11) CAUTI Prevention Team

South Shore Hospital

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PROJECT DESCRIPTION

Catheter associated urinary tract infections (CAUTIs) account for 30-40% of our organization's hospital acquired infections each year. In January 2015, we formed a multidisciplinary "CAUTI Prevention Team" comprised of nurses, physicians, infection control, nursing informatics, and information technology professionals to develop and implement evidence-based protocols to decrease the risk and incidence of CAUTI amongst patients.

Utilizing Lean problem-solving principles, the CAUTI Prevention Team reviewed current state data, identified gaps in performance and developed and implemented several countermeasures to improve the way we care for and monitor patients who are susceptible to CAUTIs. Highlights of the Prevention Team's work include:

- 1. Implemented a urinary catheter clock in March 2015 that populates the bedside nurses' status board, an electronic work list used by our nursing staff. The catheter clock allows nurses to easily identify the length of time a catheter has been in place which has resulted in a significant reduction in urinary catheter days.
- 2. Initiated a "stop the line" review of all CAUTI events to better understand root cause and identify future prevention strategies.
- 3. Implemented a nurse driven urinary catheter removal protocol in June 2015.
- 4. Created a Foley catheter report driven from nursing and provider documentation that auto "pushes" out 7 days a week to clinicians highlighting patients with Foley catheters stratified by unit, attending physician, reason for placement and elapsed time from initial insertion.
- 5. Hold ongoing daily huddles with local leaders to review all patients with urinary catheters, reason for placement and compliance with the nurse driven protocol.
- 6. Conduct ongoing CAUTI prevention education and training for multi-disciplinary stakeholders including nursing, radiology, patient transport and inpatient rehabilitation.
- 7. Conduct ongoing review by attending nurses during bedside rounds on the medical surgical units and clinical coordinators in the ICU.
- 8. Implemented the use of impregnated infection control Foley catheters in the ICU and ED.

OUTCOMES ACHIEVED

- There has not been a CAUTI in the ICU since April 2015 and there has been more appropriate use of urinary catheters house-wide.
- Aggregate Foley catheter days reduced by 24% from March to July 2015.
- Med/Surg Foley catheters days have decreased by 1570 in January 2015 to 963 in August 2015, a 39% decrease in device days.
- Increased staff awareness and engagement of best practices to reduce the risk of infection for patients who require urinary catheters.

LESSONS LEARNED

- Physician engagement is critical. In order to implement a nurse driven protocol for catheter removal, nursing and physician leadership had to partner together to understand existing gaps in performance and use the best evidence to reduce utilization. Without physician champions, this change would not have been possible.
- Ongoing daily huddles and regular review of patient data keep everyone focused on CAUTI prevention. Huddles serve as a forum where team members can hold one another accountable, ask questions and ensure protocol is being followed. With up-to-date patient data, teams can proactively use data to manage and make more informed decisions about patient care.
- Instituting the "stop the line" approach for CAUTIs created a way to obtain real-time information on system and process failures. By timing out and asking why, we have been able to develop effective CAUTI prevention strategies. "Stop the line" is a tool our organization regularly uses to help us identify root cause of problems.