

Cognitive Skills Training for Emergency Medical Technicians and Paramedics – An Interactive Demonstration

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ABSTRACT (TO BE INCLUDED IN THE CONFERENCE PROGRAM)

Emergency Medical Services (EMS) personnel are a critical, yet under-researched, component of the complex healthcare work system. No two emergency calls are the same. EMS personnel must demonstrate adaptability, flexibility, and rapid decision making in exigent situations. Additionally, the environments EMS personnel work in are often poorly controlled, potentially dangerous, and resource-constrained (Bigham et al., 2012). Cognitive skills, such as sensemaking, decision making and problem detection, help practitioners apply their technical knowledge and skills to complex and dynamic situations (Nemeth, Cook, & Woods, 2004; Johnson, et al., 2017).

Through cognitive interviews, our research project identified three learning objectives that we integrated into a scenario-based cognitive skills training program: (1) sensemaking based on pre-arrival information and patient data gathered on the scene; (2) navigating challenging social interactions with patients; and (3) deviating from established protocol when situational factors require it. We created several training scenarios to address these cognitive skills. This 90-minute workshop will provide attendees with an overview of the cognitive skills training approach (ShadowBox; Klein & Borders, 2016) and a description of the training development for EMS. The primary activity will be an interactive demonstration of a scenario that portrays the specific challenges of EMS decision making. The methodology of our approach is detailed in Figure 1. The exercise will be co-presented by an expert in scenario facilitation and an EMS subject-matter expert.

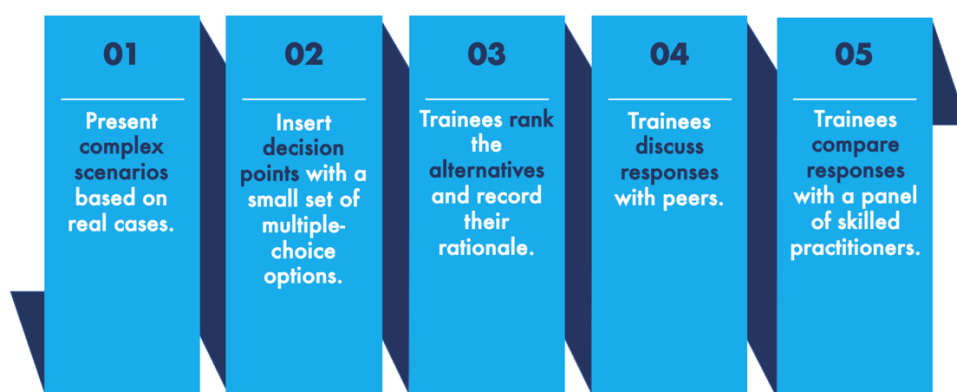


Figure 1. Five steps of ShadowBox facilitated training.

Workshop attendees will gain an appreciation for how EMS practitioners approach challenging decisions such as evaluating patient decision-making capacity, employing effective communication techniques, and understanding legal and ethical obligations when patients refuse care. Attendees will also learn about the development process and potential benefits of an innovative, scenario-based training methodology for improving cognitive skills, which can be applied to similarly challenging domains. Through structured experience, discussion and analysis, attendees will come to appreciate the decision-making complexities faced by EMS clinicians associated with these challenging situations while maintaining professional standards and protecting patient rights.

KEYWORDS

Training; Emergency medicine; Cognitive skills; Expertise.

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