## **UC Irvine**

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### **Title**

TacMed1: An Innovative Education Program in Tactical Medicine Education

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important skill for medical students to learn, as emergency medicine (EM) requires proficiency in this field.

**Educational Objective:** The objective of this study is to determine effective methods of teaching SDOH to students pursuing EM.

Curricular Design: In this study, 4th-year medical students rotating in the ED identify and interview patients with chronic illness regarding SDOH. They focus on social and other aspects of healthcare (whether they have a primary doctor, insurance, home). They follow the patient's journey through the ED shift i.e., chart time of arrival to bed, tests administered, and if the patient gets admitted. They then discuss a proposed plan of follow-up transition care with the ED Case Manager/Social Worker. Throughout the 4-week rotation, the students check on the patient to see if they followed up with their primary doctor/ specialist or returned to the ED. Students then complete a REDCap post-exercise survey. It will include written reflections, where they outline how they will apply this knowledge to future patient interactions. A thematic analysis of the reflections will be completed, with the goal of evaluating the effectiveness of this instructional method.

Impact: SDOH impacts patients' health, and EDs serve as the front line for medical care in underserved communities. A method of incorporating SDOH is by highlighting these issues in students' EM sub-internship curriculum and assessing how they apply this knowledge in the future. Thus far, the students have responded enthusiastically - their reflections expand on their experiences interviewing patients about SDOH and working closely with Social Work/Case Management to arrange follow-up care. They collectively are grateful for the opportunity to take part in this exercise.

# 37 Stop, Think, Plan, Reflect

Taylor Ingram, Yuliya Pecheny, Lisa Lincoln, Ryan Bodkin, Julie Paternack, Lindsay Picard, Michael Lu, Jason Rotoli, Flavia Nobay, Linda Spillane

Introduction/ Background: As residents progress in training, many develop a framework for managing uncertainty in caring for critically ill patients. Formal strategies to manage uncertainties are not always formally taught to novices. Developing such skills may aid the novice when they become "stuck" due to gaps in knowledge, skills, or experience.

Educational Objectives: 1) Implement "Stop, Think, Plan" as a cognitive and behavioral intervention during simulation workshops as a structured tool to approach uncertainty in the care of critically ill patients. 2)Reflect on scenarios through group discussion to understand individual and team thought process during the simulation.

**Curricular Design:** The "STOP, THINK, PLAN" technique was implemented during a PGY1 simulation workshop to teach

a strategy that anticipates and plans for adverse outcomes when caring for critically ill patients. Residents working in teams of 3-4 were presented with 3 unstable patient scenarios (septic infant, complete heart block, and status epilepticus). Scenarios were paused at critical junctures and teams were asked to "STOP." Each resident was asked to "THINK" of 3 potential adverse events, and what they would do if these events occurred. Teams were given time to discuss concerns and "PLAN" next steps together. Simulation was resumed. Post-exercise debrief focused on resident reflections in the "STOP" and "THINK" portions of the simulation identifying knowledge deficits. Post-case reflection was added to encourage self-study and improvement in identified areas.

Impact: The "STOP, THINK, PLAN" technique encouraged anticipation and planning for complications, as well as reflection and active learning. Subjectively, PGY1 participants felt that this approach was a helpful educational technique and potentially useful in the clinical setting. This technique will be instituted in upcoming workshops for all PGY levels. We did not track resident self-directed learning but will do so in the future.

# **38** TacMed1: An Innovative Education Program in Tactical Medicine Education

Lindsay Wencel, Linh Nguyen, Reshma Sharma, Delaney Rahl, Cesar hernandez, William Jimenez, Robert Woodyard, Jesus Roa, Chadwick Smith, Jay Ladde

**Background:** Sandy Hooks, Boston Marathon, Pulse Night Club, Parkland, Las Vegas, Uvalde. These tragedies also brought to the forefront a growing need in our communities. With mass shootings and other MCIs happening almost every day, we as emergency physicians have to equip ourselves to respond. Goal: To prepare EM residents for real-life scenarios involving law enforcement tactics and associated unique injuries.

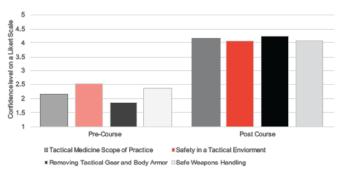
**Objectives:** 1. Teach effective hemorrhage control in austere environments 2. Display proper safe weapons handling 3. Demonstrate proper tactical equipment use and removal for medical assessment 4. Demonstrate tactical medical care and handoffs.

