CASE STUDY

Healthcare System Targets Sepsis and Sees Rewards

Organizational Background

BRG professionals worked with an independent not-for-profit healthcare system in the northeastern United States to address the risk and impacts of sepsis. The system consisted of one level 1 trauma center, one community hospital, one specialty hospital, and one critical access hospital with outpatient centers and provider practices with over 1,200 beds total. This system varied in size, geography, social economical, and unique patient populations; however, its entities shared an electronic health record (EHR) for the system.

Prior to our engagement, Centers for Medicare & Medicaid Services (CMS) Sepsis Bundle Compliance (SEP-1) was 13% for the system; severe sepsis/septic shock mortality was 26%; and sepsis readmission was 25%, with an average length of stay (LOS) of 7.6 days.

BRG Approach

BRG conducted a comprehensive engagement focused on decreasing the risk of sepsis by:

- streamlining sepsis screening processes to better identify patients sooner
- leveraging EHR and clinical pathways to improve awareness and compliance while making day-to-day processes easier
- working directly with providers and nursing staff to assist in education and customization of workflows, including transition of care
- performing inter-rater reliability of sepsis abstraction processes, along with in-depth analysis and education on abstraction management
- leading implementation and financial infrastructure to best manage sepsis across hospitals

Implementation

BRG collaborated with the emergency department (ED) medical director, Nursing leaders, and medical directors for inpatient areas in a combined effort to modify the assessment and action processes of suspected sepsis in accordance with national guidelines. Processes between ED and inpatient were customized to compliment workflows of each area while following standardized evidenced-based workflows. Our goal was to speed up the afferent phase to the efferent phase through early identification and treatment while not overburdening resources.

Targeted screening, protocol, resources, and a shared accountability model were adopted and implemented to maximize these efforts and space limitations. Additionally, provider-focused education, documentation, and an operational approach to leveraging the EHR were further engrained. Further, a governance and reporting mechanism was put in place to support sustainability across the system.

Results



LENGTH OF STAY DECREASED FROM

7.6 to 5.2 days



READMISSIONS DECREASED FROM

25% to 13%



SEVERE SEPSIS MORTALITY
DECREASED FROM

26% to 7%



Results

SEP-1 Bundle Compliance increased from 13% to 57% in eight months and has sustained top performance near 80% since implementation.



The LOS in the same eight-month time period decreased from the baseline 7.6 days to 5.2. Readmissions decreased from the baseline of 25% to 13%, and—most important—severe sepsis/septic shock mortality decreased from 26% to 7%, meaning that our work was saving patient lives.

Additionally, this system now is eligible for a Value-Based Purchasing repayment bonus due to its not top-decile performance, reductions in mortality, and reduced denials related to sepsis.

"This was an institutional systematic change of how we look at sepsis. We had tried this on our own and were not successful. This time we had true partners in change.

Executive-level leader at system

FOR A DEEPER DISCUSSION AND TO LEARN MORE ABOUT HOW BRG CAN HELP YOU, CALL OR EMAIL TO ARRANGE A PRIVATE CLIENT BRIEFING.

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Our unique structure nurtures the interdisciplinary relationships that give us the edge, laying the groundwork for more informed insights and more original, incisive thinking from diverse perspectives that, when paired with our global reach and resources, make us uniquely capable to address our clients' challenges.

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