

The First 4 Minutes Drill (FFM) **Innovative Simulation-Based Team Training** in the Ambulatory Care Setting

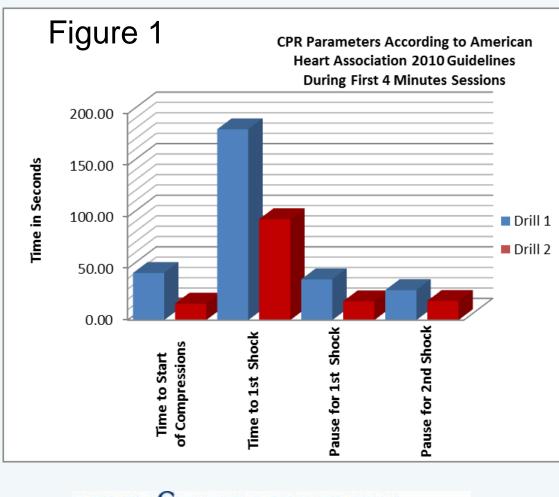
Penn State Hershey Health System

Introduction

Poor teamwork and skills deficits contribute to adverse outcomes in all settings, even for experienced providers. Ambulatory care staff must always be ready to respond to low volume, high-risk emergencies. We implemented FFM (First 4 Minutes) simulation-based drills to provide training in effective teamwork for ambulatory care emergencies. Sessions took place onsite using emergency equipment that would normally be available.

Methods

FFM is experiential learning using simulated emergencies that require teamwork for success. Unlike traditional team training, FFM can occur in any setting. Participants are thrust into a timesensitive event and measurable outcomes for critical interventions are recorded. Nurse Educators for 63 ambulatory care sites partnered with Simulation Center staff to implement FFM. A manikin with feedback software was used to measure time to start of compressions, time to first shock, compression pauses for shocks, and compression quality. Participants debriefed themselves, collaborating on team strategies to problem-solve and improve care on their own. A facilitator was there to guide the discussion as needed.



PENNSTATE HERSHEY Clinical Simulation Center

Results

Over a 1-year period, 309 multidisciplinary staff participated in 42 drills. During the drills, all groups improved standards of care for effective team communication (Table 1) and chest compressions (Figure 1). Staff reported that FFM enhanced their teamwork by encouraging them to communicate during crises, promoted competence in the use of emergency equipment, and improved appropriate notification to EMS.

Bringing Team Communication & CPR Practice to the Ambulatory Care Setting

 Table 1. Teamwork Dynamics Improvements Noted in All First 4 Minutes Drills in Ambulatory Care Sites
According to American Heart Association 2010 Guidelines

IMPROVEMENT IN TEAM COMMUNICATION NOTED IN ALL AMBULATORY CARE SITES FROM DRILL #1 TO DRILL #2 OF EACH FFM SESSION				
Teamwork Concepts	CLEAR MESSAGES	KNOWING ONE'S LIMITATIONS	KNOWLEDGE SHARING	CONSTRUCTIVE INTERVENTION
Team Member and Team Leader Role Expectations	TEAM MEMBERS voice problems and difficulties TEAM LEADER requests are directed to specific individuals	TEAM MEMBERS ask for help when struggling with a task TEAM LEADER asks for advice from all team members	TEAM MEMBERS speak up with relevant information TEAM LEADER provides support to team members	TEAM MEMBERS positively coach each other to maintain standards TEAM LEADER recognizes ineffective care and takes corrective action



First 4 Minutes Drill at Ambulatory Care Site



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Discussion

Participation in FFM drills is now required every two years for nurses, resident physicians, and respiratory therapists. Support staff and others who might respond to patient care events are encouraged to participate to reflect a real clinical team. Anecdotal reports after live codes have indicated that participation in a FFM drill improves response times, response effectiveness, and team communication.

COMMENTS FROM MULTIDISCIPLINARY AMBULATORY CARE STAFF AFTER PARTICIPATING IN A FIRST 4 MINUTES DRILL

"Awesome training. Might help to do every so often to keep up our skills."

"There is always room for continued improvement of communication."

"Very helpful, made me more apt to help and be confident in my skills."

"Great activity for learning strengths and weaknesses."

"Even though I'm not clinical staff, there are still things I can do to help!"

"Very helpful, I would support this course for everyone."

"This should be repeated at least yearly to aid in entire staff involvement."

Conclusions

FFM is now a quality improvement safety initiative that is standardized across all ambulatory settings. We demonstrated that FFM can be carried out onsite with no risk to patients or disruption in patient flow. Moreover, ambulatory staff recognized the importance of talking to each other during patient crises.





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First 4 Minutes Drill at Ambulatory Care Site

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