

One Year CAUTI Free

A Multi-Disciplinary Team Approach to Reducing CAUTI in a Pediatric Intensive Care Unit

Jessica McClusky, MSN, RN, CPN, CIC
Grand Rapids, Michigan

Background

- Helen DeVos Children's Hospital is a 234 bed hospital with a Level I trauma center, Level IV neonatal intensive care unit, and a robust cardiovascular surgery program
- The pediatric intensive care unit (PICU) is a 24 bed unit, with the option to flex to 36 beds. In 2017, the PICU had 1,584 admissions for a total of over 7,100 patient days
- Catheter associated urinary tract infection (CAUTI) rates were consistently above national benchmarks in the PICU

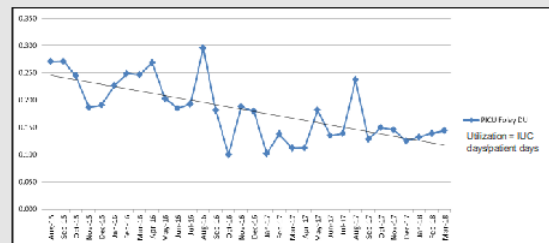
Objectives

- To reduce indwelling urinary catheter (IUC) utilization in the PICU to less than 20%
- Achieve one year with zero CAUTI in the PICU

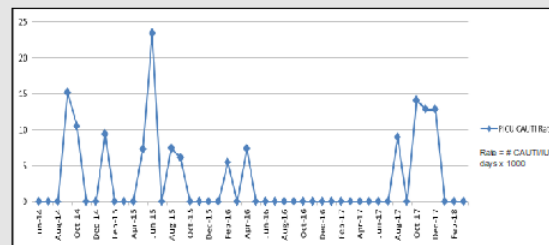
Methods

- Multi-disciplinary team formed in August 2015
- Team members include:
 - Infection Prevention
 - Bedside caregivers
 - Urology, Intensivist, and Infectious Disease providers
 - Quality Improvement Specialists
 - Nurse Educators
 - Support staff
- Meetings take place monthly and as needed
- Meeting topics include metrics, CAUTI prevention bundle compliance, new products, and to make recommendations for the use and care of IUCs
- CAUTI cases and near-misses are reviewed in detail and action plans are developed for follow up

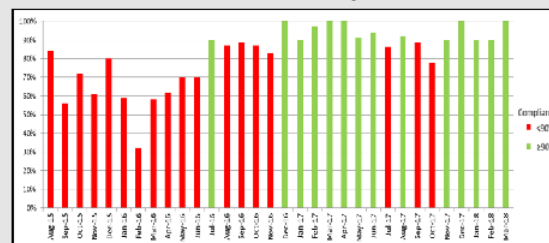
IUC Device Utilization- PICU



CAUTI Rate- PICU



Prevention Bundle Compliance- PICU



Methods, cont.

- Interventions:
 - Provided one-on-one staff education on CAUTI prevention bundle components
 - Implemented bathing products designed for perineal cleansing and CAUTI prevention
 - Implemented standardized bathing process
 - Prevention bundle task built into electronic medical record
 - Developed a bladder scan and straight catheterization guide for patients with urinary retention
 - Developed a guide for appropriate IUC sizing
 - Implemented standard work for transporting patients with a catheter

Results

- Helen DeVos Children's Hospital
 - Zero CAUTI identified for over one year
- PICU
 - Zero CAUTI identified for 498 days
 - 77% CAUTI reduction since 2014
 - 63% Foley utilization reduction since 2014
 - Average number of patients per month with a Foley decreased from 53 to 32 post committee implementation
 - Prevention bundle process measure improvement of 52%

Conclusion

- A multi-disciplinary team approach results in successful CAUTI reduction in pediatric populations