Helping Hospitals Improve Patient Safety

Central line-associated blood stream infection (CLABSI)

Anita R. Jackson, MSN, RN, CNL, **Charlene A. Stinnett**, MSN, CNS-BC, RN and **Susan J. Wedel**, RN, BSN, MS

Background

A central line-associated bloodstream infection (CLABSI) is a serious infection that occurs when germs (usually bacteria or viruses) enter the bloodstream through a central line. Costs associated with CLABSIs can include:

- Increase in mortality rate
- Patient safety
- Patient satisfaction
- Hospital reputation
- Longer hospital stays
- Average of **$46,000** in additional unreimbursed cost per case[1]

Many hospitals struggle with hospital-acquired infections (HAIs), but CLABSIs are the most costly of all HAIs.[1] Furthermore, Centers for Medicare and Medicaid Services' (CMS) pay for performance programs penalize or reward hospitals according to the hospital's HAI rates. Many healthcare agencies provide evidence-based CLABSI-reducing guidelines and toolkits for hospital use. However, tools must be used consistently and correctly for hospitals to successfully reduce CLABSIs.

Aim

Crowe provides the expertise of clinical risk specialists to assist hospitals in reaching their objective to deliver safe patient care through standardized infection surveillance and evidence-based prevention practices that can help decrease CLABSI rates.

Design and strategy

Crowe clinical risk specialists, working with hospital staff, assess and observe relevant controls to determine gaps and opportunities for improvement and whether controls are working as management expects. Relevant controls include:

- Written policies and procedures based on evidence-based guidelines
- Monitoring for adherence to policies and procedures
- Education and competency evaluations for staff caring for patients with central venous catheters
- Patient education materials that are current and simple for patients and/or family members
- Adherence to CDC-recommended indications for central venous catheter insertion to reduce nonessential catheters
- Proper aseptic technique for central venous catheter insertion and use, and consistent, proper maintenance by all clinicians
- Identification of key CLABSI metrics and ongoing surveillance methods
- Formal tracking and reporting methods
- Documented performance improvement efforts by the facility
- Use of current technology such as electronic medical records
- Clear employee roles, responsibilities, expectations, and accountability

Crowe clinical risk specialists help hospital management and staff address each opportunity identified and develop action plans designed to reduce CLABSI rates.

Process issues discovered

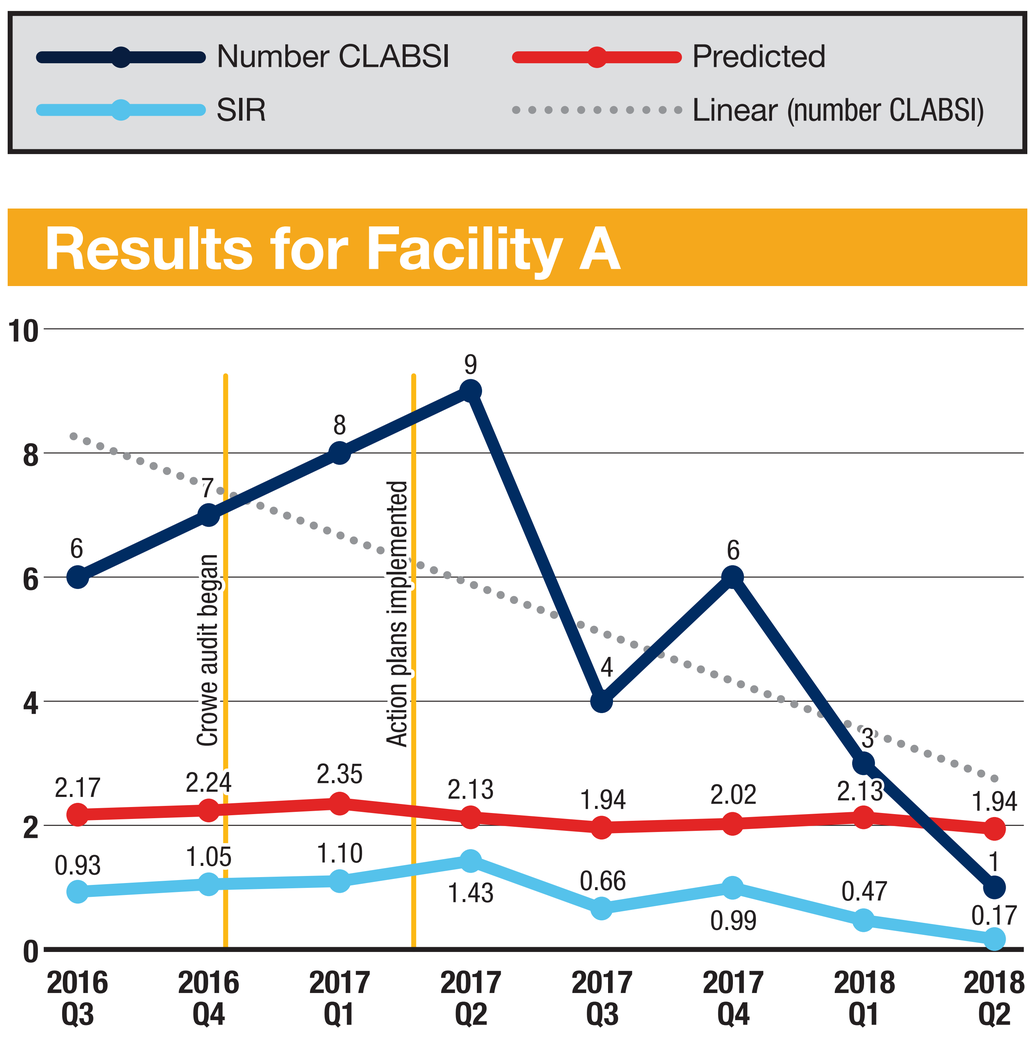
Through observation and medical record testing, Crowe discovered deviations from expected standards, including:

