

Reducing CAUTI Infection Rates in the NSICU



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BACKGROUND

Patients in the Neurosciences ICU are at risk for urinary retention, often requiring Foley catheters. Stool incontinence, and prolonged catheter use increase contamination and infection risk, raising hospital stays and costs by up to \$29,000 per infection.

PROJECT AIM

The goal of the project was to decrease Foley Catheter device days and Catheter Acquired Urinary Tract Infections (CAUTI) by 5% per fiscal year from FY2021-FY2023

PROJECT DESIGN/STRATEGY

- Ensure appropriate assessment for Foley catheter necessity
- Promote early and timely Foley catheter removal to minimize reinsertion
- Utilize NSICU nurse led rounds with deliberate emphasis on daily evaluation of lines, drains,
- Incorporate line and device necessity reviews into Progression of Care Rounds
- Implement urinary management protocol and increase bladder scanning and in/out catheterizations

CHANGES MADE (PDSA CYCLES)

- Unit-wide education to include:
 - ❖ Bladder scanning and in/out catheter use
 - ❖ External urinary management devices
 - ❖ Standardizing weighing incontinence pads
- Hardwiring addressing Foley catheter necessity in progression of care rounds, nurse-led rounds, and rounding sheet checklist
- Rounding by unit leadership on patients with Foley catheters
- Peer auditing on unit Foley catheters

RESULTS/OUTCOMES

FY 2021-FY2022

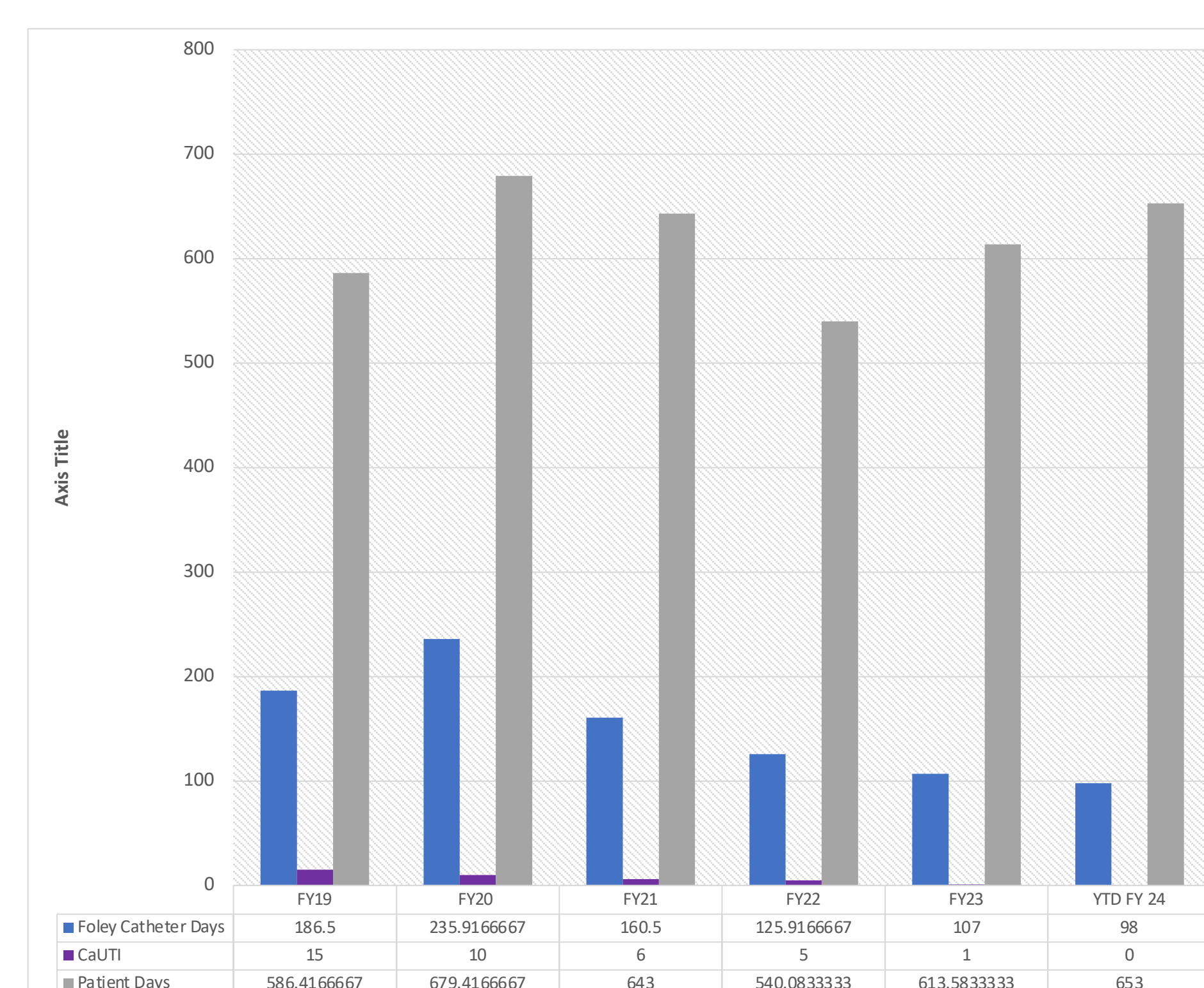
Decrease in CAUTIs by **16%**
 Decrease in Foley catheter device days by **27%**

