

Escalation of Care Outside of the Pediatric ICU: Educational Needs from a Multidisciplinary Perspective

Background

Appropriate escalation of care outside the ICU results in better patient outcomes, including reduced cardiac arrests and hospital mortality. Focused education may improve timeliness and effectiveness of care escalation, however, dedicated education for different team member groups is often separate and inconsistent. Understanding overlapping areas of educational needs is important for development of effective interdisciplinary curricula.

Objective

To assess the learning needs for a pediatric escalation of care curriculum using a multi-disciplinary approach.

Methods

We performed a cross-sectional study at a quaternary care pediatric hospital. Participants included acute care floor members (residents, advanced practice providers and nurses), and rapid response team (RRT). A link to an anonymous electronic survey was sent to chief residents and nursing supervisors for distribution in Dec 2020. RRT members received the invitation directly. Survey items, developed and refined by clinical and educational experts for clarity and content, focused on domains of self-efficacy, communication and competence related to care escalation practices. Team member responses were compared using chi² analysis, significance defined as $p < 0.05$.

Results

A total 152 team members responded: 45 floor providers, 81 nurses and 26 RRT (response rate of 24%). All floor team members had experienced patient escalation events, but more nurses reported no dedicated teaching sessions (46% nurse vs 24% providers, $p=0.02$). Both floor providers and nurses expressed confidence in recognizing a patient in need for escalation (78% and 86% respectively, $p=0.22$). However, 58% of providers reported experiencing discomfort with escalating concerns, while only 21% of nurses reported the same ($p < 0.001$). Nurses were also more likely to immediately escalate concerns compared to providers (67% vs 40%, $p=0.004$). Both groups reported that their decision to escalate is influenced by the person to whom they are escalating (84% providers and 77% nurses, $p=0.29$) and often had discomfort in expressing disagreement with their supervisors. (48% providers and 41% nurses, $p=0.45$). Floor providers, nurses and RRT members most commonly reported effective communication between floor team members (78%, 74% and 54% respectively, $p=0.08$) and early recognition by bedside team (71%, 70% and 58% respectively, $p=0.45$) were always contributory to successful escalation. Floor team members less frequently identified trust between bedside team members as a contributor (48% nurse, 36% providers, $p=0.17$). All three groups were less likely to believe systems-based issues were as contributory, with no significant differences between groups (45% for adequate staffing, 35% for adequate resources, 16% automatic triggers). Most respondents indicated some interest in interdisciplinary escalation of care educational exercises, with on-shift preferred over off-shift timing (96% vs 76%).

Conclusion

Our results suggest pediatric acute care team members often care for patients requiring escalation, however, dedicated education on escalation of care varies based on clinical role. Important areas identified by multidisciplinary stakeholders for educational focus included: early recognition of patient deterioration and effective communication between team members as potential current barriers to effective escalation of care, in addition to possible adverse hierarchical influence. Interdisciplinary approach to education is considered valuable and should be considered to improve clinical care and patient outcomes.