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"Prez Drillz" for med students: An online workshop to practice oral case presentation skills through peer-feedback, repetition, and application

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Introduction: Foundations of Emergency Medicine (FoEM) is an open-access curriculum that involves case-based table-top exercises, and is an established part of our weekly conference. Case-based simulation has been shown to improve clinical knowledge and comfort levels in the care of critical patients. The educational need for this pilot study arose from PGY-1 residents' requests for more time to run cases in our simulation center.

Educational Objectives: To convert FoEM cases into high-fidelity simulation cases to enhance PGY-1 residents' learning experience, and to evaluate the feasibility of the process.

Curricular Design: Simulation specialists converted 18 FoEM cases to high-fidelity simulation cases. A total of 17 PGY-1 EM, EM/IM and EM/FM residents performed FoEM simulation cases on 6 separate conference days during the 2020-2021 academic year in lieu of the standard FoEM table-top exercise. Three cases were run per session. Each case was 10 minutes long followed by a 20 minute debrief by EM faculty. Residents were surveyed to gauge educational satisfaction and clinical confidence. Simulation specialists were surveyed to identify resources required and to ascertain barriers to implementation.

Impact/Effectiveness: The post-implementation surveys had an overall response rate of 70%. All residents agreed or strongly agreed that performing FoEM through simulation was a positive addition to the curriculum and the information and skills were applicable to patient care. The majority reported that scenarios helped to solidify foundational knowledge and confidence in caring for patients. Simulation specialists reported taking 1-4 hours to prepare a case. Challenges included predicting learner decisions and interpreting the cases as a non-physician. We conclude that FoEM cases can be converted to simulation with reasonable effort and are a valuable addition to the curriculum. We have continued this curricular innovation in the 2021-2022 academic year.

Table 1. Resident suvery results, 5-point Likert Scale responses.

Resident type	Positive addition	Solidified knowledge	Increased Confidence in patient care	Increased Confidence in team communication	Applicable to caring for patients	Frequency of FoEM in simulated setting
Combined resident	Agree	Agree	Agree	Agree	Agree	Just right
Categorical resident	Agree	Strongly agree	Strongly agree	Strongly agree	Agree	Not enough
Categorical resident	Agree	Strongly agree	Agree	Neither agree nor disagree	Agree	Just right
Combined resident	Strongly agree	Strongly agree	Agree	Agree	Agree	Not enough
Combined resident	Agree	Neither agree nor disagree	Neither agree nor disagree	Disagree	Agree	Just right
Categorical resident	Agree	Agree	Agree	Disagree	Agree	Not enough
Categorical resident	Strongly agree	Strongly agree	Agree	Agree	Strongly agree	Just right
Combined resident	Agree	Agree	Neither agree nor disagree	Neither agree nor disagree	Agree	Just right
Combined resident	Agree	Agree	Agree	Neither agree nor disagree	Agree	Just right
Categorical resident	Agree	Agree	Disagree	Disagree	Agree	Just right
Categorical resident	Agree	Agree	Agree	Agree	Agree	Just right

Table 2. Simulation specialist survey open-ended responses.

What role did you play in implementing the Foundations of Emergency Medicine cases in the VEST center?	Length of time to convert case	Challenges	Describe Challenges	How many simulations specialists needed?	Number of simulation specialists appropriate	Do you think you needed more or less staff members to run the session?
My primary role is to assist in the set up and clean up of the simulation rooms for the session.	N/A	No		4-5; 3 to run the simulators and 1-2 for support or confederates.	Yes	
Simulation Specialist, may play the role of the manikin, role of confederate if staff available. Convert cases into sims	1-2 hrs	Yes	what route will the learners take	min of 3	No	more confederates in the room would help
Simulation Specialist to run the manikin or participate as a RN assisting the learners. Also participate in the pre-brief and de-brief		Yes	The cases are not always in an easy to understand format when you are not a EM physician.	2	Yes	
simulation specialist, RN	N/A	No		3	Yes	
Primary Design and Implementation Lead for Cases	Large range of time to develop and test cases budget for cases is usually 4 hours of building sim with 90 minutes to test sim	Yes	Challenges can be verifying that cases are reflecting current practice, including how cases are run in large Trauma Center. Other challenges include how to pare down case that is running over hours to 15 minutes, or case that is designed for docs taking the boards, to PGY1	Generally 2 or 3 per cases, when one case is running there will be 4 team members, when multiple cases are running, happy to have 2 per room	No	In the instance of running a high fidelity ED case, we need 4 or 5 ideally, 1 to run manikin and be voice, 1 to be family member, 1 to bedside RN, another to be respiratory or other ancillary position. 5th to have oversight to make sure all the parts come together.

37 "Prez Drillz" for med students: An online workshop to practice oral case presentation skills through peer-feedback, repetition, and application

Alexis del Vecchio, Anthony Seto, Paul Bryan, Logan Haynes, Nicole Ertl

Learning Objectives: Students at our university identified low confidence in presenting oral cases and a desire for more practice. We created a workshop, "Prez Drillz", to address this. We will describe an educational model for medical students to practice oral case presentations online and discuss its impact.

