

CNS impact through innovation and implementation of PrimaFit™ External Urine Management System for Females

Catheter-associated urinary tract infections (CAUTIs) are one of the most common healthcare-acquired infections (HAIs)-making up nearly 40% of all HAIs.¹

Of these:

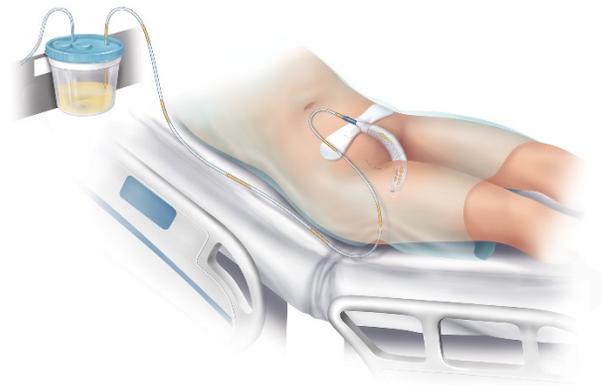
- Approximately 75% are associated with urinary catheters²
- 95% occur in the intensive care setting³
- Up to 25% of hospital patients have a urinary catheter at some point during their stay²

CAUTIs are associated with increases in morbidity, mortality, and costs.

- Estimated 449,334 CAUTI harm events per year⁴
- Estimated 13,000 annual UTI related deaths⁵
- The cost of a CAUTI is approximately \$600 with up to \$340 million spent in healthcare per year⁴

Background

Terrie Beeson and Carmen Davis are Clinical Nurse Specialists at University Hospital, a part of Indiana University Health System. In an effort to reduce CAUTI prevalence and harm, Beeson and Davis evaluated strategies designed to help decrease indwelling urinary catheter usage in female patients. Additionally, they conducted data collection surveys exploring workflow impact on nursing practice with the use of a urine management system in acute and critically ill women.



Intervention

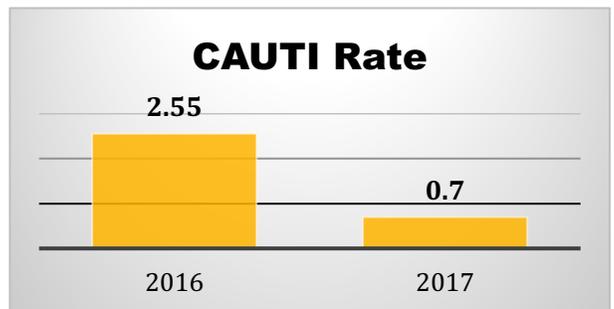
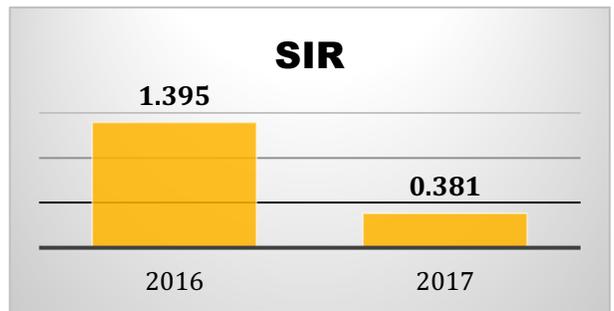
Beeson and Davis initiated a quality improvement pilot program using an external female urine management system in an 18-bed adult SICU. Female patients were identified for early removal of indwelling urinary catheters during interdisciplinary rounds for CAUTI prevention. Daily rounds included a review of the Centers for Disease Control (CDC) indications for ongoing catheter need. For female patients who remained incontinent after a catheter was removed or when output management was needed, the PrimaFit External Urine Management System was applied. The device was used on a range of surgical and medical patients with variable ages and body mass indexes.⁶

CAUTI rates and Standard Infection Ratio (SIR) metrics were compared. For data collection, the pre-implementation time was April to September 2016 and the post-implementation was April to September 2017.⁶

Results

- SIR decreased considerably in the six-month pilot time of 2017, from 1.395 to 0.381.⁶
- CAUTI rates during the pilot decreased 27%, from 2.55 in 2016 to 0.70 in 2017.⁶

In addition, nurses caring for these patients reported satisfaction associated with a decreased workload of frequent linen changes, the ability to capture and record drainage output, and general excitement about a viable alternative to help keep patients safe from infection and skin injury. 100% of the nurses surveyed agreed that the product helped to manage female urinary incontinence.⁷ Patients also verbalized satisfaction with the use of the PrimaFit™ External Management System for Females.⁹



Conclusion

PrimaFit External Urine Management System for Females can be a viable alternative to an indwelling urinary catheter or intervention for urinary incontinence. The device can minimize the risk for skin injury and infection for female patients.

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About the Clinicians

With nearly 40 years of experience, Terrie Beeson MSN, RN, CCRN, ACNS-BC, and 20 years of experience, Carmen R. Davis MSN, RN, CCRN, CNS-BC are practicing critical care clinical nurse specialists in an academic tertiary referral center (Surgical and Medical Intensive Care Units, respectively). They are responsible for providing clinical leadership and promoting optimal patient outcomes. In addition, they collaborate with all members of the healthcare team to design, implement, and provide safe, cost-effective, evidence-based care strategies. Both clinicians are consultants for Sage/Stryker.