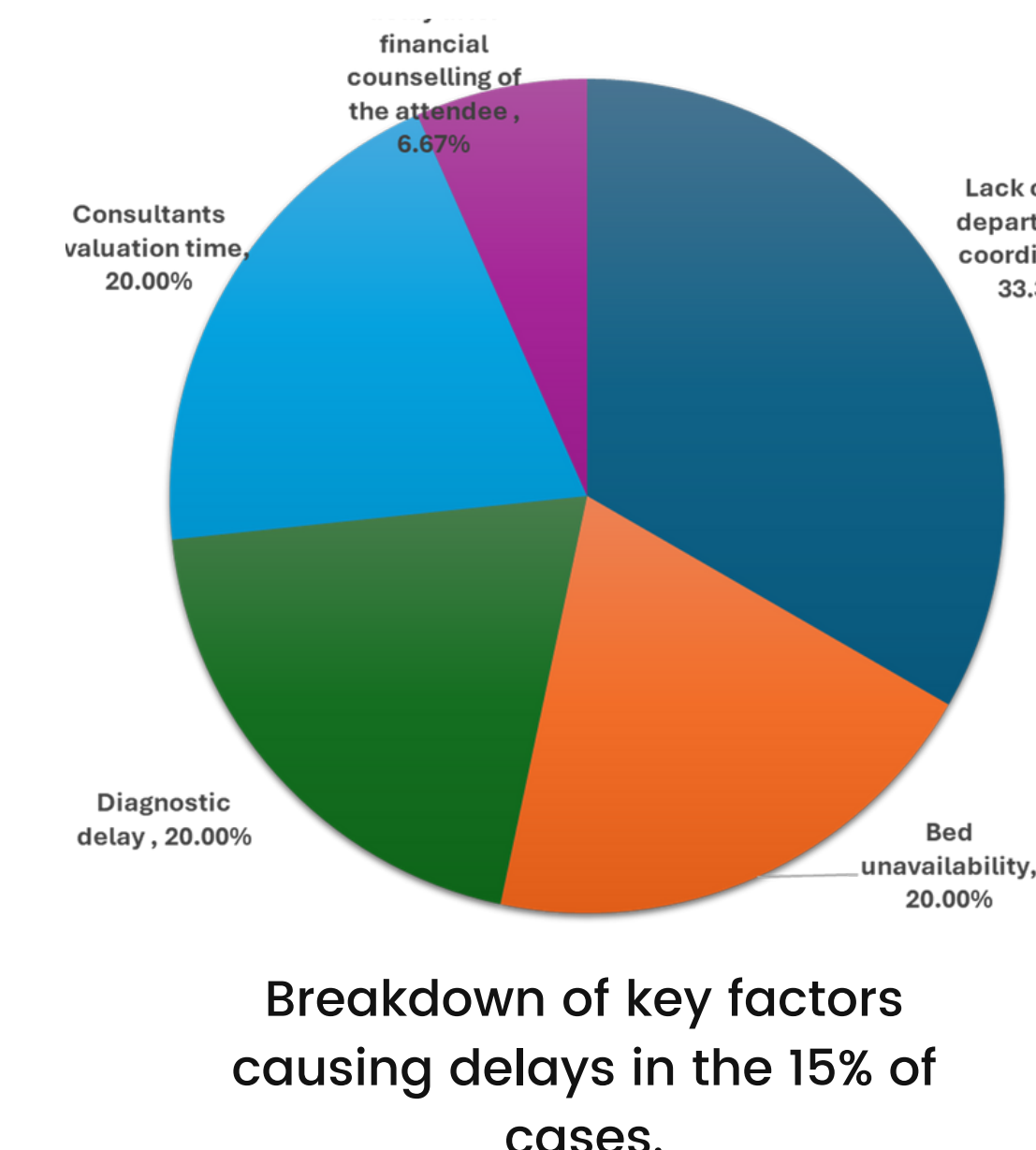
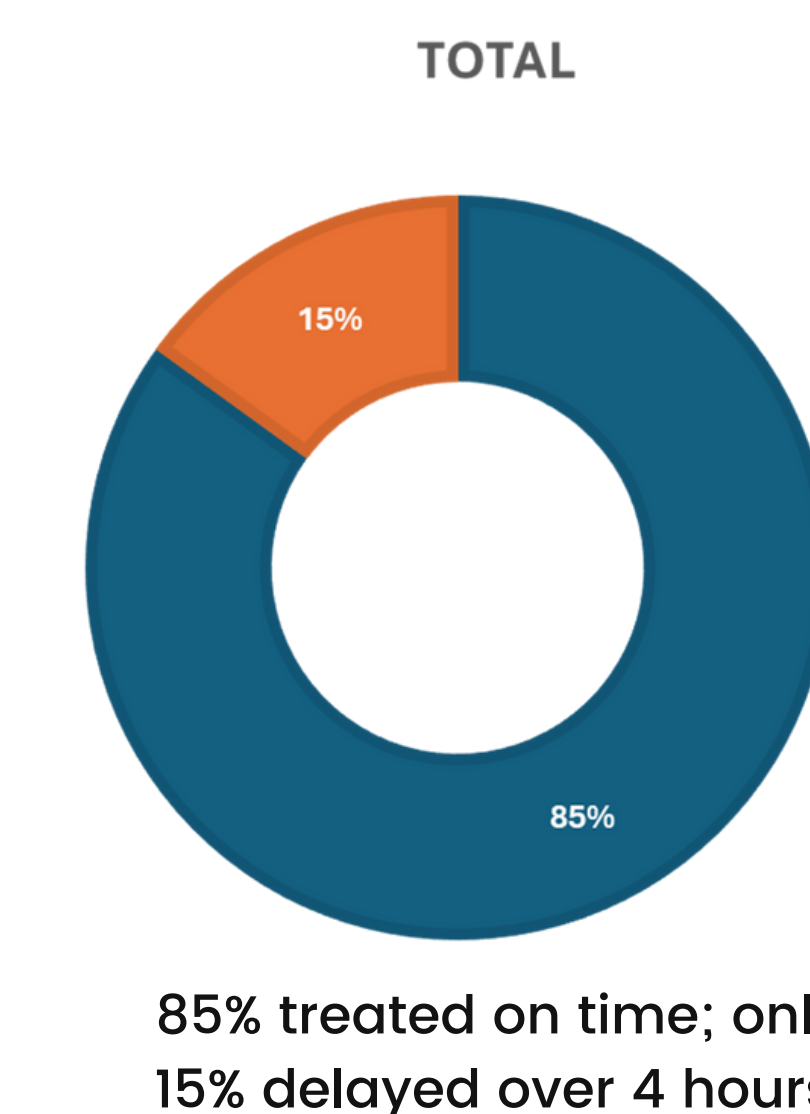
Workflow of ER



