

A “Fight the Foley” Bundle to Reduce Device Utilization Rate and Catheter Associated Urinary Tract Infections

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Introduction

- Catheter Associated Urinary Tract Infections (CAUTI) are considered a preventable hospital acquired infection (HAI) and are not reimbursed by the Centers for Medicare and Medicaid Services.
- The Centers for Disease Control (CDC) states a urinary tract infection involves any part of the urinary system, and urinary catheters account for 75% of all urinary tract infections and 40% of all hospital acquired infections.
- The average cost from a single CAUTI can range from \$867-\$10,197, depending on population and bed location (Hollenbeak & Schilling, 2018).



Background & Purpose

- In 2017 & 2018, the study hospital had the highest device utilization rate (DUR) across a 12-hospital system.
- Although CDC recommended best practices for CAUTI prevention were utilized, a struggle to remain below the national benchmark for DUR and CAUTI was apparent.
- In the first quarter 2018, a re-focus program regarding alternative devices was incorporated to not only remind staff of available product but also to inventory and ensure easy access to such devices.
- After identifying gaps and inconsistencies in leadership buy-in to device reduction, as well as staff engagement to address appropriate indications for catheter insertion and nurse-driven catheter removal once indications no longer met, a literature review and action plan was completed.
- A literature review revealed the following key variables to a successful reduction in DUR/CAUTI rates:

- ✓ Leadership engagement
- ✓ Processes to assist staff in determining appropriateness
- ✓ Empowerment to utilize nurse-driven protocols

Methods/Data

The aims of this project were:

- 1) To develop and implement a daily “Fight the Foley” line huddle for unit leaders
- 2) To develop and implement a Foley stop huddle prior to insertion- see Figure 1.
- 3) Increase available alternative devices.

Study Population: All patients admitted to critical care, intermediate care, or a medical-surgical unit with an indwelling urinary catheter at a 238 bed not-for-profit hospital.

Methods: A pre-post retrospective comparison was completed by using data collected from July 2017 to August 2018 and post intervention data from October 2018- September 2019.

- CAUTI rate and DUR device data was collected from a system infection prevention high performance team reporting dashboard that provides unit and facility detail by month.

Fight the Foley Pre-Insertion Stop Huddle	
Prior to all indwelling urinary catheter insertions, please complete this Stop Huddle. If any answer is NO, then stop and address.	
❖ Does the patient self-cath at home? *If patient still functionally able to perform self-cath STOP!	
YES	NO
	Do we have a need to collect and measure urine?
	Have alternates been attempted? i.e, bladder scan I&O cath, condom catheter, purewick, ask patient to void
	Is there an appropriate indication? <input type="checkbox"/> Select Surgical Procedure <input type="checkbox"/> Accurate Daily I&O/cannot be assessed by other means <input type="checkbox"/> Acute Urinary Retention <input type="checkbox"/> Critically Ill and need for hourly I&O <input type="checkbox"/> Prolonged immobilization <input type="checkbox"/> Assist in healing of sacral/perineal wound, stage III or greater <input type="checkbox"/> Terminal Comfort Care
	Provider order entered in Epic.
	Aseptic technique used. 2-Person for Females.
If Foley inserted did we ensure the following?	
	UA with a reflex culture ordered, collected and sent to lab? (Fever, symptoms, indwelling catheter in place upon arrival)
	LDA documented in EPIC

