Summer Internship Program 2025

Comprehensive Audit on Medication error in ICU's

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Brief history & History about organization-

Eternal Hospital

Eternal hospital established on 5th October 2013 this landmark healthcare institute was founded by **Dr. Samin Kumar Sharma** world renowned interventional cardiologist based at Mount Sinai Hospital, New York, USA.
The hospital is **JCI** (Joint Commission International) accredited and affiliated from The Mount Sinai Hospital, New York, USA. Hospital is also **NABH** & **NABL** accredited.
Eternal Hospital is an 250 bedded hospital and has state-of-the-art technology focusing on the specialities like Cardiology, Cardiac Surgery, Neurology, Neuro Surgery, Orthopaedic & Joint Replacement, Spine Surgery, Nephrology, Paediatrics, Gynaecology, Critical Care, Urology, Pulmonology, Gastroenterology, Diabetes and Endocrinology and many more.

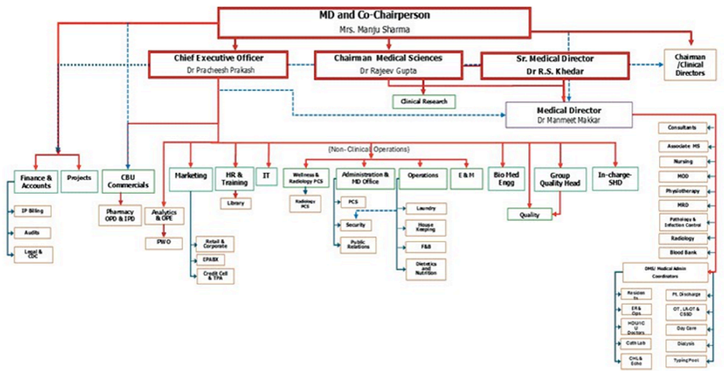
Vision-

A centre of excellence in area of medicine with highest international standard at affordable cost for the community around the globe.

Mission-

To redefine healthcare by improving outcomes and experience of patients through cutting edge research and personalized clinical care including innovative, preventive, diagnostic, therapeutic and rehabilitation services.

Organogram of Hospital-



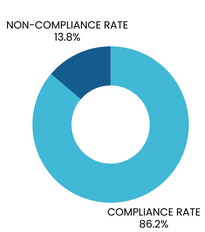
Key Objectives-

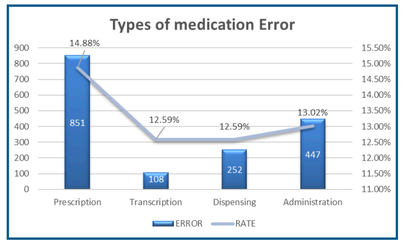
- To evaluate medication safety practices in ICU by auditing prescription, transcription, dispensing, and administration stages against national and international (JCI, NABH, IPSG-3) standards.
- To Identify medication errors, omissions and inappropriate prescriptions to reduce the risk of adverse drug events.

Methodology-

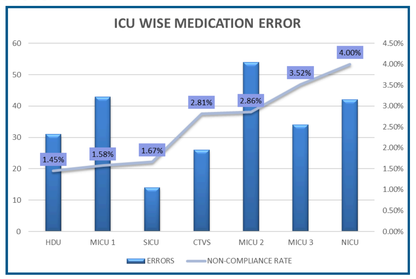
- Study Design
  - Observational Study
- Sample size
  - 100 Patient Files
- Inclusion Criteria
  - Patients admitted to ICU receiving three or more medications.
  - Receiving any High Risk or LASA medicine.
  - Patient having drugs on any stat or infusion order.
- Exclusion Criteria
  - Patients discharged within 24 hours.
  - Files with incomplete medical records.
- Research Tools
  - Self designed Audit sheet for medication management.

•Total no. of Opportunities- 12012
•Total no. of Non-compliance response - 1658
•Total no. of Compliance response - 10354
This shows that 86.2% of the sample responded "Yes" while only 13.8% responded "No."

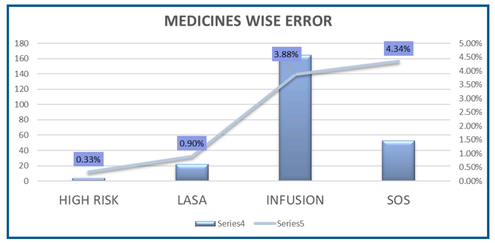




- Most medication errors occur during the prescribing and administration stages, indicating critical gaps in clinical judgment and medication delivery processes.
- Errors during transcription and dispensing are less frequent but still present, emphasizing the need for accurate communication and proper pharmacy practices.



- Medication errors show a rising trend across ICUs, with higher complexity in critical care areas like Neuro ICU contributing to increased risk.
- Neuro ICU settings demand heightened attention to medication safety due to the critical condition of patients and the complexity of treatments involved.



- Infusion-related medications account for the highest number of errors, highlighting a critical area for process improvement and vigilance.
- Although administered less frequently, SOS medications exhibit the highest error rate, underscoring the need for stricter control during urgent care.

SWOT Analysis

Strengths
- Improved patient safety.
- Helps in educating and training new healthcare staff.
- Encourages adherence to established protocols.

Weakness
- May be seen as additional paperwork by staff.
- Checklists need regular updates to stay relevant.
- Potential pushback from healthcare professionals

Opportunities
- Identifying area patterns & area of improvement.
- Continuous education & improvement of healthcare staff.
- Demonstrates a commitment to patient safety, improving institutional reputation.

Threat
- Possible legal consequences if checklists are not followed correctly.
- Ensuring all staff consistently use the checklist
- Possible legal consequences if checklists are not followed correctly

Difference practical exposure at SIP organisation and theoretical understanding-

- Hands-on experience in quality improvement projects
- Participation in real-world inspections, contrasting with theoretical learning
- Experiencing Day-to-Day Challenges and Problem-Solving in Real-Time
- Observing and understanding the actual workflows of various departments
- Communication and Teamwork

Key Learnings-

- Overview of all the departments of hospital &their working.
- Learned to conduct quality audits across various departments.
- Operational workflow of clinical and non-clinical departments. and their inter dependencies.
- Improved self communication skills confidence and through daily interactions.
- Explored the critical aspects of various department including PCS-OPD/IPD, TPA & Billing, Laundry, Food & Beverages, Marketing, CSSD, Emergency, OP & IP Pharmacy, Medical Record Department, IT, Projects, Engineering, Finance & Ambulance

Challenges Faced-

- Hesitation of staff in sharing relevant information.
- Balancing multiple tasks & duties.
- Transitioning from academic learning to unpredictable healthcare environment.
- Limited access to clinical area like OT & Cath lab

Suggestions-

- Patient/attendant entry and exit should be from different gates to manage the flow.
- Complete counselling of patients/attendants at the time of discharge.
- Appointing a health counsellor for PHC