

Systematic Approach to Decrease Device Utilization by Assessing Urinary Catheter Appropriateness and Alternative Devices

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Abstract

Catheter-associated urinary tract infections (CAUTI) account for seventy to eighty percent of healthcare-associated infections¹. CAUTI prevention is related to appropriate use of the catheter and compliance with infection prevention bundles. Through an organized approach of assessing urinary catheter appropriateness, alternative devices, and timely discontinuation, Infection Prevention partnered with nurse leaders in a daily huddle to decrease device utilization.

Objectives

Decrease urinary catheter utilization through:

- Assessment of catheter appropriateness
- Availability of alternative devices
- Engagement of nursing leaders

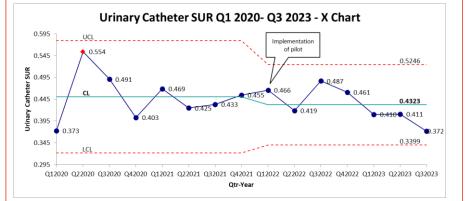
Study Design

Infection Prevention reviewed current literature for best practice and participated on the CAUTI Reduction team. Availability of external catheters was confirmed. Nursing leader and team engagement was assessed, specifically regarding timeliness of removal.

- Support from Vice Presidents of Medical Staff and Nursing
- Established daily huddle meeting with Clinical Directors and Senior Directors
- Utilized computer report with necessity and bundle compliance
- Report-out by leaders with identification of follow-up
- Created escalation process

Standard Utilization Ratio (SUR) was used.

Results



Pre-intervention period (Jan 2020 to Dec 2021): SUR ranged from 0.373 to 0.544.

Post-implementation period (Jan 2022 to Sep 2023): SUR ranged from 0.372 to 0.466.

A downward trend of SUR occurred in the first through the third quarters of 2023 with SUR of 0.410, 0.411, and 0.372.

Disclosures

None of the faculty or planners for this activity have relevant financial relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by patients.

Conclusion

This pilot found that having a systematic approach to assess urinary catheter appropriateness and alternative devices facilitated the discontinuation of the catheters which lead to a decrease in the SUR.

Engagement of our senior and clinical leaders, nursing teams, and physicians were essential to our success.

References

- Centers for Disease Control and Prevention (CDC). (2015, October 16). Catheter-associated urinary tract infections (CAUTI). <u>https://www.cdc.gov/hai/ca_uti/uti.html</u>.
- Gould CV, Umscheid CA, Agarwal RK, Kuntz G, Pegues DA, and Healthcare Infection Control Practices Advisory Committee (HICPAC). (2019, June 6). *Guideline for Prevention of Catheter-Associated Urinary Tract Infections 2009.* https://www.cdc.gov/infectioncontrol/pdf/guidelines/cauti-guidelines-

H.pdf
Lo E, Nicolle LE, Coffin SE, Gould C, Pettis M, Saint S, Yokoe DS. (2014). Strategies to prevent catheter-associated urinary tract infections in acute care hospitals: 2014 update. *Infection Control and Hospital*

Epidemiology, 25(S2), pp232-S47.

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