Introduction: Presenting clinical cases orally is a core skill for medical students, a task some find intimidating. Oral case presentations may influence preceptors' impression of students, as it highlights learners' cognitive and non-cognitive attributes. Students at our university identified low confidence in presenting oral cases and a desire for more practice. We created a workshop, "Prez Drillz", to address this.

Curricular Design: Before the workshop, students viewed a podcast on oral case presentation structure. 154 second-year students participated in the 2.5-hour workshop, hosted via Zoom videoconferencing, with 1 physician preceptor for 4-5 medical students. During the workshop, students first listened to a 5-minute case audio, outlining patient history and examination findings. Students delivered an oral case presentation, based on information extracted. Self-reflection and feedback from peers and preceptor followed. Students then practiced delivering a second oral case presentation by implementing the feedback received. Students completed a retrospective survey on their agreement (1=strongly disagree; 5=strongly agree) with self-efficacy

statements regarding presentation skills pre- vs post-workshop (effective frame/context, clear history/physical exam, convincing top differential diagnoses, comprehensive management plan, appropriate confidence, clear/effective communication, organized/structured approach). All ratings of self-efficacy (N=23) increased with statistical significance (p<0.001) and large effect size; the average self-efficacy rating was 2.50/5 pre-workshop versus 4.32/5 post-workshop. Average workshop rating (N=55) was 4.73/5.

Impact/Effectiveness: This workshop improved students' self-efficacy in oral case presentation skills. Peer-teaching, repetition, and feedback opportunity aided workshop success. Medical educators can adapt this educational model to help learners practice and elevate oral case presentations.

38 Buddy System: An Interventional Peer-Mentoring Program Between Fourth-Year Medical Students and Emergency Medicine Residents

Yehuda Wenger, Ramin Tabatabai, Brad Stone, Linda Papa, Jesus Roa

Learning Objectives: To implement a peer mentorship program and assess its impact on the levels of stress and self-esteem of fourth year medical students.

Background: Residents and medical students often face significant stress during their training which negatively impacts their wellbeing and job satisfaction. Peer mentoring is a dynamic social construct shown to have a positive effect on psychosocial wellbeing, stress reduction, and job satisfaction. We hypothesize that implementing a buddy system between emergency medicine (EM) residents and fourth year medical students will have a beneficial effect towards decreasing stress levels and improving self-esteem during their EM rotation.

Objectives: To implement a peer mentorship program and assess its impact on the perceived levels of stress and self-esteem of fourth year students.

Curriculum design: We implemented a 5-week 1:1 peer-mentoring program between 27 students and current EM residents at a Level I Trauma center over three rotation months. Prior to the rotation, they each received an email introducing the buddy system and outlining suggested topics and a meeting frequency of three times. Students completed surveys incorporating the 10 item Perceived Stress Scale and the Rosenberg Self-Esteem Scale both one week prior and on the last day of the rotation. Random numbers were assigned for anonymity.

Impact: In total, 25 of 27 pre and post surveys were collected. Preliminary data shows that 84% of buddy pairs met at least three times, 92% of students perceived the intervention positively, and 84% believed it contributed to

their overall wellbeing. This is an easy platform to implement with no cost or constraints on a residency program. By implementing peer-mentorship early it can have a rapid positive effect, foster a larger network of mentorship, and improve the psychological safety of trainees.

39 Can a Modified Medical History Performed (in a Virtual Setting) by Medical Students Provide a More Efficient and Accurate History?

Simi Jandu, Kristen Cuadra, Steven Joseph, Brett Todd, Ronny Otero

Learning Objectives: To determine whether a history elicited by using an modified format of questions, i.e. past medical history prior to history of present illness, can reduce the amount of time necessary to obtain vital historical elements compared to the traditional history-taking format in a virtual environment.

Introduction: History-taking and communication skills are essential for accurate and efficient diagnosis in Emergency Medicine. The traditional history begins with the patient's chief complaint, followed by the history of present illness, past medical, surgical, social history, medications, and allergies. We propose an alternative history-taking method to obtain the medical history before eliciting the history of present illness to obtain key historical elements more efficiently.

Educational Objectives: To determine whether a history elicited by using a modified format of questions can reduce the time necessary to obtain vital historical elements while preserving complete assessment compared to the traditional history-taking format; history of present illness before medical history.

Design: The study enrolled 3rd and 4th-year medical students randomized to alternative history or traditional history taking methods. Students were placed in a Zoom room with a standardized patient who provided epigastric pain, flank pain, or syncope narrative. The virtual histories were recorded and later reviewed for comprehensiveness and timing. Results: Most students were 4th-year medical students (74.8%) who completed family medicine and internal medicine rotations (54.2%). The average time for history was 609 seconds vs. 617 seconds for the alternative and traditional groups, respectively (p-value 0.76). The alternative history elicited 14 of the 19 key elements of the history more than 70% of the time compared to the traditional (12 of 19).

Conclusion: This pilot study demonstrated that an alternative history method elicits more key elements than traditional history. It establishes that randomized simulated patient studies can be utilized in a virtual environment in place of in-person. Further studies can continue using the