Creating Healthy Work Environments VIRTUAL 2021

Implementation of an Interdisciplinary Huddle to Improve Emergency Response

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Purpose:
When responding to emergencies in a large academic medical center, the likelihood of the same team working together more than once is rare. Huddles provide an opportunity for brief, organized discourse and yield improved teamwork, situational awareness, role identification, communication, and patient safety (Chapman et al., 2020; Maruthappu et al., 2016; Newman et al., 2016; Rodriguez et al., 2015). The Critical Care Outreach Team (CCOT) is comprised of specialized nurses who serve as designated leaders during emergency responses. Previous emergency response data identified needs for leadership and role identification, preceding this CCOT initiative to increase team cohesion and improve patient care.

Methods:
International collaboration afforded a prototype Emergency Response Huddle (ERH) successfully implemented by CCOTs throughout the United Kingdom. The CCOT summoned stakeholders from medicine, respiratory, and pharmacy to develop a strategy. Together, the team decided ERH would be limited to five minutes and held in a convenient location to promote attendance. After the proposal received approval from leadership and the hospital's emergency resuscitation committee, CCOT educated all interdisciplinary partners and determined a go-live date. Pre- and post-assessment measures included perceived knowledge of role identification, patients at risk for deterioration, influence over emergency response, and confidence in leading a response.
The ERH meets twice-daily allowing responders to identify roles, assign responsibilities, and exchange contact information. Participants discuss acute care patients at risk for deterioration and availability of intensive care unit (ICU) resources.

Results:
The CCOT has conducted approximately 1,400 ERHs since September 2019. Attendance is tracked to measure sustainability, revealing consistent participation among disciplines (Chapman et al., 2020). 72.8% of participants agreed ERH improved emergency responses. Participants reported the team leader was more easily identified post implementation, $t(68)=2.606$, $p=.01$. Likewise, participants indicated improved understanding of respiratory therapy (RT) and CCOT roles, $t(63)=2.6881$, $p=.009$. Analysis of variance revealed stronger self-perceived influence over emergency responses for CCOT, RT, and critical care physicians than general medicine physicians ($p<.001$, $p<.001$, $p<.001$) and ICU nurses ($p=.0015$, $p=.04$, $p=.001$). Pharmacists perceived greater influence than general medicine physicians did ($p=.027$). Additionally,

ANOVA revealed higher levels of confidence in leading codes among CCOT nurses and critical care physicians ($p<.01$).
Positive feedback was received across disciplines. As one CCOT nurse indicated, “the ERH has helped to expedite organized care during emergencies. Knowing other members of the response team has helped us hold each other accountable for maintaining best practice and delivering safe care.” This sentiment was corroborated by a pharmacist who responded, “I think ERH has strengthened [the hospital’s] response to critical patients.” Physicians also exalted ERH, “the huddle has increased teamwork and familiarity... which always increases fluidity of a response in an emergency.”

Conclusion:

Implementation of ERH has positive implications for healthy work environments and patient safety. Improved interdisciplinary communication, role clarity, and leadership during cardiac arrests are direct results of ERH and are congruent with high-performing hospitals (Mallamothu et al., 2018; O’Donoghue et al., 2015). Plans for further research include analysis of time from response activation to time of intervention, and inclusion of additional disciplines in ERH such as anesthesia.

Title:

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Keywords:

Critical Care Outreach Teams, Emergency Response and Interdisciplinary Huddles

Abstract Summary:

This session will provide attendees with an understanding of how a nurse-driven, Interdisciplinary Emergency Response Huddle can improve care of vulnerable patients during acute deterioration. Evidence-based need, planning, implementation, and evaluation will be discussed as well as implications for nursing practice.

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Author Summary: Holly has over 20 years of critical care experience and is currently the Team Lead on a Critical Care Outreach Team responsible for emergency response in a large academic medical center. She is pursuing her PhD and studying the relationship between culture of safety and delayed rapid response activation. Holly is a founding and active member of the Midwest Society of Rapid Response Systems, which promotes Critical Care Outreach as an evolving nursing specialty.

Second Secondary Presenting Author
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Author Summary: Heather practices as a critical care outreach RN with certifications in critical care and stroke care. Through actively building positive relationships with attending physicians, an idea for unique collaboration was created. This partnership specifically highlights the experiences in pairing expert nurses and medical students as they are emerged into the acute hospital setting as novice physicians.

Third Author
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Author Summary: Jen has been a nurse for 13 years with one year on telemetry, ten years in a surgical/trauma ICU, and 1.5 years as a trauma coordinator. Since October 2019 she has been working at Rush University Medical Center as a CCOT nurse.

Fourth Author
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