

Impact of Video Education to Train Trauma Staff

Nick Redilla¹, Scott Isenberg², Jeremy Levin³, Ashley Meagher³

¹Indiana University School of Medicine; ²IU Health Methodist Trauma Services; ³Division of Acute Care Surgery, Department of Surgery, IU Health Methodist Hospital, Indiana University School of Medicine

Background:

Management of trauma patients is challenging and requires a coordinated team effort inside a crowded trauma bay. Errors can result in disastrous consequences. Trauma is the leading cause of death in the United States of people younger than the age of 45. Maintaining a cohesive team dynamic is paramount, but academic medical centers must deal with the constancy of rotating staff and learners that may be unfamiliar with resuscitation workflows. This project aims to improve the trauma resuscitation process by identifying the gaps in knowledge and process through auditing of the highest-level trauma activations.

Methods:

This is a pre- and post-intervention prospective cohort study of adherences to a standardized trauma resuscitation process through the use of an educational video at a busy level 1 academic trauma center. Process improvement resulting from the educational video will be assessed quantitatively through in-person and video review audits using a pre-defined checklist. This checklist scores the crucial elements highlighted in the educational video that must be addressed in each trauma resuscitation. The goal of this project is to illustrate improvement of the trauma resuscitation process through the comparison of trauma resuscitations audited before and after implementation of the training video.

Results:

The most commonly observed deficits have been related to the donning of correct personal protective equipment (PPE) and communication. The most common PPE left out was eye protection and hair covering. Shortcomings in communication include failure to practice 1:1 communication and the performance of adequate pre-briefs.

Potential Impact:

This study will establish a feasible method of improving the trauma resuscitation process at IU Health Methodist Hospital. Potential next steps of this study's conclusions include improving the trauma resuscitation process at other Indianapolis trauma 1 centers outside of Methodist Hospital, and the implementation of similar video education training for additional team-based procedures.