

## 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

*Andrew Moore, Inna Massaro, Timothy Fortuna*

**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