Curriculum: Deficit: Although there is faculty and resident interest in tactical medicine, our program had no formal residency experience related to this topic. Design: The course began with a brief introductory lecture by medical staff and SWAT operators covering topics including tactical zones of care, the THREAT approach, MARCH care, and casualty evacuation. The session was then broken into 3 stations covering bleeding control and tourniquet use, safe weapons handling, and tactical officer equipment use and removal. The final portion of the course included live-action high-fidelity case scenarios of providing care in the Hot, Warm, and Cold zones.

Impact: Result: Of the course participants, 83.9% had

no prior experience with tactical medicine. They completed pre- and post-course surveys and the results can be seen in Figure 1. There was a statistically significant improvement in participant self-efficacy in all areas assessed. At the conclusion of the course, participants ranked the experience's usefulness a 4.79 out of 5 on a Likert scale.

**Conclusion:** The initial implementation of this curriculum was highly successful. We plan to make feedback-based adjustments to this curriculum as well as develop a second phase of training with more advanced topics.



**Figure 1.** TacMEd1: An innovative education program in tactical medicine education. Comparing pre- and post- course confidence of participants in tactical medicine topics.

# Teaching Primary Palliative Care Skills to EM Residents

Matthew Mason, Frances Rudolf

**Background:** Having goals of care (GOC) conversations tactfully and efficiently in critically ill patients is an important skill in EM but can be difficult to teach. Using a virtual simulation model, residents can practice these skills a low risk setting.

**Objectives:** 1. Create virtual simulation curriculum in palliative EM topics. 2. Provide EM residents with case-based practice in GOC conversations and breaking bad news. 3. Give individualized feedback to residents highlighting best-practices.

Curricular Design: We developed three cases that were administered in small group ZOOM breakout rooms. In each cases, a patient arrives to the emergency department critically ill and, during the initial resuscitation, a member of the patient's family arrives. The resident is instructed to broach GOC or break bad news. Cases were administered by our faculty in the style of oral-boards. Each case included a debrief on a codified approach to broaching GOC, individualized feedback, and discussion time for participants to share their observations.

**Impact/Effectiveness:** Virtual simulation allows for a low-pressure setting in which to practice the challenging GOC

conversations necessary in critically ill patients in the ED. Residents were introduced to a flexible but formatted approach to these conversations. Our format also allowed residents to build camaraderie seeing peers learn a difficulty skill and borrow effective phrases and approaches. The digital format of the intervention allowed for easy implementation and distribution of educational material, as well as greater comfort for residents.

#### Case 1

<u>Patient Information:</u> 92-year-old female with a history of mild dementia arrives from her SNF with a fever. Mental status A&O x 1, baseline x3.

<u>ED Resuscitation</u>: Code sepsis, fluids, IV antibiotics initiated. Found to have pneumonia with a new oxygen requirement. Patient currently satting 93% on 15l. YOUR TASK:

- 1. Patient's son calls for an update.
- 2. Address patient's goals of care and code status with him.

#### Facilitator Script

Depending on prompting, son reveals the following:

- 92 years old with minimal medical problems, though some mild dementia. Lives in an
  independent living facility where a CNA checks in on her once a day. Needs some help
  with organizing her meds and paying bills but can cook, bathe, cloth herself. Friendly
  and still "sharp as a tack."
- Derives meaning from puzzles, her grandtids, and reading crime novels. Loves short walks around the neighborhood and family holidays like Thanksgiving.
- Has always said she doesn't want to be a burden on others and wouldn't want to her family to have to feed her, bathe her, etc. Does not want to die in a hospital, but has never mentioned her attitude towards ventilators or CPR.

#### Debrief

#### Rapid Code Status Discussion

1. What does the family member know?

Tell me what you know about what's happened to your mother today

2. Break the news and establish goals, urgency

I'm afraid I have some bad news, is it alright if I share it with you? Your mother is very ill with pneumonia. It is my hope that she will make a full recovery, but considering how sick she is, we need to work together quickly to decide what to do if she gets worse.

3. Assess patient's premorbid function

Help me understand your mather — what sort of activities was she doing on a daily basis before today? Was she oble to feed, bathe, clothe herself? Did she require much help?

4. Assess patient's values

What things are important to your mather in her life? What does she derive jay from? If she were to get worse, are there things so cruzial to her that life would not be worth living if she couldn't do them?

5. Summarize and Advise

Figure 1. EM SIM 1.18.

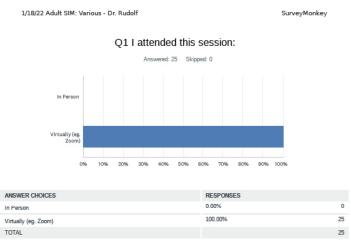


Figure 2.