

Title: Identifying Gaps and Addressing Intern Anxiety during Pediatric Cardiology Floor Emergencies through Debrief and Simulation

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Background

Floor emergencies are commonly the highest source of anxiety among interns. The pediatric cardiology floor in particular cares for many high-acuity patients who have the potential for rapid decompensation (e.g. patients with LVADs, dysrhythmias, post-procedure, etc...). It is the setting for many frequent Rapid Responses Team (RRT) and occasional codes on the floor. At the same time, it is also the first setting for many interns in which they are the sole provider on the floor overnight and on the weekend. The impact of the distress surrounding these emergent situations are often overlooked and underestimated particularly among interns and residents.[1]

One of the most effective methods of RRT/code preparation lie in simulation practices and education. Previous studies have demonstrated significant improvements in comfort with leading real-life RRTs. [2, 3] Others have detailed the significance of practicing the first 5 minutes in a cardiopulmonary arrest particularly among pediatric trainees given the relative paucity of real-life events in the patient population.[4] While a simulation curriculum currently exists at the resident level, only 2 residents are selected at a time to lead 1-2 times per month and cases are not focused in cardiology. Given the high level of acuity and intern autonomy on the cardiology floor, a need for further practice remains.

While floor emergencies are inevitable, the way in which they are approached can be improved. Currently, there is not a set protocol in place for residents to debrief RRT and codes that occur on the floor. Studies have shown that timely debriefs aid residents in building resilience and decreasing burnout.[5, 6] The American Academy of Pediatrics (AAP) Section on Simulation and Innovative Learning Methods (SOSILM) has recently launched a focused project focusing on clinical event debriefings to improve team performance named the Who, What, When, Where, Why, & How in Clinical Event Debriefing (WHiCED).[7] This highlights the need for debrief education at the resident level.

This project will address and alleviate resident anxiety via simulation-based education and resident feedback. We will explore real-time RRT/code debriefs and practice simulated emergencies and responses. Outcomes will center on resident comfort level in caring for cardiac patients, increased understanding of barriers to efficient medical management, and more targeted approaches in resident education surrounding these barriers.

Aims

The primary aim of this project is to improve intern comfort with emergencies on the cardiology floor. In addition, we hope to identify barriers to efficient medical management during rapid responses/codes.

Methods

This will be a qualitative improvement project that will focus on pediatric and anesthesia interns who are rotating on the pediatric cardiology service. Prior to any intervention, participants will be surveyed both through qualitative survey responses and Likert scale ratings on the level of comfort of being the sole provider overnight as well as the possibility of needing to lead rapid and codes. Then after the implementation of real-time RRT/code debrief and education, interns will then be surveyed again in a similar method.

Study Subjects:

Pediatric and anesthesia interns rotating on the inpatient pediatric cardiology service.

Study Drugs/ Medical Devices:

There are no drugs or medical devices used as part of this study.

Conflicts of Interest:

I have no conflicts of interest to report.

Location of Study:

This study will take place in the Morgan Stanley Children's Hospital Cardiology Floor 6 Tower

Risks:

There are no major risks to participants of this study.

Potential Benefits:

The potential benefits to participants of this study will be better preparation for floor emergencies for interns.

Future Directions:

Through debriefs of real-time RRT and codes, we hope to identify gaps in resident education regarding emergencies. This will hopefully allow a more targeted approach for trainee education moving forward.

References:

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