

# Collaborative Infection Screening to Reduce Sepsis Mortality



**Authors: Dr. Krysta Wolfe and Brenna Sloane** 

# **Problem**

Sepsis is a life-threatening condition caused by the body's improper response to an infection. Sepsis is the number one cause of hospital death and readmissions and is costly for the patient and healthcare organization. In Fiscal Year 2023 at UChicago Medicine (UCM), 487 patients died of sepsis with a Observed:Expected Mortality rate of 1.19. This is 19% higher than expected in comparison to our peer healthcare organizations. Of these 487 expired patients, 182 developed sepsis after being admitted, which accounts for 37% of UCM's total sepsis deaths. Up to 80% of these deaths could have been prevented through early detection and treatment.

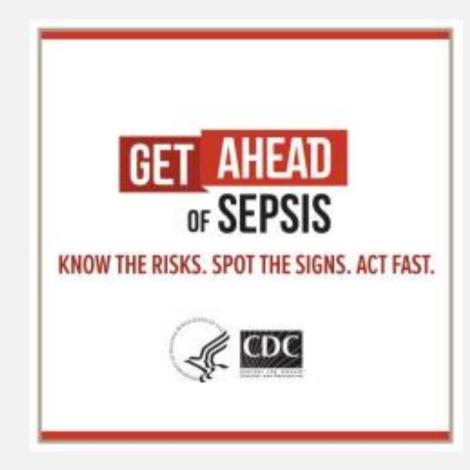
### Goal

Our goal is to reduce our Sepsis Observed:Expected Mortality rate for UCM patients from FY23 baseline of 1.19 to 1.00 by June 30<sup>th</sup>, 2024.

# **Intervention Design**

The risk of sepsis mortality increases up to 8% for every hour that treatment is delayed. Early detection of sepsis requires determining if a patient has organ dysfunction and the presence of an infection. To identity the onset of an infection, one must recognize subtle changes in a patient's condition or behavior. Patients and families may be the first to notice these changes, which is where interdisciplinary communication becomes even more essential. By engaging patients and families in their care and actively listening, we can then leverage our clinical expertise to discern - Could this be sepsis?

It takes a full interdisciplinary team to identify and combat sepsis. The goal of our project is to create a collaborative approach to infection screening that empowers patients, families, and clinicians to speak up if they suspect an infection. This collaborative approach will improve sepsis outcomes such as decreased mortality, clinical length of stay, and readmission rates. We plan to leverage the CDC's Hospital Sepsis Program Core Elements to guide this project, and our performance will be measured via the National Healthcare Safety Network Annual Hospital Survey.



CDC Sepsis Core Elements Website:

Hospital Sepsis Program Core Elements
| Sepsis | CDC

# **Impact**

To create an impactful, interdisciplinary approach to infection screening, we plan to implement the following:

### Improved Patient and Family Education

- Build awareness of the signs and symptoms of an infection that can lead to sepsis
- Provide verbal and written sepsis education for patients and families pre and post discharge

### Optimization of infection screening tools

- Enhance partnership with Agile MD to optimize infection screening pathways
- Complete strategic data analysis to track performance and identify improvement opportunities
- Increase the adoption of infection screening tools through ongoing monitoring and education

### Frontline involvement in quality improvement

- Empower the frontline to create meaningful changes in their daily workflows to enhance infection screening
- Provide close to real time feedback to frontline staff regarding the success of infection screening
- Recognize and reward frontline staff for completing life-saving infection screens

### Ongoing sepsis case reviews

- Facilitate regularly scheduled multidisciplinary sepsis case reviews
- Create a non-punitive learning environment to improve sepsis outcomes

# Hospital Sepsis Program Core Elements Hospital Leadership Commitment Dedicating the necessary human, financial, and information technology resources. Accountability Appointing a leader or co-leaders responsible for program goals and outcomes. Multi-Professional Expertise Engaging key partners throughout the hospital and healthcare system. Action Implementing structures and processes to improve the identification of, management of, and recovery from sepsis. Tracking Measuring sepsis epidemiology, management, and outcomes to assess the impact of sepsis initiatives and progress toward program goals. Reporting Providing information on sepsis management and outcomes to relevant partners. Education Providing sepsis education to healthcare professionals, patients, and family/caregivers.

# Next Steps

### FY24 Quarter 1

• Comer Resuscitation Quality Committee Sepsis Workgroup – First meeting to be held 9/13/23

## FY24 Quarter 2

- Launch 3 Area Specific Sepsis Quality Improvement Workgroups for Adult Patients
  - ED
  - Med Surg
  - ICU

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