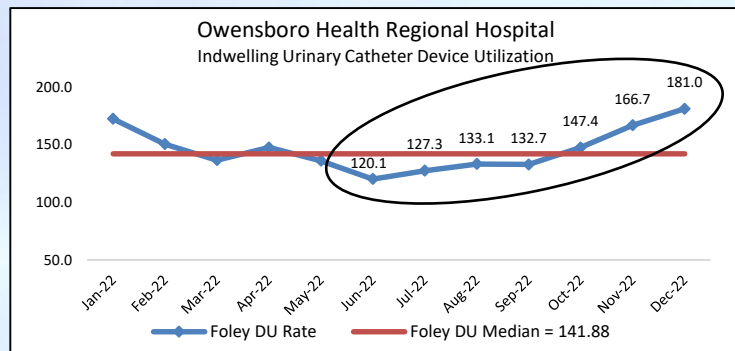
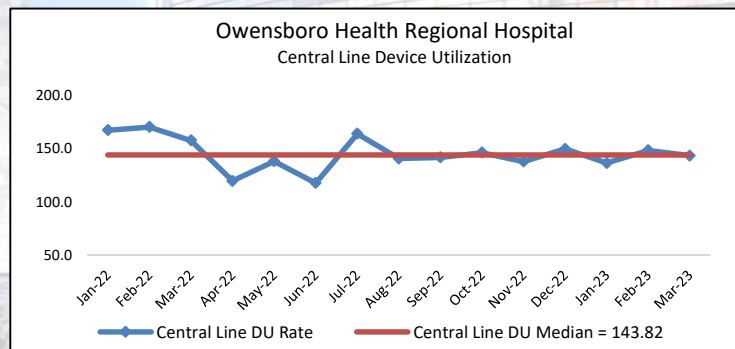


## PROBLEM

The 'Eyes on the Lines' project was initially implemented by the CAUTI (Catheter Associated Urinary Tract Infection) Team in December 2022 after they identified an upward trend of 7 data points in indwelling urinary catheter device utilization From June to December 2022.



The 'Eyes on the Lines' project was then adopted by the CLABSI (Central Line Associated Bloodstream Infection) VAT (Vascular Access Team) Committee in March 2023. The baseline median central line device utilization ratio was 143.82.



## MEASUREMENT:

- CAUTI rates were calculated by the number of CAUTI divided by the number of urinary catheter days multiplied by 1,000.
- Central line device utilization was calculated by the number of central line days divided by the number of patient days multiplied by 1,000.

## ANALYSIS:

- Run charts with a median were used to identify statistically significant shifts and/or trends in the data.
- Pareto charts were also used to identify opportunities for improvement with indwelling urinary catheter maintenance and care.

## IMPLEMENTATION

### METHODS:

The project included bi-monthly foley catheter audits and routine review of reports to identify patients that may qualify for removal of unnecessary urinary catheters and/or high risk central lines, or may be candidates for urinary management alternatives such as female or male external catheters.

Every Person. Every Time.

### Foley Catheter Audit

Review Date: \_\_\_\_\_

Unit: \_\_\_\_\_

Foley POA: Yes No

Foley insert date: \_\_\_\_\_

Unit Foley inserted in: \_\_\_\_\_

MRN: \_\_\_\_\_

Admit Date: \_\_\_\_\_

Room #: \_\_\_\_\_

Name: \_\_\_\_\_

Age: \_\_\_\_\_ Gender: \_\_\_\_\_

Perfect Compliance: Yes No

Unit Foley inserted in: \_\_\_\_\_

* Anchor Clip Present:	Yes No	* Disinfectant Cap:	Yes No
* Anchor Clip Used:	Yes No	* Is Bag Touching Floor:	Yes No
> Reason: _____		* Sitting in Chair:	Yes No
* Securement Device in Place:	Yes No	* Mattress Low/On Floor:	Yes No
> Reason: _____		* Is Bag Overfilled (>2000mls):	Yes No
Chart Documented:	Yes No		

BUNDLE COMPONENTS	NOTES
* Seal Intact:	Yes No
Chart Documented:	Yes No
Need Assessed Daily:	Yes No
Daily Catheter/Pericare Doc:	Yes No
* Dependent Loop Present:	Yes No
* Is Patient Immobile:	Yes No

The CAUTI Team conducted routine foley audits to monitor indwelling urinary catheter maintenance and identify opportunities for improvement related to:

- ✓ Tamper evident seal intact
- ✓ Securement device in place
- ✓ Daily catheter care/pericare
- ✓ Absence of dependent loop
- ✓ Urinary collection bag not touching the floor
- ✓ Urinary collection bag not overfilled (>2,000mls)



Nursing leaders were asked to review urinary catheter necessity and follow the hospital's nurse driven foley protocol to remove unnecessary catheters.