RBH, Jaipur



Analysis



Key Findings

- Number of Cases Audited: 100
- Compliant with ALOS SOP (≤ 4 hours): 85 patients (85 %)
- Exceeded ALOS SOP (> 4 hours): 15 patients (15%)
- Minimum Recorded ALOS: 25 mins
- Maximum Recorded ALOS: 6 hrs.13 mins
- Most Common Delay Reason: lack of interdepartmental coordination, approx. 33%
- Average ALOS time – 2 hrs. 50 min

Root Cause Analysis

- Lack of coordination between the ED front desk and wards/ICUs causes delays in patient transfer due to poor communication.
- Diagnostic delay in USG and MRI
- Delay due to consultant evaluation time

Suggestions

- Make bed updating a time-bound, auditable nursing KPI
- Designate accountable staff per shift to promptly update the tracking system within 10–15 minutes post-discharge, ensuring seamless bed turnover and expedited ER admissions.
- Real-Time Bed Availability Dashboard for the ED staff.
- To facilitate discharge or step-down care, use HIS to highlight IPD patients who have ALOSs that are above average for review.

Learning during internship

- Bridged academic knowledge with real hospital practices.
- Strengthened analytical, observational, and management skills.
- Gained exposure to hospital systems, workflows, and quality protocols.
- Helped identify future career interests in operations and quality.
- Built professional relationships and received mentorship from experienced healthcare professionals.

Usefulness of Internship

- Gained hands-on experience in hospital operations, especially in ED workflows and patient flow analysis.
- Developed data collection, analysis, and reporting skills using real-time clinical data.
- Understood SOPs, quality standards, and the importance of timely care delivery.
- Learned to coordinate with clinical staff and departments for smooth hospital functioning.
- Improved communication, project planning, and audit execution skills.

Theoretical Understanding VS Practical Exposure

THEORETICAL UNDERSTANDING	PRACTICAL EXPOSURE
In theory, we learned that effective communication and professional behavior among staff members significantly influence patient decisions.	Practical observations confirmed that appropriate communication and desired conduct positively impact patients' decision-making processes.
Theoretically, we learned that efficient resource utilization is essential for increasing productivity.	Practically, we observed how high-quality care can still be delivered to patients even in situations where resources are limited.
Theoretically, we gained knowledge about various research methods and study designs.	In practice, we applied this knowledge by implementing the study design in this project.

STRENGTHS

- 24x7 availability and readiness for emergency care
- Availability of multi-specialty consultants (cardiology, neuro, ortho, etc.)
- Dedicated trauma & critical care units

WEAKNESS

- Long patient waiting time during peak hours
- Overcrowding due to various reasons
- Inadequate communication between ED and in-patient departments

SWOT

OPPORTUNITIES

- Integration of AI-based triage and predictive analytics
- Expansion of fast-track zones for minor emergencies
- Implementation of patient flow dashboards for real-time status)

THREATS

- Legal and medico-legal risks due to critical patient outcomes
- High staff burnout and attrition
- Seasonal disease outbreaks leading to surge in volume