



PATIENT SAFETY/ORGANIZATION-WIDE COMMITMENT TO QUALITY IMPROVEMENT

Wyckoff Heights Medical Center

In recognition of efforts to reduce nosocomial infections by reducing the use of indwelling catheters and other medical devices.



Reducing Device Days

BACKGROUND

Wyckoff Heights Medical Center (WHMC) is a 350-bed teaching hospital located in the Wyckoff Heights section of Bushwick, Brooklyn, New York. The hospital is a New York State designated stroke center and level III perinatal center.

The Device Days initiative was designed to

- prevent device-related infections by minimizing pathogen entry points and reducing exposure time to potential infection sources;
- lessen the likelihood of complications and adverse events;
- reduce length of stay.

Timely removal of indwelling catheters and other medical devices aligns with principles of evidence-based care. The use of these devices can cause discomfort and anxiety for patients, creating increased stress on the patient care team. In addition to the risk of infection, there is an increased chance for the patient to dislodge the device, causing harm. Infections associated with these devices harm patients, affect the hospital's safety grade, and impact staff morale.

APPROACH

IPRO QIN-QIO participation

- Attended infection prevention and CDC TAP LANs
- Participated in QI 101 Training series

Interventions implemented:

- Staff report daily on all Central Lines (CLs) and Foleys in use.
- Staff use the CL Bundle for insertion to ensure evidence-based practices are observed.
- Protocol initiated to assess retention via bladder scanning prior to insertion of a urinary catheter.
- Patient care manager (PCM) responsible for timely removal of CLs/Foleys.
- Medical staff and clinical leaders collaborated to explore alternatives to CLs (i.e., midlines) and Foleys (i.e., condom catheters/Purewick system), adding them to the units' par level stock.
- The PICC line team changes dressings every Monday.

Staff and patient involvement:

- Staff complete competencies upon hire and annually for CL and Foley care and maintenance.
- Staff are part of the team and kept informed of any infections via a unit "huddle" to review cases and explore potential causes of infection.
- When appropriate, patients and families are educated about why CLs/Foleys are necessary, as well as the care and maintenance of devices.

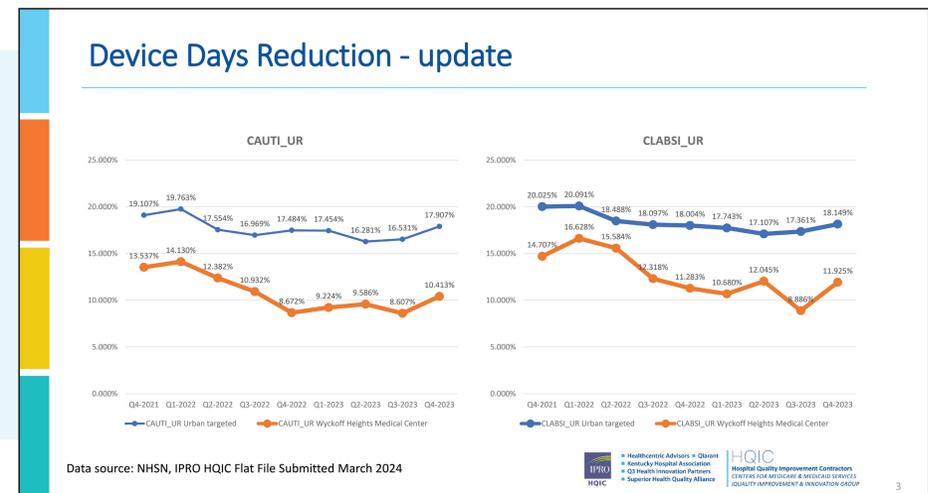
RESULTS

- As Device Days at WHMC have trended down from Q4'21 thru Q3'23, catheter-associated urinary tract infections (CAUTIs) have decreased.
- Decreased Device Days have led to decreased infections/acute illness which results in a decreased length of stay and increased patient satisfaction.
- In 2022, CAUTIs were at a high of nine for the year. In 2023, this was decreased to four/year – a 56% reduction via measures taken/vigilance with this nurse-driven protocol to decrease indwelling catheter days.
- In 2022, central line-associated blood stream infections (CLABSIs) were at a low of three for the year; however, in 2023, a slight increase in device days led to an increase in infections to five for the year.

CONCLUSIONS

WHMC plans to continue education and daily monitoring of CLs and Foleys on inpatient units to sustain these results.

The emphasis on Device Days has become a critical task for each unit nurse leader. Lessons learned include the importance of maintaining consistency in action and prioritizing the issue with urgency. The team has also recognized the importance of education and reinforcement for both staff and patients.



ACKNOWLEDGEMENTS

Our Team: Device Days

- **Executive Sponsor:** Dr. Catherine Simon, CNO
- **Leaders:** Dr. Pedro Soto, Patricia Meade, Garfield Patrick, Dr. P. Mir, Dr. G. Martin, Dr. S. Patel, Dr. N. Yakubov
- **Managers:** G. Palma-Cardona, L. Travers, K. Lago, R. English, A. Cox-Tannis, R. Madden
- **Line staff:** NICU, ICU, IMCU, 6S- Med-Surg Vent, 5S- Surgery, 3S Telemetry
- **Multidisciplinary members/Q.I. staff:** D. Williams, B. Chandler, M. Canastra, G. Jenkins-Massiah