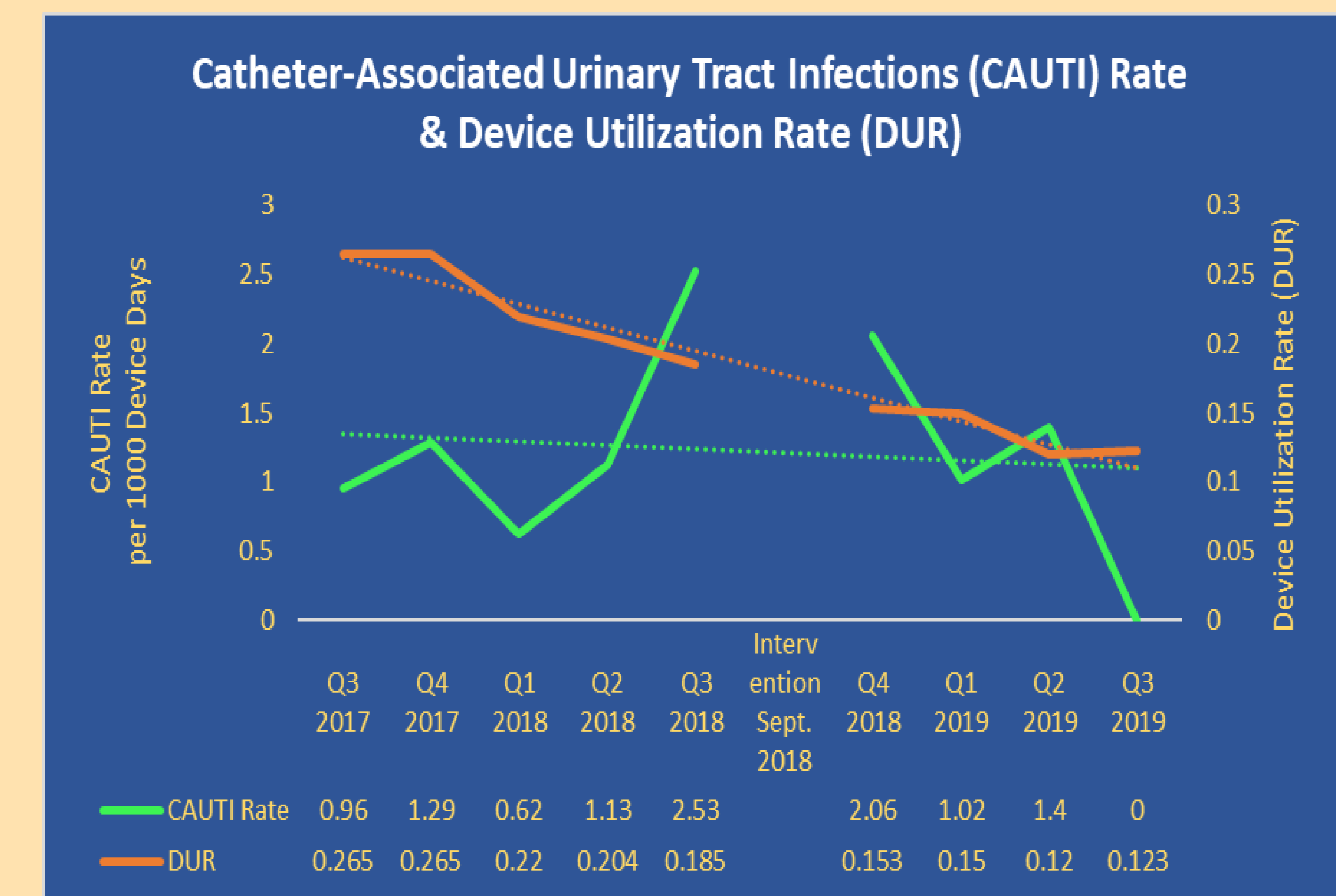
Figure 1

Results

A Chi-square analysis revealed an overall reduction in device utilization by 30% (P<.05), CAUTI rate was reduced by 24%, and a reduction in the raw number of CAUTIs by 50% (P<.05).

Key Findings

- Successful in reducing device use and infections
- Promotes leader and clinical staff buy-in, inter-professional collaboration, and organizational change that is imperative for sustainability of results
- The availability of alternative devices, in addition to a bladder management and auto-discontinuation protocol, offers nurse autonomy and knowledge to influence provider perception of urinary catheter needs
- Daily review and follow-up is necessary to identify trends, barriers, and opportunities for improvement with real-time action



Graph 1

Limitations

- Limitations included:
 - ⊗ Not following bladder-management protocol
 - ⊗ Missed weekend huddle opportunities
 - ⊗ Delayed buy-in from unit leaders

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