Relevance/ Significance
80% of patients develop sepsis outside of hospital and the Emergency Department (ED) is their first point of care.1 The mortality rate ranges from 6-22%, but could be 140% higher given lack of universal language among health care institutions.2 Early recognition and treatment of Sepsis-3 patients has proven to save lives with initiation of early goal directed therapy (EGDT).3 There are several components to the 2016 Surviving Sepsis Campaign Guidelines: (a) crystalloid fluids 30ml/hg, (b) lactic acid, (c) blood cultures, (d) broad spectrum antibiotics within three hours of time zero.4 ED nurses are critical thinkers and assets to early recognition of sepsis.

Strategies and Implementation
The ED has three nurses and two physician Sepsis Champions. An interdisciplinary team consisting of pharmacy, in-patient provider, an inpatient nurse, ED leadership and quality leads for support for developing the following:
1. Worksheet with separate criteria in determining severe sepsis: infection/possible infection, systemic inflammatory response symptoms, and organ dysfunction parameters. The reverse side of the worksheet included times for EGDT metrics.
2. Sully the Sepsis Monster as a remind to draw a repeat lactic.
3. On Oct. 2016 the ED Sepsis Champions launched education for Code Purple (Sepsis). use of the worksheet using a poster that highlighted relevant data regarding mortality when EGDT is not initiated, purple lab bags and Sully the mascot for 2 weeks during huddles.
4. A codepurple dot phrase initiated January 2017 within the electronic medical record to improve communication during transitions in care.
5. Trials for sending lactic acids via the pneumatic tube system versus walking the specimen was completed without change in results.
6. The ED champions continue to communicate updates, provide encouragement and discussed areas of opportunity individually with team members and during huddles.

Evaluations/ Outcomes
With the use of Sepsis Champions the Sepsis Mortality index has decreased from 1.31 to 0.51 in September 2017. Second Lactic acids have improved from 50% to 95% from Oct. 2016 To Jan. 2017. The use of sepsis order sets improved from 75% to 90% from Oct. 2016 to Jan. 2017.

Implications for Practice
On October 2017 with the success of the ED sepsis process it was extended to the in-patient units. The foundation remains the same with utilizing Sepsis Champions from each unit to mentor and educate their teams. The Champions continue to meet bi-weekly. The responding team is comprised of ICU/ED, nursing supervisor and phlebotomy with the lab and pharmacy prioritizing their response to patient care.

References