

Purpose:

The aim of the process improvement initiative was to utilize Sepsis Champions within the ED to decrease the Mortality rate of patients diagnosed with severe sepsis by being a bridge for integrating evidence based practice at the bedside.

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/kg, (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.

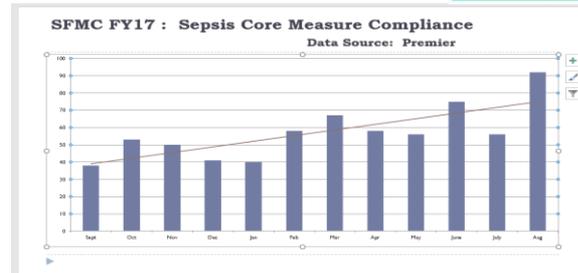
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Strategies and Implementation

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:

- 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.
- Sully the Sepsis Monster as a remind to draw a repeat lactic.
- 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.
- A codepurple dot phrase initiated January 2017 within the electronic medical record to improve communication during transitions in care.
- Trials for sending lactic acids via the pneumatic tube system versus walking the specimen was completed without change in results.
- The ED champions continue to communicate updates, provide encouragement and discussed areas of opportunity individually with team members and during huddles.



2016-2017

Month/Year	Sepsis Mortality Rate	Sepsis Mortality Index
August 2016	12.77%	1.31
September 2017	6.6%	0.51

Evaluations/ Outcomes

With the use of Sepsis Champions the Sepsis Mortality index has decreased from 1.31 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.