

External Female Catheters: Appropriate Use Reduces Urinary Catheter Utilization/CAUTIs



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Problem

- CDC reports that catheter associated urinary tract infections (CAUTIs) are the most common type of healthcare-associated infection, accounting for more than 30% of infections reported by acute care hospitals.
- CAUTIs result in increased morbidity/mortality, length of stay and costs.
- FY'20 and FY'21 CAUTI rates were above organizational goals.
- Literature* demonstrates that female patients in intensive care units (ICUs) benefit most from using external female catheters (EFC); and organizational catheter utilization rates dropped >5% over 2 years after EFCs were implemented (Ekert et al., 2020).
- This project aligns with AOP pillars of patient experience; patient quality & safety, reducing and avoiding patient harm.

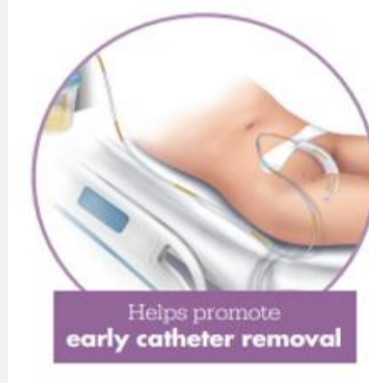
Goal

- Reduce urinary catheter utilization, thereby reducing CAUTI rates, with appropriate use of external female catheters

Intervention Design

What is an external female catheter?

a disposable latex free flexible external urine collection tube used with suction to collect urine from female patients. For the purpose of accurate I&Os. Not intended for incontinence management or to replace bedpan/commode/toilet use.



- Re-enforced use of nurse driven foley removal protocol
- Developed/evaluated pilot project in MICU/SICU/3SE/3SW Feb-Jun 2021
- Developed EFC nurse driven protocol, Jun 2021
- Initial RN education about EFCs May-Nov 2021
- Stocked by Supply Chain in adult med-surg / ICU units May-Nov 2021
- Implemented EFCs in all adult med/surg and ICUs Nov 2021
- Conducted RCA to evaluate 2 HAPI events; developed action plans May 2023
- Revised leadership audit tool for appropriate EFC use Jun 2023
- Re-educated > 700 RNs about EFC use in Jun 2023
- Updated new hire education, skills checklists, competencies Jul 2023
- Improved documentation of EFC usage in WALDO Jul 2023
- Improved Epic report of EFCs Jul 2023
- Revised EFC nurse driven protocol, developed tip sheet Jul 2023
- Disseminated information in Nursing Need to Know Jun-Jul 2023

Intervention Design



TIP SHEET: External Female Catheters

Intended for patients who require strict I&O and are unable to use bedpan, urinal or commode AND have limited mobility AND/OR require immobility and/or supine positioning.

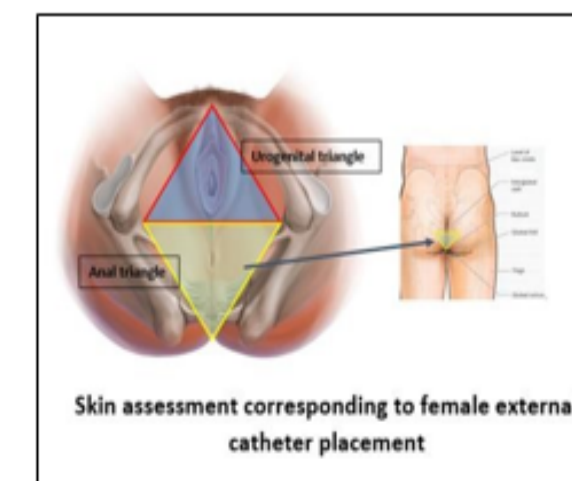
#1 Tip This device is not intended for incontinence management or to replace bedpan/commode/toilet use.

- Promote patient mobility: Assist patients to bathroom toilet, bedside commode or use bedpan.