FY2022-FY2023

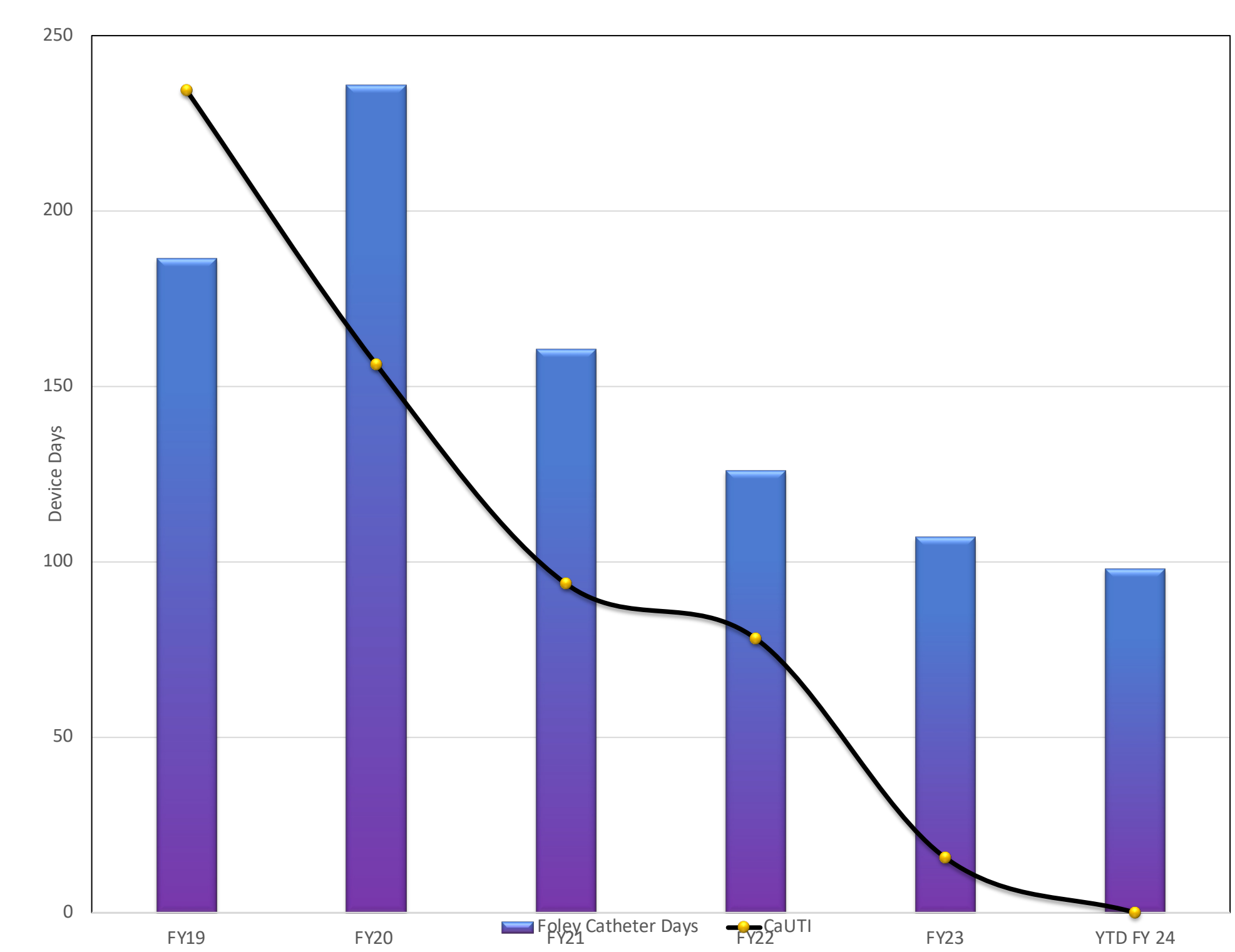
Decrease in CAUTIs by **80%**
 Decrease in Foley catheter device days by **13%**

Implementation of NSICU Urinary Management Protocol System-wide.
In 2024, system-wide implementation achieved 16% overall CAUTI reduction.

NSICU Catheter and CAUTI Reduction with Patient Day Comparison



NSICU Foley Catheter Days and CAUTI Reduction



LESSONS LEARNED

Targeted interventions, to include education, standardized urinary management protocols, and enhanced collaboration, significantly improves patient safety and outcomes in critical care.

NEXT STEPS

Continued education and data collection on NSICU related to Foley catheter device days and CAUTI rates

Reinforce Urinary Management Protocol and expand education to other Critical Care units within ECU Health Medical Center and throughout the organization

ACKNOWLEDGEMENTS

NSICU Leadership
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