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Converting Serious Safety Events into Educational Opportunities

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Converting serious safety events into educational opportunities

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Background

- Over the past year, the Associate Director of the Simulation Center worked with the EM Quality and Safety Director to identify serious safety events (SSE) and critical incidents.
- As part of the case review, an informal root cause analysis (RCA) was conducted and root causes related to safety risks or breakdowns were identified.
- System vulnerabilities were woven into simulation cases for hospital code team training.
- Cases focused on skills and attitudes that would help prevent, capture, or mitigate similar vulnerabilities while providing clinical care.

Objectives

To intentionally translate lessons learned from SSE into changes in clinical practice through the use of RCA followed by simulation.

1. Appreciate the importance of root cause analysis in serious safety event reviews
2. Recognize simulation approaches after RCA can prevent similar events
3. Recognize safe environments for learners can promote safer clinical practices

Instructional Methods

- One case patient suffered cardiac arrest due to air embolism after an internal jugular central venous catheter removal.
- Team debriefed in how they relayed information to code leaders, communicated key findings, and updated the team during the code.
- Second case involved hospital wide obstetric (OB) alert call system, created after suboptimal recourses were available for the care of a critical OB patient.
- Debriefed on interdisciplinary team dynamics, systems issues, and limited resource environments.
- Evaluation clinical care as well as the team behaviors that avoid the system vulnerabilities that were built into the case.

Outcomes

- A total of 71 learners submitted the survey.
- The learners appreciated the debriefing opportunities, medical education, and high functioning team-based skills.
- 100% of learners agreed that instructors established an engaging and safe learning environment, conveyed a commitment to respecting learners and understanding their perspectives, and were prepared to discuss medical knowledge and technical skills required for the case.
- 100% of learners agreed that they were encouraged to think aloud, allow people to understand their thought process, and were given an opportunity to 'self-critique' their own performance.
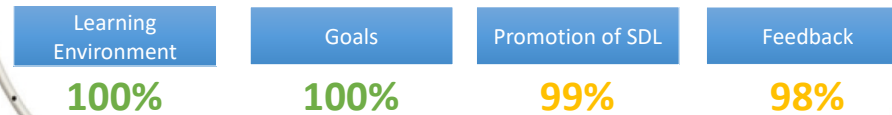
Discussion

- The process of identifying SSE and working to understand the associated root causes of these events can be integrated into simulation cases
- Learners train both on the clinical care, while also practicing behaviors that may address risks to safety.
- This allows a safe environment to learn from past lessons and promote a future culture of safety.

Next steps

- Continuing work with quality and safety educators to develop meaningful simulation cases.
- Continuous review of these events and simulation cases will be important to track those providers who have experienced the cases.
- Evaluating how these providers uses these learned skills in their practice will be important.
- Following up with how providers teach their peers regarding their simulation experience will be critical.

Learning Environment	Goals	Promotion of SDL	Feedback
100%	**100%**	**99%**	**98%**

"Great discussion and debrief!"
"Content was believable and in the moment"
"Feedback was concise and informative"

References

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