IN PRACTICE

A104 ENHANCING SAFETY THROUGH SIMULATION: INTERDISCIPLINARY SIMULATION PROGRAMME FOR STAFF AT A NEW PAEDIATRIC DAY SURGERY UNIT

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Introduction: When opening a new healthcare space, simulation based clinical systems testing allows for potential patient safety threats to be identified [1]. Translational simulation can be used in this context due to the focus on improving patient care and healthcare systems through diagnosing safety and performance issues and delivering simulation-based intervention [2].

The creation of a new paediatric day surgery centre required an interdisciplinary simulation programme designed to familiarise staff with the new environment and equipment, test systems and processes, and enhance team working both within and between departments. Clinical scenarios added focus on human factors and non-technical skills alongside strategies for improvement [3].

Research question: How can a simulation programme help prepare for the safe, functional operation of a new day surgery unit?

Methods: The two day in-situ simulation took place at the new Paediatric Day Surgery Unit at Castle Hill Hospital. Participants included anaesthetists, operating department practitioners, scrub, theatre and recovery staff and paediatric nurses, alongside wider hospital teams including outreach, porters, ambulance services, and blood transfusion. The programme involved various clinical and non-clinical scenarios focusing on testing the environment, processes and team-working. All scenarios included debriefing and discussion to raise main learning points and areas for improvement and change.

Results: The simulation programme provided valuable insights and over fifty learning points or adjustments were identified. Patient safety threats highlighted included issues with emergency equipment location, familiarity and accessibility, unfamiliarity with novel equipment, availability of protocols for emergencies and transfer and communication between departments or teams. Emergency preparedness was significantly enhanced, with staff demonstrating increased confidence and competence in managing critical situations. Due to the in-situ nature of the simulation, many changes were able to be made on the day by the team directly impacted by them. Actions taken forward included further training sessions, equipment adjustments and process refinements.

Discussion: The results indicate that the simulation programme was instrumental in identifying and avoiding potential patient safety risks within a new paediatric day surgery unit. Staff gained familiarity with the new environment, tested medical and non-medical equipment, and validated systems and processes. Hands-on experience and interdepartmental involvement ensured a thorough understanding of the unit's layout and system functionality. The major conclusion is that simulation-based training is an effective strategy for enhancing patient safety, staff readiness, team working and operational efficiency in a new clinical setting. Future work will focus on implementing the identified actions and conducting follow-up evaluations to assess long-term impact.

Ethics Statement: As the submitting author, I can confirm that all relevant ethical standards of research and dissemination have been met. Additionally, I can confirm that the necessary ethical approval has been obtained, where applicable.

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