#2 Tip Do not use in patients who have contraindications:

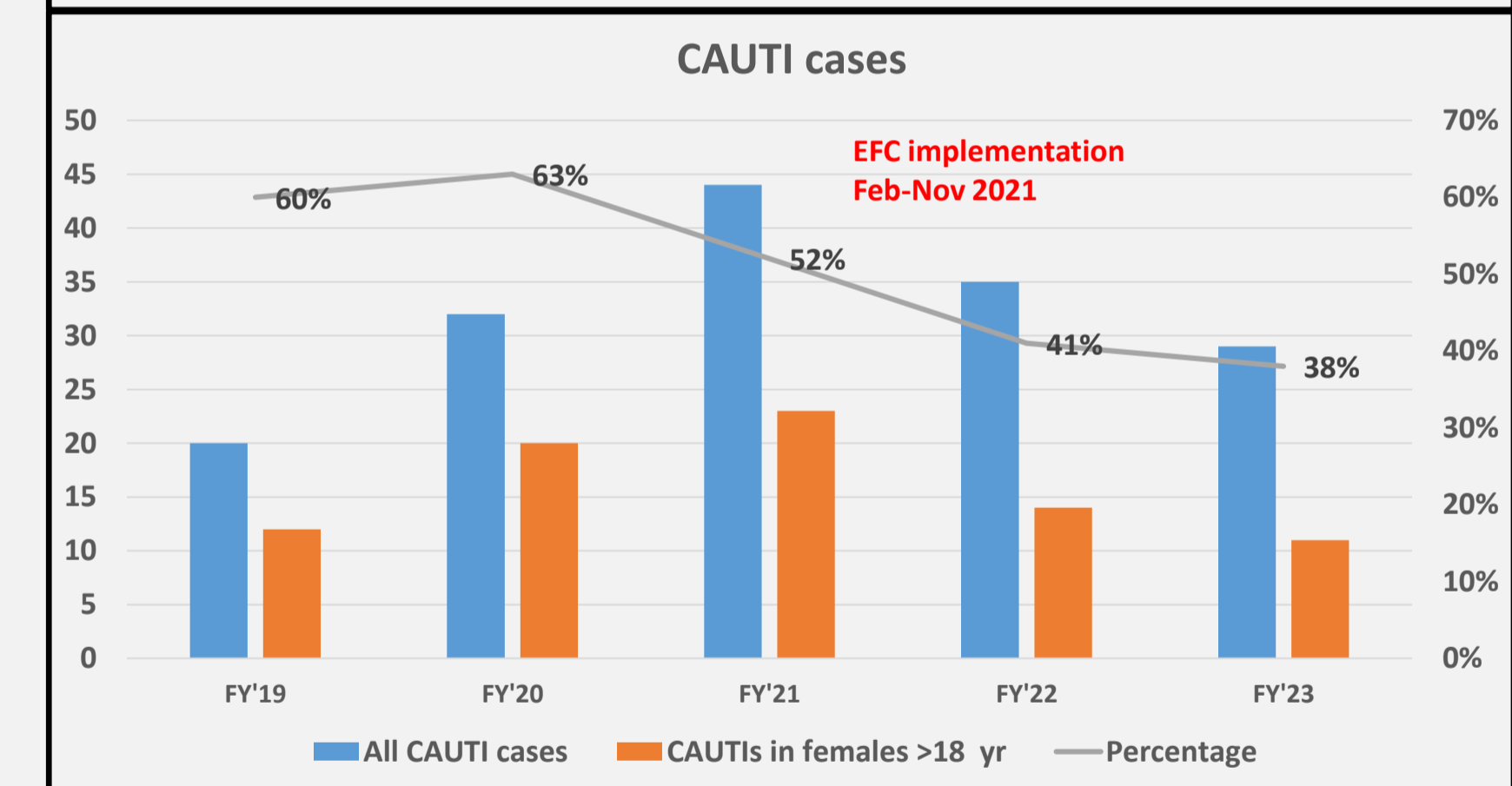
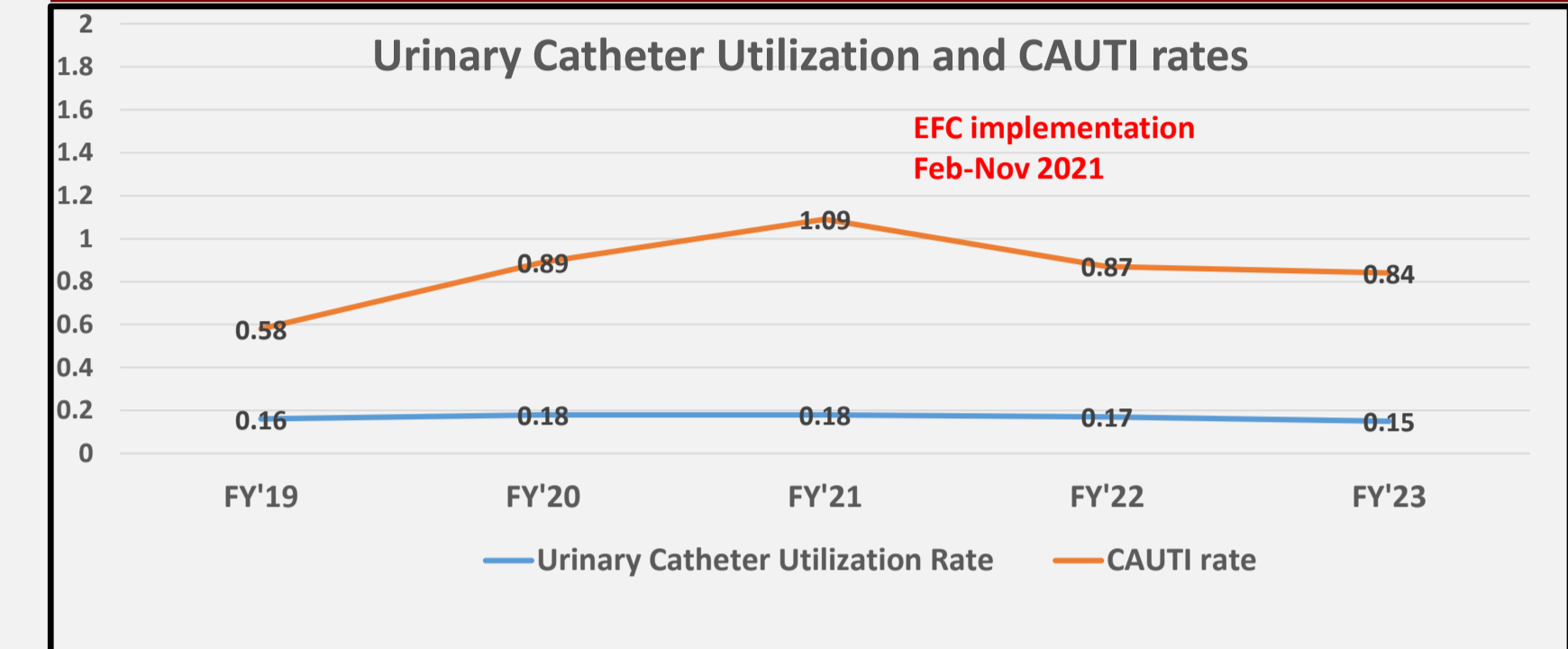
- Incontinence and no medical necessity for accurate I&Os
- Wounds (sacral, coccyx, lower abdomen, groin, perineum or inner thighs)
- Ability to toilet with assistance (either bedpan, urinal or bedside commode)
- Concern for fecal contamination (incontinent of stool, diarrhea)
- Agitation/Delirium/Dementia
- Pelvic/Trunk Sensory Deficits (paraplegia)
- Sensory perception issues (inability to communicate pain/sensations)
- Impaired coagulation (low platelet count, high risk for bleeding, bruising)
- Suicide Precautions (ligature risk)
- Age less than 18
- Small or Large body habitus (improper fit, inability to assess skin integrity)
- Prone positioning
- Upright positioning, HOB>45 degrees
- Pregnancy/Labor
- Urinary retention
- Rectal or Vaginal bleeding/Menstruation
- Prolapses Uterus/Rectum
- Trauma: Pelvic/Rectal/Vaginal/Perineal/Urological
- Fistulas: Pelvic/Rectal/Vaginal/Perineal/Urological
- Surgery: Pelvic/Rectal/Vaginal/Perineal/Urological
- Anuria
- Moisture associated skin damage

#3 Assess position of the device at least every 2 hours; assess for skin breakdown/pressure injury, especially perineum, urogenital triangle, anal triangle, intergluteal cleft at least every 2 hours and when repositioning.



*References available upon request.

Results



Conclusions

- When appropriately used, EFCs contribute to decreased urinary catheter utilization and decreased CAUTI rates for the organization
- Continued collaboration between providers and nurses is needed to reinforce appropriate use
- Continued quarterly vendor/UCM leader education: planned Sep-Oct 2023
- Continued auditing for appropriate usage, education for patients

Acknowledgements

- Thanks to Nursing Leaders; Wound Care Team; Supply Chain; Informatics; Sage Product Representatives