Enhancing Process Efficiency in ICU: A Data-Driven Audit Approach

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1. HISTORY & DESCRIPTION OF ORGANISATION

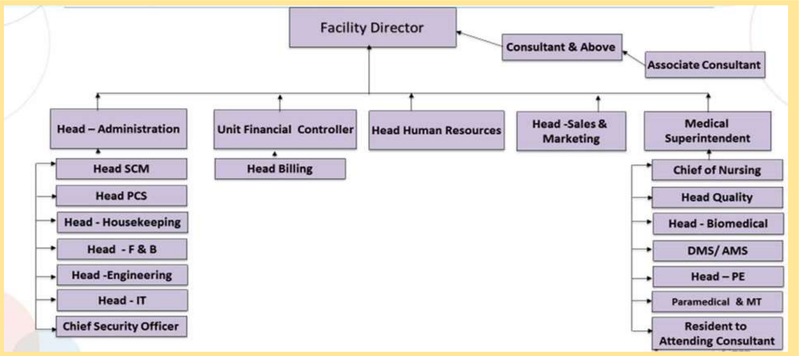
Fortis Hospital Manesar, Gurugram, is a multi-speciality hospital located in Sector 5, Manesar, with a maximum bed capacity of 350 beds. Fortis Healthcare Limited, part of IHH Healthcare Berhad, is a leading provider in India with 28 facilities, 4500+ beds, 400+ diagnostics centers in India, UAE, Nepal, and Sri Lanka. Listed on the BSE and NSE, Fortis focuses on delivering world-class patient care and upholding ethical medical practices, employing approximately 23,000 people and offering a comprehensive range of healthcare services.

2. VISION & MISSION

Vision: To create a world-class integrated healthcare delivery system in India, entailing the finest medical skills combined with compassionate patient care.

Mission: To be a globally respected healthcare organization known for Clinical excellence and Distinctive Patient Care.

3. ORGANISATION STRUCTURE



4. THEORETICAL EXPOSURE VS. PRACTICAL EXPOSURE

1. Gained theoretical knowledge of ICU protocols, audits, and efficiency metrics.
2. Learnt how to calculate Quality indicators like ALOS, occupancy, and SMR through examples.
3. Studied standard protocols from textbooks or models.

1. Real-time observation of how ICU procedures and processes are being implemented.
2. Actual computation & interpretation of ICU-specific indicators based on hospital data.
3. Active involvement in formulating the ICU SOP manual and aligning with ground realities
4. Direct interaction with hospital stakeholders for data validation and approvals.

PROJECT

OBJECTIVES:

- To understand ICU quality indicators for performance monitoring.
- To Audit documentation and continuity of care during patient transfers.
- To assess the timeliness of critical lab value communication to the ICU and other locations.
- To contribute to ICU SOP formulation to enhance patient safety and operational efficiency.

METHODOLOGY:

An Observational and Audit-Based Study Using Mixed Methods, i.e., Qualitative and Quantitative, to Evaluate ICU Documentation, Communication, and SOP Compliance

ICU QUALITY INDICATORS

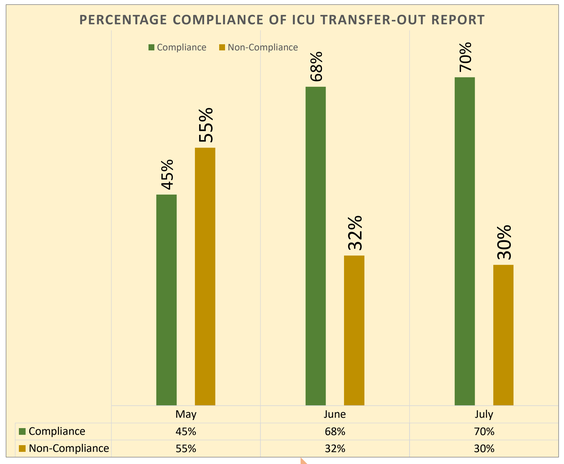
Compliance

- ALOS — Achieved: 2.17 days; Target: < 3-5 days
- ICU Mortality Rate — Achieved: 6%; Target: <10%
- Standardised Mortality Rate — Achieved: 0.39; Target: <1(good)

