

Using a Kaizen event to kick-off your sepsis care improvement journey

SOUTHCOAST HEALTH

Southcoast Health is a not-for-profit, community-based health system with multiple access points, offering an integrated continuum of health services throughout southeastern Massachusetts and Rhode Island. The Southcoast system includes three emergency departments, located at Charlton Memorial Hospital in Fall River, St. Luke's Hospital in New Bedford and Tobey Hospital in Wareham. Collectively, the three emergency departments see more than 200,000 visits each year.

Challenge

In 2015, the Centers for Medicare and Medicaid Services announced its intention to begin collecting sepsis quality data from hospitals through the Inpatient Quality Reporting Program. Hospitals were suddenly on-notice that they would have to adapt their processes to meet the measure requirements.

Action

Southcoast began its sepsis process improvement journey employing LEAN redesign. It kicked off efforts with a Kaizen event in August 2016 that involved frontline staff and stakeholders from across the system's three hospitals: emergency department clinicians, antibiotic stewardship specialists, laboratory staff, quality department staff, and IT personnel. The Kaizen was led by Urszula Andrade of the Operational Excellence team and aimed to "lock them in a room" to develop a process that would better achieve the system's goal of improving compliance with CMS's sepsis quality measure (SEP-1). The starting compliance rate, according to Andrade, was in the low-twenties (out of 100 percent), leaving lots of room for improvement.

Because the SEP-1 measure is so complex and multi-faceted, as a first step the quality team translated the SEP-1 specification manual into a visually-pleasing,

easy-to-read algorithm. Once on the same page, the team identified barriers they faced in trying to achieve the necessary steps towards SEP-1 compliance. One stumbling block the team identified early was the configuration of the Epic electronic health record – at the time, Epic did not support the necessary workflow. For example, the system would issue a pop-up alert that was premature and too easily dismissed. The team highlighted fundamental areas of work such as timekeeping; identifying time zero was key to adherence of multiple time-based measures. Components of SEP-1 such as infusing the sufficient volume of fluids, completing a repeat lactate and handing patients off from the emergency department to an inpatient unit all both human factors interventions and electronic tactics to hard-wire care.

Over the two-day event, the team brainstormed solutions to the identified barriers and drafted the ideal workflow.

They then translated the ideal workflow into an action plan, to identify potential steps that would need to be taken to accomplish the ideal workflow. With extensive follow-up with stakeholders in clinical areas, information services, quality and operational excellence, implementation began in late 2016 and has been ongoing since.

Outcomes

In recent months, Southcoast is increasingly focused on areas beyond the emergency department, including adult inpatient areas and pediatrics. It took some time, intensive coaching and at-the-elbow support along the way to put all of the strategies in place. Ultimately Southcoast was able to **improve measure compliance from 31 percent in CY16 to 67 percent in CY18, which is well-above the national average of 49 percent.**