

44 Using Quality Improvement Education to Improve Care of Septic Patients in the ED

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Background: Sepsis is a widely known disease process that specifically impacts patients in the emergency department where Emergency Medicine physicians are usually the first to recognize and intervene on the resuscitation of these patients. Studies have shown that the absence of timely intervention lead to poor outcomes in morbidity and mortality. Additionally, failure to meet metrics also result in a substantial loss of Center for Medicare and Medicaid compensation to hospitals. Residents at Baystate Medical Center used quality improvement methodology to identify the limiting factor in regards to meeting the 3 hour sepsis bundle criteria at our level 1 academic trauma center.

Objectives: To identify the gaps in care for patients meeting Center for Medicare and Medicaid sepsis criteria in our ED while improving residents' knowledge of quality improvement methodology.

Method: Using Define, Measure, Analyze, Improve, and Control quality improvement methodology, residents performed a retrospective analysis of patients meeting criteria for severe sepsis or septic shock who presented to Baystate Medicine Center ED and required admission in the days between 1/30/2022 – 2/6/2022 and 8/28/2022 – 8/31/2022 to evaluate which proportion did not receive antibiotics within 3 hours of identification. Exclusion criteria included patients meeting sepsis criteria after admission, documented exclusion for concern of infection in emergency room encounter, and patients who were COVID positive.

Results: 38% of patients admitted who met severe sepsis criteria did not receive antibiotics within the 3 hour guideline window. Approximately 33% of patients in this cohort did not have IV antibiotics ordered within the 3 hour window. The remaining 67% had IV antibiotics ordered within 3 hours but not administered until more than 3 hours after identification of severe sepsis or septic shock.

Conclusions: Antibiotic administration within 3 hours of identification of sepsis was delayed in 38% of the patients meeting criteria for severe sepsis or septic shock during the studied period at Baystate Medical Center. Using this data, residents have been able to craft a clear, compelling problem statement to administration to garner their partnership continuing their quality improvement project to close this gap in care.

45 Open to Interpretation: Design Thinking, Role-Reversal Simulation, Builds Empathy in Language Discordant Care

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Background: Linguistic barriers create challenges

in delivering effective healthcare in the ED, where miscommunication has dire consequences. There is limited evidence regarding resident education on language discordant care. Undergraduate students partnered with EM faculty to understand language discordant care in the ED. Design thinking, a human-centered problem-solving technique, was utilized to identify innovative solutions to improve provider understanding of the effects of those barriers on patient care.

Educational Objective: Evaluate EM resident confidence treating language discordant patients and develop training to improve understanding and empathy.

Curricular Design: Utilizing design thinking, undergraduates and EM faculty met to identify problems and goals of the exercise. Empathy interviews with ED patients and providers exposed contrasts between language concordant and discordant patient encounters. A preferred-language role-reversal simulation exercise was developed. EM residents were surveyed to evaluate experience and attitudes in caring for non-English speaking patients. In a structured simulation encounter, English-speaking EM residents placed in a patient role were treated by embedded participant physicians speaking non-English languages. Participants then completed a post-survey and structured debrief. Responses were analyzed for change and theme.

Impact: Following the simulation, learners rated communication as challenging with confidence in treating language discordant patients and perceived quality of care decreased. Debriefs identified common themes including perspectives on patient encounters and technology available for assistance. This novel exercise was an effective tool to provide education and experience on the care of language discordant ED patients. Results and reflections exposed lack of confidence in the current resources available and highlighted the need for better technology and resources to help alleviate barriers when traditional avenues for communication fail.

46 Growing a Culture of Feedback in Emergency Medicine: A Multifaceted Curriculum Design and Incentive Structure

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Background: Feedback is a cornerstone of resident education. Actionable and timely feedback, provided during and after shifts and in written format, is pivotal to resident advancement and compliance with GME milestones (1). The Emergency Department (ED) is a particularly challenging learning environment due to time constraints, regular interruptions, and the nature of shift-based scheduling impacting resident and attending overlap (2). We hypothesized that we could improve the quantity and quality

of feedback Emergency Medicine (EM) residents received via an intervention that combined an educational curriculum for faculty and monetary incentives.

