Improving Sepsis Care

Collaborations improving the delivery of care for patients across the continuum







Improving Sepsis Care: Data Story at ARH

- We focused on the Sepsis Bundle Measure as the overall indicator for tracking improvement. To better understand the barriers, problems, and issues, the bundle was separated into the 3-hour and 6-hour specification elements.
- We continue to track compliance with the Sepsis Bundle Core Measure. As a System we saw an improvement from 66% in 2022 to 77% in 2023.
- We raised expectations to a stretch goal of >75% for 2024 with three facilities consistently exceeding in Q1: Hazard (96%), Tug Valley (91%), and Whitesburg (88%).

The Opportunity to Improve Sepsis Care

- Major barriers and issues identified were:
 - Electronic Medical Record (Documentation & Order set usage)
 - Staff Education
 - Provider buy-in
- Improvement in these areas were important to succeed:
 - Meditech was a new EMR for ARH in 2019. We identified incorrect collection time entry, cancellation of repeat lactic acids, cancellation of IV fluid bolus, failure to document Focused Sepsis Exams.
 - Staff education on how to properly identify positive sepsis screening and communication with providers.
 - Providers not wanting to call it sepsis for fear of CMS reporting which caused delay in initiation of care.



The Opportunity to Improve Sepsis Care

- Experience of the patient and Staff:
 - Patients experienced: Delay in care.
 - Staff experienced frequent changes with EMR updates and education.
 - Providers continued to struggle with Order set usage.

• Impact:

- Fortunately, readmissions related to sepsis have improved from 15.0% in 2022 to 12.9% for 2023. Mortality related to sepsis have improved from 10.6% in 2022 to 9.3% in 2023.
- However, the impact of continuous improvement to the EMR, order set usage, and education to staff did cause some reluctancy to follow standardized practices.

What did you do:

- Project steps:
- Data collection and analysis focused on the failures of the specification manual elements identified with the Sepsis measure.
 - Early Identification:
 - Collection of Sepsis screening data to ensure nursing identified elements of SIR criteria and sources of infection.
 - Lactic acid and repeat if > 2,
 - Blood culture collection and prior to antibiotics
 - IVF Bolus ordered 30 ml/kg
 - Focused Sepsis Exam
 - Trended core measure failures to specific elements and conducted root cause analysis to identify action plan.
 - Quality tools used
 - RCA, Flowcharts, PDSA Worksheet, SMARTTD



What did you do:

- Intervention or change implemented
 - Re-education on proper sepsis screening and empowerment to initiate order sets to capture lactic acid and blood cultures timely.
 - Education of staff and nursing leaders to oversee 3-hour/6-hour bundle elements
 - Coaching letters for both staff and providers for one-on-one education for fallouts.
 - ED Medical Director providing provider education as needed.
- How staff/patients were involved in your work
 - System Focused Sepsis Committee was developed and included all locations.
 - Providers, Quality, ED staff, Core measure abstractors, Laboratory, and Meditech Build team were available on the committee monthly to identify and develop solutions for issues/problems.
 - Utilization of a sepsis checkoff sheet to educate and hardwire processes with Front line staff on the specifications of sepsis. This included house coordinators to drive the process in real time.

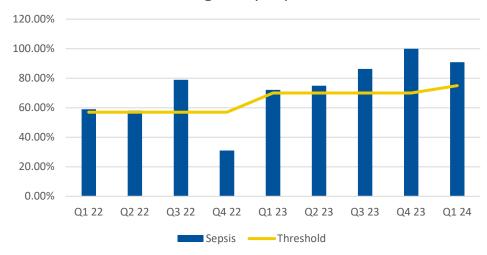
Your Results: How you made a Difference

- Hardwiring the specifics of sepsis allows the staff and providers to identify and initiate timely interventions for sepsis.
- Staff are empowered to initiate ED screening order set for timely interventions with early recognition of sepsis.
- Early recognition leads to timely interventions.
- Standardization of the processes leads to continuity for all the patients we serve.
- Sustainability will be achieved with continued awareness of sepsis, education of new specification requirements, robust sepsis orientation for new hirers, and hardwiring processes.

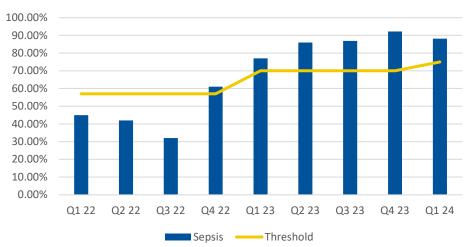
Key Takeaways: Lessons learned

- Concurrent abstractors are only useful for a limited time. Once education and process expectations are set, the abstractor needs to step away and allow the team to perform.
- A Physician Champion is essential for provider education and a resource for optimization of the process from their prospective.
- Inter-rater reliability is important to assess standardization of abstractions to ensure that all are consistent with specification manual.

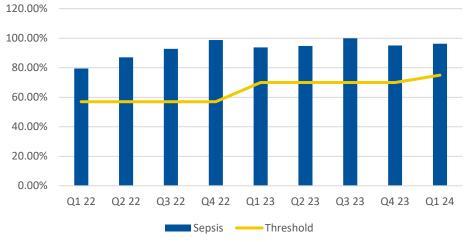
Tug Valley Sepsis



Whitesburg Sepsis



Hazard Sepsis





- Healthcentric Advisors Qlarant
- Kentucky Hospital Association **Q3 Health Innovation Partners**
- Superior Health Quality Alliance

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