The Sepsis Registry

Sepsis Improvement Collaborative

The Sepsis Improvement Collaborative (SIC) was launched in July 2011 to improve the detection and management of patients with severe sepsis or septic shock, with the goal of reducing sepsis-related mortality.

Leveraging the EHR

Key enhancements were made in the patient electronic health record to create “electronic breadcrumbs” that would allow for the quantification of the patient care process. Working with SIC leadership, the registry team leveraged these enhancements to develop and validate an algorithm based on a clinical definition of severe sepsis/septic shock, create and report indicators of treatment bundle compliance, and report on patient length-of-stay and mortality. The registry has continued to be refined over the past three years:

- Improving the accuracy of bundle compliance by refining clinical “start time,” treatment timing calculations, and appropriate indicators for treatment.
- Creating a new cohort of coded (vs. clinical) cases for purposes of standardized reporting to the Delivery System Reform Incentive Payment (DSRIP) program.
- Designing a sepsis audit tool for nurses and physicians charged with improving bundle compliance and documentation.

The sepsis registry provides near real-time dashboards of provider performance, allowing for peer-to-peer education. As a result, sepsis-related mortality has decreased by 25% compared to the 2009 baseline.