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Creation of a Milestone Driven Simulation Based Resuscitation Course

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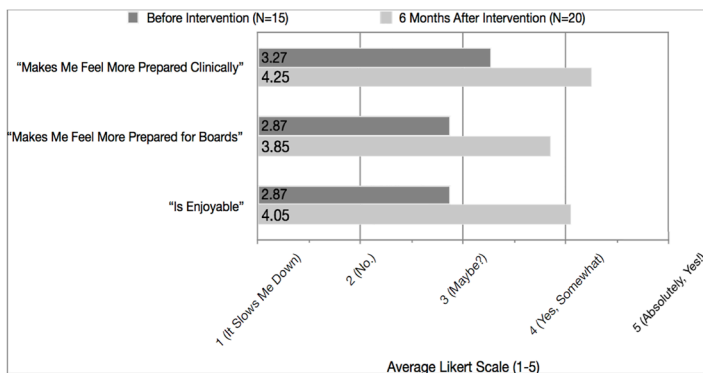
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monthly trivia competitions held during didactic conference. Divided into three “Houses” at the beginning of the academic year, residents compete as a team. These competitions allow for review of that month’s material and encourage spaced repetition as well as active social learning to solidify knowledge.

Timely completion of the material is encouraged with late residents causing the entire team to lose points for that month’s competition and the first House finished receiving bonus points. The competition spans the academic year with the House winning the most months being declared the victors.

Impact/Effectiveness: Post-implementation of this Asynchronous model, our residents now have completion rates of > 90% prior to deadline compared to ~30% before intervention. Residents on standardized surveys also report not only markedly increased enjoyment of the curriculum but also rank it as more valuable for improvement in both clinical practice and Board preparation. This socially synchronized asynchronous curriculum model offers a new method of engaging residents as adult learners.



4 Creation of a Milestone driven Simulation based Resuscitation Course

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Background: To assess resident growth and development, the Accreditation Council for Graduate Medical Education (ACGME) and The American Board of Emergency Medicine (ABEM) have collectively established a set of twenty-three milestones for Emergency Medicine (EM) Residents. Biannually, residents are assessed on these milestones by residency leadership. Difficulty can arise when the faculty evaluating these milestones cannot recall specific examples of milestone achievement for each resident. A simulation curriculum to directly evaluate these milestones may improve assessment reliability.

Educational Objectives:

- To develop a prioritized list of resuscitation-oriented milestones as defined by EM attending physicians.

- To create a milestone driven simulation cases for EM residents to improve their readiness for EM resuscitation.
- To improve EM residents’ ability to perform vital resuscitation skills, while advancing their clinical skills and ability to care for critically ill medical patients.
- To improve direct observation of critical milestones performed by EM residents for residency leadership.

Curricular Design: Attending physicians at four EM residency programs were surveyed regarding the most important milestones associated with resuscitation care, establishing the top 10 resuscitation oriented milestones. Using these 10 milestones, we created a two-day simulation based resuscitation course, to evaluate second year EM residents’ preparedness for caring for critically ill patients. Day one included 4 milestone-driven simulation cases, followed by a formative evaluation. Day two included a summative evaluation for each individual resident on a standardized case that evaluated all the established milestones. These evaluation forms were created by 4 EM attending physicians, correlating simulation critical actions to specific milestones and numbered levels.

Impact/Effectiveness: In combining simulation and milestones, this resuscitation curriculum allows for the direct observation and evaluation milestones, in a safe environment. The information gathered can be used by residency leadership to report milestones to the ACGME. Long-term goals include expanding the curriculum to other post-graduate levels, and validating this milestone based assessment tool.

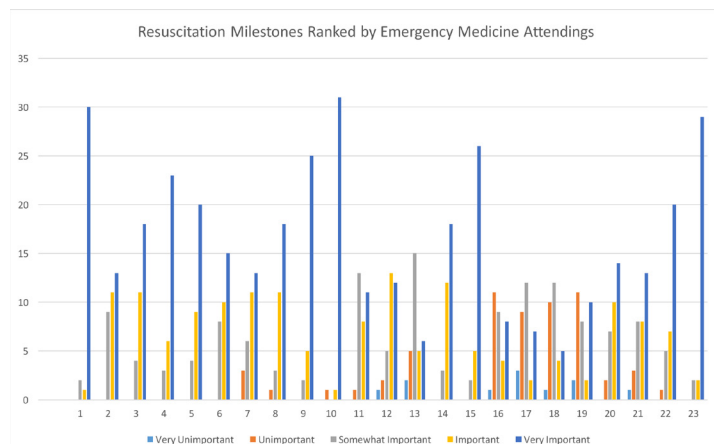


Figure 1. To prioritize resuscitation milestones, all 23 Milestones were ranked by Emergency Medicine Attending using a 1-5 Likert based scale based on their importance.

5 Faking the Friendly Skies: A Simulated In-Flight Emergency

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Background: Approximately 1 in 604 flights is