



Physicians Caring for Texans

TexMed 2017 Clinical Abstract

Please complete all of the following sections and include supporting charts and graphs in this document. Submit a total of two documents - this document and the Biographical Data and Disclosure Form to posters@texmed.org by midnight March 17, 2017.

Procedure and Selection Criteria

- Submissions not directly related to quality improvement or research may be accepted and should follow the standardized format outlined below. Content should enhance knowledge in the field of clinical care and be relevant to a given patient population.

PROJECT NAME: Emergency Equipment Open House in the Surgical Setting

Institution or Practice Name: University of Texas MD Anderson Cancer Center

Setting of Care: Hospital Based Operating Room

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Other Members of Project Team: January Tsai, MD; Teresa Moon, MD; Mona Sarkiss, MD, PhD;

Is the Primary Author, Secondary Author or Member of Project Team a TMA member (required)?

Yes No

Please provide name(s) and their role in the project:

TMA Member Name: Charles Cowles- Coordinator, Jose Soliz- Instructor/ Advisor; January Tsai- Instructor; Teresa Moon-Instructor; Mona Sarkiss-Instructor

TexMed Poster Session Specialty Subject Area: Please check if these apply.

~~Enhanced Perioperative Recovery~~

Disaster Medicine and Emergency Preparedness

Clinical

Background (15 points max): Describe the purpose for sharing the content. What caused this subject matter to be approached? Why is this content important to share? What is the potential impact if this content is not shared?

Physicians are often asked to use emergency equipment or other seldom used, unfamiliar critical devices when faced with crisis situations. The authors coordinated an open house educational event whereby all operating room team members participated in education centered around emergency equipment. The open house educational event was held on site in the operating suites. Many organizations are emphasizing the use of drills; however without adequate preparations, drills become a frustrating and negatively perceived experience. Site accreditors require education in disaster preparedness and crisis response. Exercises such as these fulfill these requirements without the need for external education consultants and thus creating monetary savings. The open house for emergency equipment turned out to be a cost-effective means of education with strong positive evaluations. This style of crisis preparedness activity can be easily adapted to any size or type of facility at a minimal cost.

Intended Stakeholders (15 points max): *Identify those individuals, organizations, or interest groups that could be potentially impacted by this information or benefit by obtaining this information.*

Any clinical practice setting can benefit from familiarity with emergency or seldom used equipment. Private offices can periodically review emergency action plans and create their own hands-on sessions lead by physicians to provide an overview of kits such as cardiac arrest kits, anaphylaxis kits, and even practicing how EMS response would be handled. Larger groups can involve more departments in their training and also review all emergency operations and “break the seal” of crash carts to allow greater proficiency in their use. In other words, this activity can be scaled for a small practice to a large academic center.

Description of Accomplished Work (25 points max): *Provide an overview of the work that was accomplished, including any specific methods, tools or techniques. Also, include any milestones or key accomplishments. Note charts, graphs and tables here and send as addendum with abstract form.*

Our group was able to lead and coordinate an educational activity in the operating room where participants could get hands-on experience with emergency equipment. Stations were set up and staffed by physicians, nurse anesthetists, and OR nurses. The stations included hands-on time with education of fire extinguishers, jet ventilation, laser safety, malignant hyperthermia, emergency pacemaker, code crash cart, defibrillator use, emergency intercom system, and emergency phone operations. A post participation survey was done and 85% (60) of the participants stated the exercise was very helpful, 11% (7) replied that it was helpful and only 4% (3) of the 71 survey respondents thought it was not educational. As for individual stations, over 85% of participants stated they learned new material at the stations for malignant hyperthermia, emergency pacemakers, and use of the emergency intercom. All of the other stations had at least a 71% favorable rating for new information presented. Overall 88% of participants requested similar sessions in the future. Additional comments and suggestions were to have this type of education more often and at a set interval. Many comments from the anesthesiology department suggested smaller and more focused groups, while the OR nurses and technologists appreciated having a more collaborative multidisciplinary team effort.

Timeframe and Budget (20 points max): *Provide the start and end dates for the work along with any financial implications that were incurred due to the work accomplished. Note charts, graphs and tables here and send as addendum with abstract form.*

The activity was carried out during weekly dedicated education time, so no added expense was incurred. Coordination between nearly 200 anesthesiology staff and 300 operating room nursing staff began about 4 months prior to the event. Arrangements were made for the training with fire extinguishers and also to re-seal the carts and secured equipment after demonstration. The evening and night shift were also provided a training session in the evening, but due to regular operations and fewer people, the training took place in 3 operating rooms which were unused due to renovation. We do realize that similar activities may have personnel expenses in surgery centers or community hospitals that might not have an allocated down time for education. The activity cost should be weighed against the associated costs of experiencing an un-anticipated event and having a bad outcome. Bad outcomes can be associated with non-reimbursable costs and also the decreased revenue resulting from negative publicity. Bottom line, this can be a minimal cost educational activity with a high yield.

Intended Use (25 points max): *Describe how this information could be used moving forward to impact patient care.*

The emergency equipment open house and familiarity session was well received. In addition to being able to familiarize themselves with seldom used equipment, the operating room nurses and technicians were appreciative that physicians and nurse anesthetists took the time to engage in an educational session which included them. The session also creates a baseline familiarity with equipment so that future drills and scenarios can be implemented. Overall the exercise fostered teamwork and helped to fill in educational gaps, but most importantly the end result was an increased comfort level with use of equipment which could one day translate into an improved response to a crisis situation involving a patient.