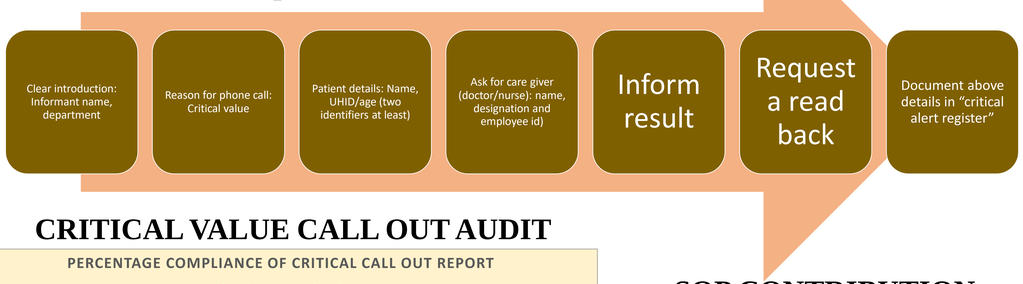
Non-Compliance

- ICU Occupancy Rate — Achieved: 65%; Target: 80-85%
- LAMA Rate — Achieved: 8%; Target: <2%
- Pressure Injury Incidences — Occurred: 4; Target: Zero

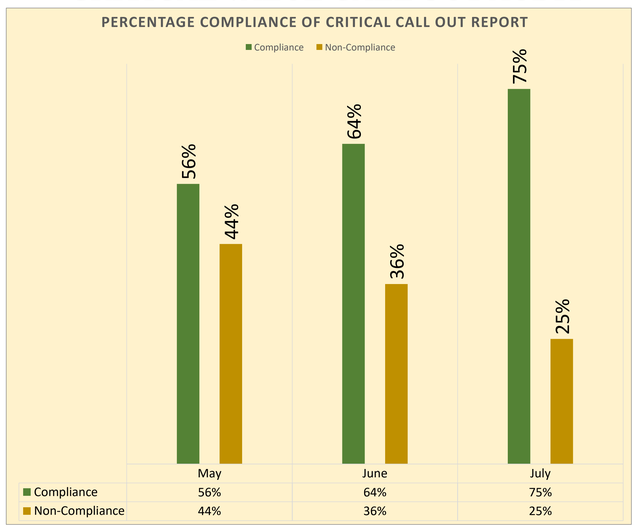
ICU TRANSFER OUT AUDIT



Procedure for telephonic information of Critical Values



CRITICAL VALUE CALL OUT AUDIT



SOP CONTRIBUTION

- SOPs for ICU Admission, LAMA, Death, MLC protocols, Transfers
- Involved in designing **ICU Quality Indicator Framework**, covering: Structure, process, outcome, safety, and managerial indicators
- Handover logs and consent protocols

References: Quality indicators for ICU: ISCCM guidelines for ICUs in India, **https://pmc.ncbi.nlm.nih.gov/articles/PMC11077517/**

5. GAPS IDENTIFIED

- No signature on the in-house transfer forms
- Non-completion
- wait in multiple cases to transfer the patient
- Miscommunication between duty doctors and nursing staff
- Critical value registers were not getting updated
- Critical values were not transmitting properly to the departments

6. SWOT ANALYSIS

Strengths
- Expert Doctors
- specialized codes (STEMI/FAST)
- Wide range of services

Weaknesses
- Incomplete documentation
- High attrition
- Untrained staff

Opportunities
- Capability to expand
- Tech-advanced services
- Nearby catchment monopoly

Threats
- Perception of high cost
- Rise in Competitors

7. CHALLENGES FACED DURING INTERNSHIP

- Convincing staff to follow documentation standards
- Delays due to RMO/GDA non-availability
- Time-bound data collection of multiple audits

8. LEARNING DURING INTERNSHIP

- Understand the problem quickly and come up with a solution
- Exposure to corporate work ethics
- Necessity of coordination among various departments
- Way of communicating what you want them to do.

9. SUGGESTIONS

- Regular Training for the Nursing staff, for improving process compliance
- Focus on avoiding the doubling of documentation
- Proper integration of digital platforms like EHR and HIS with the processes
- Strengthen shift coordination (nursing & GDA) through hiring
- Allocate SOP champions to ensure policy adherence by doing daily audits