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7 A Practical Curriculum for Emergency Medicine Intern Orientation Using Near-Peer Teaching

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Background: Most EM residency programs utilize a traditional learning model for intern orientation that relies on didactics to deliver EM core content. While this knowledge is preparatory for exams, it is presented outside the context of practical ED challenges such as resource bottlenecks or task prioritization and therefore may have limited real-world applicability. We propose a new orientation curriculum that places EM core content within the context of ED workflow to better prepare interns to work clinically.

Educational Objectives: Improve the clinical applicability of EM intern orientation by supplementing EM core content with interactive workshops, practice-based learning and near-peer teaching.

Curricular Design: The 4-week intern orientation curriculum at our PGY1-4 program consisted of 3-hour didactic sessions in which faculty review Tintinalli's Emergency Medicine Manual using PowerPoint slides. In our new curriculum, which was developed through the Harvard-Macy Future Academicians Course giving it face validity, these didactics were shortened to 1 hour and paired with 1-hour interactive workshops led by senior residents. Each workshop consisted of a walk-through of how to approach a chief complaint (Abdominal Pain, Chest Pain, Dizziness, Fever, Agitation, and Blunt Trauma) from arrival to disposition. All workshops were slideless, case-based, and interactive. Using near-peer teaching, senior residents addressed pitfalls in workflow based on their experiences, and reviewed skills related to clinical practice such as giving proper signout, calling consultants, and escalating care. To ensure quality, we created a faculty-approved Course Manual including workflow charts and instructor's guides for senior residents.

Impact/Effectiveness: Pre- and post-orientation surveys were conducted to measure the impact of our intervention. Overall, we found near-peer teaching and the emphasis on ED workflow to be powerful tools that can improve engagement and feedback. Interns received the new curriculum positively, with the majority recommending the new format for next year. Senior residents found the experience to be rewarding for their academic development. We plan to conduct a 6-month follow-up survey to assess the degree to which specific elements of the new curriculum contributed to intern preparedness.

8 A Shock Workshop For 1st Year Medical Students Using Novel Teaching Methods

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Background: With limited clinical context, pre-clinical students may find the concept of "Shock" difficult to understand. Simulation provides instructive clinical context early in the medical school curriculum. Asynchronous instruction allows students to reinforce key principles before more in-depth group discussion and clinical simulation. We developed a workshop that combines asynchronous instruction, group discussion, and clinical simulation to teach 1st year medical students about different shock states.

Educational Objectives: We challenged students to identify the pathophysiology of each shock state and to describe the expected compensatory physiology observed in representative clinical scenarios.

Curricular Design: A week before the workshop the entire MS I class was emailed the workshop objectives and a link to an "Overview of Shock" voice-over Power Point video lecture. A 5-question pre-workshop knowledge assessment was created to gauge students' baseline understanding of the topic. Three simulation cases were developed to illustrate cardiogenic shock (myocardial infarction), distributive shock (sepsis) and hemorrhagic shock (after MVC).

For each case, teaching focused on identifying the primary abnormality and understanding how the shock state affects vital signs and key hemodynamic parameters. Approximately 35 students were assigned to attend each 2-hour workshop, which was offered 6 times over one week to accommodate the entire MS I class. For each workshop, half of the students were brought into the simulation center and divided into 3 groups. In the simulation center each group of students encountered 3 consecutive cases of different shock states. After each brief case, faculty provided focused and consistent debriefing to reinforce predetermined teaching points. The other half of the students attended a classroom discussion on shock led by clinical faculty. For the second hour of the workshop, the groups switched.

Impact/Effectiveness: In 2015 and 2016, all 445 students completed the pre-workshop knowledge assessment. 365 students (82%) completed the post-workshop evaluation (Table 1). All clinical faculty preceptors were rated highly by the students.

The multi-modal session was successful, with many students requesting more sessions of this kind be developed for other topics as well.