The Challenge - Released in October 2015, the Centers for Medicare & Medicaid Services’ (CMS) sepsis bundle management is a test of a hospital’s ability to navigate the future of healthcare. Unlike more straightforward CMS quality metrics, the sepsis bundle requires longitudinal, detailed reporting on patient care which spans multiple departments. The bundle requires reporting on diagnosis, fluids, antibiotics, monitoring, lab testing, and outcomes, meaning hospitals must coordinate care across multiple departments and teams to ensure compliance.

The incumbent model of using different specialty physicians groups to staff disparate departments struggles to execute on initiatives which require this kind of coordination. In particular, a lack of physician leadership, or a single, responsible team which takes ownership over the program, typically leads to failure. Though no reliable statistics exist for nationwide compliance with the bundle, anecdotally it appears to be very low, in the range of 30-40%. This reflects a challenging environment for hospitals and health systems when this kind of interdepartmental cooperation is required.

There are more than 1 million cases of sepsis per year, according to the National Institute of General Medical Services, which estimates that between 28 and 50 percent of those people die, or more than deaths from prostate cancer, breast cancer and AIDS combined. Therefore, an effective response to sepsis is essential for improving population health and lowering mortality rates.

The Solution - US Acute Care Solutions’ (USACS) Integrated Acute Care model provides a unique avenue to supply a necessary element to the success of any sepsis bundle compliance program: a unified team that takes ownership over the process, and is held accountable for its success.

USACS implemented this model for its partner, Somerset Hospital, in Somerset Pennsylvania. From the start, USACS’ collaborative model of managing both the Emergency Department and Hospitalist services laid the groundwork for success. The sepsis bundle program there included four essential components:

- **A Unified Interdisciplinary Team.** USACS formed a process improvement team which brought together representatives from key departments throughout the hospital, including pharmacy, radiology, lab personnel, the documentation team, hospital quality leaders, the CNO, and APP leadership. This collaborative approach allowed USACS to diagnose areas for improvement while remaining accountable for moving the overall process improvement program forward.

- **Outreach and Education.** Sepsis presentations can be difficult to identify, so USACS embarked on an aggressive education campaign to ensure that nursing staff and physicians could identify and effectively triage potential sepsis patients.
• **Identifying Areas of Fall-off.** Over the course of several weeks and months, USACS used hospital data and input from the interdisciplinary team to identify several areas of improvement. Among the improvements:
  - Installing an automated process to ensure a second lactate test is drawn within 6 hours of presentation if the initial lactate level is >2. Previously, there had been a fall-off on ordering repeat lactates.
  - Changing the sepsis order set and educating staff to ensure proper anti-biotic selection in order to meet the bundle metric.
  - Creating a set guideline for proper dosing of fluid resuscitation.

• **Continuing Education & Monitoring.** With the program in place for a year, USACS still monitors its compliance to ensure areas of small drop-offs. When identified, USACS works with its interdisciplinary team to correct.

**The Results** - In January of 2016, when the program began, Somerset Hospital was 0% compliant. Within a few months, compliance was up to 50%, and within 6 months compliance had reached 75%. In months 6-12 after program implementation the Integrated Acute Care Team was able to maintain sepsis bundle compliance between 60% and 75%.

**Summary** - As healthcare continues its shift from volume to value and reimbursements are increasingly tied to quality metrics, a health system’s ability to meet the sepsis compliance bundle is signpost of its preparedness for the future. By partnering with USACS to implement its model of Integrated Acute Care, Somerset Hospital has improved its patient care and is poised to thrive.

Ultimately, the combination of the Integrated Acute Care model with USACS’ culture of physician ownership meant Somerset could rely on an accountable, unified team of physician leaders to not only execute, but maintain its success with progressive improvement over the long-term.