

Project Submission:
2009 Delaware Valley Patient Safety Award

NAZARETH HOSPITAL

“Crisis Resource Management Training”

Crisis Resource Management Training

Abstract

In response to the need to improve patient safety in healthcare facilities where the potential for urgent medical crises exists and often does occur, our organization developed an educational program to train healthcare workers methods to improve communication, teamwork, and resource utilization during in-house medical emergencies for the benefits of timely, accurate, and safe patient care under the most demanding circumstances. Medical crisis situations include any deterioration in a patient's physiologic status that requires the swift and timely intervention by a healthcare provider. The purpose of the program we implemented was to improve the crisis management skills of student registered nurse anesthetists in the operative setting. This program was based on the principles of Crew Resource Management that were developed by NASA in assisting commercial aviation to improve safety in the wake of multiple catastrophic events that were attributed to a lack in crew communication and resource utilization. The principles involved in this training program have the potential to be widely disseminated to all healthcare workers who are responsible for direct patient care. Our organization developed a six-hour simulation-based educational program that included didactic lecture, participant immersion in simulated crisis scenarios, and faculty guided debriefing. This program was implemented in June 2009 with the support of the staff and facility. Evaluations provided by course participants are extremely positive and have been in support of the continued and expanded presentation of the program.

Goals

- Improve awareness of and response to changes in a patient's physiologic status.
- Improve interdisciplinary communication during medical crises.
- Improve resource awareness and utilization during medical crises
- Immerse course participants in a simulated medical crisis scenarios in order to allow them to gain perspective regarding effective and ineffective strategies of communication, team coordination, and resource utilization.

Baseline data

Through a thorough literature search our organization determined a need to teach the non-technical (behavioral) aspects of crisis management. Recently a national survey of nurse anesthesia training programs noted that despite

evidence that indicates positive benefits from teaching the “shared mental model” of Crisis Resource Management (CRM), only about half of all programs present these topics. While data regarding other health profession has not been determined, the need for clear thinking and timely, effective action in a medical crisis has obvious benefits for our patients.

Interventions

- **Utilize a central group of trainers. (Non-unit based)**
- **Simulation-based educational offering in crisis management**
- **Small group interactions (3-6 participants per group)**
- **Debriefing session guided by instructors. (Video if possible)**
- **Recurrent training**

Results (Per surveys)

- **Improved confidence in crisis situations**
- **Improved time to recognition of changes in physiologic status**
- **Acquisition of new communication strategies.**
- **Improved awareness and utilization of resources.**
- **Awareness of the impact of stressors on clinician performance and strategies to manage stress in a crisis.**

How this initiative may be replicated throughout the region

- **Provide initial training to key personnel through collaboration with facilities that possess simulation resources.**
- **Develop a train the trainer program to educate key personnel in each facility to assist with the dissemination of the CRM program.**
- **Recommendation: Integration of CRM into required certification training (i.e. ACLS, CPR)**

References

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