- Maintenance elements were not documented in the medical record as complete
- Standards for central line care were not followed
- Patient education was not documented
- Orders for insertion, use, continued need, and removal were not documented
- Daily rounds were not conducted
- A standard handoff communication tool (to report on central lines) was not in place
- Best practices were not always utilized

[1] Yazan Haddadin and Hariharan Regunath, "Central Line Associated Blood Stream Infections (CLABSI)," National Center for Biotechnology Information, Sept. 30, 2018, https://www.ncbi.nlm.nih.gov/books/NBK430891

Crowe

Results for Facility A

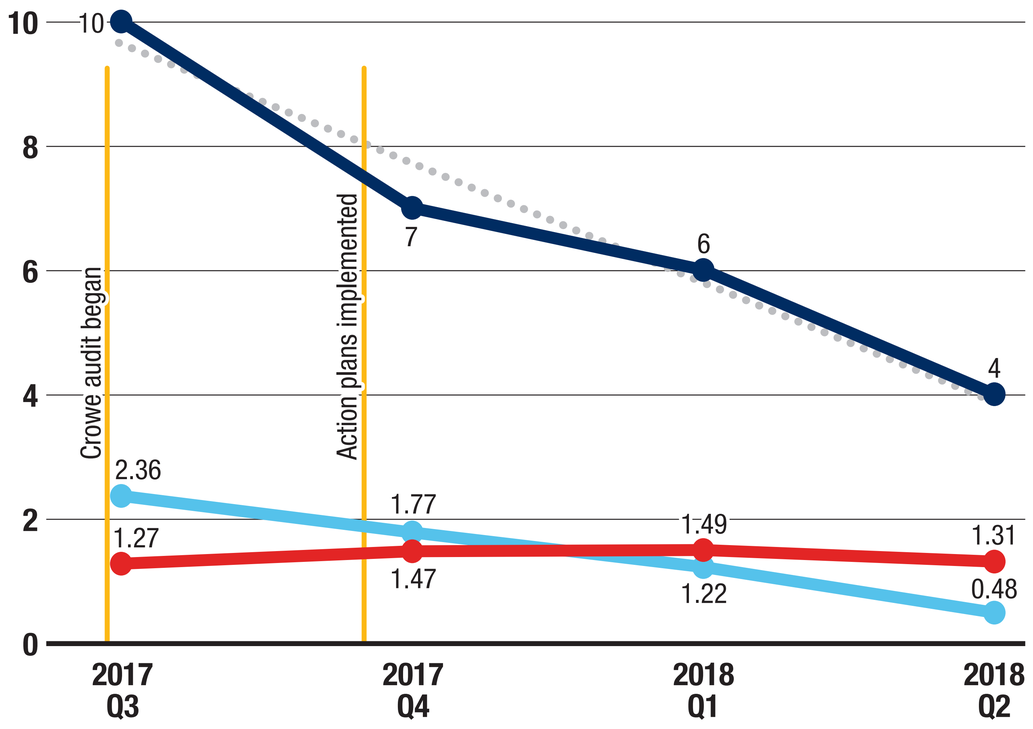


Corrective actions for Facility A

To decrease instances of CLABSI and follow established best practices, Facility A implemented the following action plans:

- Provide reeducation to staff and monitor medical records for adherence
- Require use of a central line insertion checklist
- Require consistent documentation and monitoring of required care elements
- Require contracted staff to follow policies for insertion of central lines
- Require daily CHG baths for patients with central lines

Results for Facility B



Corrective actions for Facility B

To decrease instances of CLABSI and follow established best practices, Facility B implemented the following action plans:

- Improve physician orders regarding insertion and confirming placement of central lines
- Grant access to specific areas within the medical record for documentation and information for all clinical staff who assist in insertion of central lines, including radiology
- Require consistent documentation and monitoring of required care elements
- Perform multidisciplinary rounding and monitoring on patients with central lines
- Implement an electronic template for handoffs in transitions of care to ascertain the medical necessity of the central line
- Establish a detailed handoff communication process to determine central line need

HC-19005-001C