Methods: We designed and implemented a faculty development curriculum on feedback that included lectures, small group workshops, and targeted feedback on their resident MedHub evaluation forms. Clinical faculty were provided with a monetary incentive for feedback compliance. The number of completed faculty feedback evaluations were tracked and reported from MedHub. We also sought informal feedback from residents about their satisfaction with the evaluations they received

Results: The number of completed evaluations increased by 38% from 1900 to 2641, with a year-over-year increase of 741 completed resident evaluations in MedHub. A paired students t-test showed a significant increase by provider year over year ($p=0.00034$). Additionally, resident physicians felt that the quality of feedback was significantly improved. Thematically, the quality of feedback improved with the average words per feedback form increasing from 10 words to >20 words. Additionally, the quality of feedback improved as well, often citing specific cases or learning opportunities.

Conclusions: A multi-pronged approach improved the quantity and quality of faculty feedback to residents. Curriculum development for clinical faculty and pay incentives increased assessment and signaled a cultural shift integral to quality resident education. The next steps include developing a scoring model to quantify the improvement in feedback. We will also assess whether curriculum development or the monetary incentive had the most impact on faculty feedback behaviors.

47 Foundations of Emergency Medicine: Development, Use, and Satisfaction of a Novel Curriculum Focusing on Lower Acuity Conditions

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Background: The Model of Clinical Practice of Emergency Medicine includes the management of critical, emergent, and lower acuity conditions. Lower acuity patients represent 25% of encounters that occur in the emergency department (ED). No standardized curriculum exists for lower acuity conditions. Foundations of Emergency Medicine (FoEM) is a free, comprehensive, open-access, online curriculum that has been widely adopted. Recognizing this education gap, FoEM developed a novel Urgent Care (UC) curriculum.

Objective: To improve knowledge regarding the evaluation and management of common lower acuity conditions in the ED and UC settings using case-based

small groups that can be incorporated into existing training curriculums.

Curricular Design: Using a modified Delphi method, we developed 14 cases covering common lower acuity presentations. The opportunity to practice effective responses to common patient questions is a unique, emphasized component (Table 1). This adaptable online curriculum can be implemented longitudinally as single case sessions or as five hour-long units. Cases are best utilized in a small group setting with an experienced clinician facilitating discussion and guiding learners. Each case is paired with asynchronous resources and an “essential learning” document that provides additional details on core concepts.

Applicability/Impact: We developed a 2024 survey of FoEM site leaders and learners to assess this curriculum. A total of 28 EM training programs indicated use of the curriculum, serving 1,001 learners. 100% of site leaders and 97.6% of site learners found content to be clinically relevant, high-yield, and a valuable use of didactic time (Table 2). Suggestions for improvement included: expanding the list of lower acuity conditions and incorporating imaging and procedural skills for lower acuity conditions. Future efforts will focus on expanding content and disseminating the curriculum more widely.

Table 1. Case topic and example patient questions from Foundations of Emergency Medicine Urgent Care Curriculum.

Sample of Case Topics	Examples of Commonly Asked Patient Questions
Cellulitis	"I've been taking this antibiotic for 24 hours and the redness has not gotten better, does this mean the antibiotic isn't working?"
Conjunctivitis	"Don't I need eye drops for my eye infection? Everyone I know gets eye drops for pink eye."
Influenza	"What is the difference between a cold and the flu?"
Upper respiratory infection	"I know this is bronchitis. Why can't you just prescribe me an antibiotic for this cough? I get these symptoms every winter and I always get an antibiotic and it makes me feel better."
Ankle sprain	"How long will it be before I can play sports again?"
Concussion	"I have a really important game this weekend. Is it OK if I play?"

48 BINGO: A Novel Observation Tool to Optimize the Observer Role in Simulation-Based Setting

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Background: Simulation-based training is essential for healthcare education, allowing trainees to practice in a controlled environment. However, resource constraints often mean many assume observer rather than active roles, which can feel passive. Various methods like assigning roles