

6) Catheter-Associated Urinary Tract Infection (CAUTI) Prevention and Reduction

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PROJECT DESCRIPTION

With the national focus on decreasing hospital acquired infections (HAIs) and with Catheter Associated Urinary Tract Infections (CAUTI) as the most prevalent of all HAIs, the hospital determined that a focused approach to decreasing CAUTI was vital. A thorough literature review was conducted to identify the best evidence-based practices for CAUTI prevention, and the best practices served as a guide to assess where gaps existed in our ICUs. This review revealed varying degrees (gaps) of adherence to approved indications for catheter use, identification of a plan for catheter removal and compliance with routine urinary catheter care principles. The analysis was used as baseline information as we begin to prioritize our efforts on practice improvement initiatives.

In September of 2012 an interdisciplinary team, the CAUTI workgroup, was developed to address the high CAUTI rates in the intensive care units (ICUs). A wide representation of nurses from the ICUs and the Department of Infection Control participated. Because each additional day of catheter use there is a 3-5% increase in the risk for infection, the workgroup collaborated with physicians to initially develop a list of evidenced-based hospital approved indicators for the use of an indwelling urethral catheter.

The CAUTI workgroup is co-led by the Patient Care Services, Office of Quality and Safety and the Department of Infection Control and has now expanded to include nurses from general care units to help reduce CAUTI in those areas. The workgroup's primary objective is to "identify opportunities for improvements and interventions to aide in decreasing the usage of urinary catheters and CAUTI rates to below the NHSN benchmarks in 50% of the ICUs and on the general care units."

OUTCOMES ACHIEVED

The CAUTI rates at the facility are nationally benchmarked with the Center for Disease Control's (CDC) National Healthcare Safety Network (NHSN). The outcomes achieved includes:

- 50% of ICUs are now below the national NHSN benchmark for CAUTI
- 23 of the general care units (62.16%) outperformed the NHSN benchmark for 5 (five) or more quarters 2013-14
- In Q1 of 2015, 27 out of 29 units outperformed the NHSN benchmark for CAUTI
- The ICU CAUTI rate is decreasing steadily, and the rate in general care units has remained stable at a low level.

Data using a Standard Infection Ratio (SIR) also shows reductions in rates to below the national benchmarks (i.e., values less than the benchmark of 1.0):

- Device utilization ratio in the ICUs decreased from 0.91 to 0.78
- Device utilization rates have remained stable in both ICUs and general care units.

LESSONS LEARNED

Top Lessons Learned:

- Tailoring the program allowed for customized selection of interventions that met the unique clinical and practice needs of both the units and the organization
- Bottom up approach to prevent CAUTI through interdisciplinary clinical workgroups is an effective way to achieve reductions.
- Having clinical staff participate from units with the highest and lowest CAUTI rates allowed staff to openly discuss rates, practices, design solutions and motivated change.