Obstacles included pushback from providers when questioned about the need for and/or removal of indwelling devices

- Physician Champions helped support the project.

- Central line reports identified patients with high risk central lines that may qualify for removal or alternative line placement.

### High Risk Central Lines:

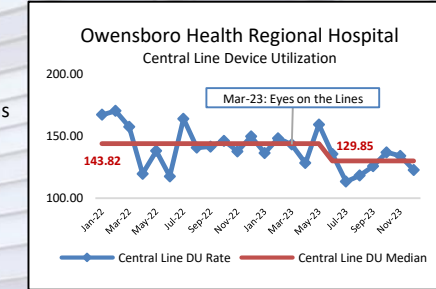
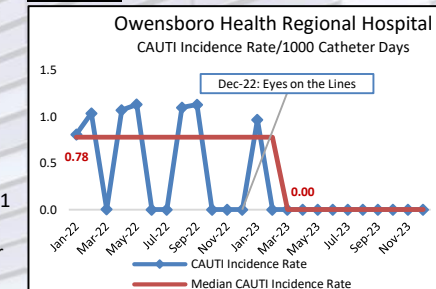
- Femoral Line
- Cordis
- Central Lines in place > 7 days

- ✓ Nursing leaders and VAT were made aware of those patients and asked to review central line necessity.
- ✓ VAT led conversations with providers regarding high risk central lines and offered alternatives such as a PICC line, midline or alternate line insertion sites.
- ✓ This partnership with VAT was positive for both the patients and the infection prevention program.

## Decrease in urinary catheter associated infections:

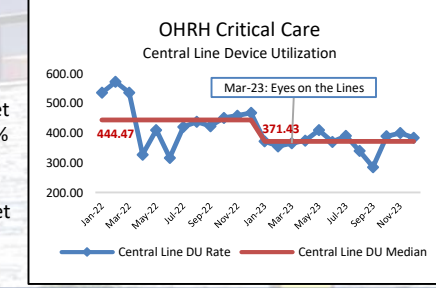
- A downward shift in the CAUTI rate was identified for the hospital, with 11 data points below the median.
- The median CAUTI rate was reset from 0.78 to 0.00, with 1 CAUTI identified from December 2022 to December 2023.
- There was also a decrease in catheter associated urinary tract infections identified in Critical Care, with > 300 days since the date of last CAUTI as of December 2023.

## RESULTS



## Decrease in central line device utilization (DU):

- A downward shift in central line DU with 6 data points below the median was identified for both the hospital and Critical Care.
- The median central line DU rate for the hospital was reset from 143.82 to 129.85, a 9.7% reduction.
- The median central line DU rate for Critical Care was reset from 444.47 to 371.43, a 16.4% reduction.



## REFERENCES

Barnes, S., Olmsted, R., Monsees, E., Harris, J. E., Khoury, R., Hadaway, L., & Downham, G. (2015). APIC Implementation Guide: Guide to Preventing Central Line-Associated Bloodstream Infections. In *Association for Professionals in Infection Control and Epidemiology*.

Centers for Disease Control and Prevention (CDC). (2015). Retrieved from [https://www.cdc.gov/hai/ca\\_uti/uti.html](https://www.cdc.gov/hai/ca_uti/uti.html)

Centers for Disease Control and Prevention (CDC). (2010). Retrieved from <https://www.cdc.gov/hai/bsi/bsi.html>

Felix, K., Bellush, M. J., & Bor, B. (2014). APIC Implementation Guide: Guide to Preventing Catheter-Associated Urinary Tract Infections. In *Association for Professionals in Infection Control and Epidemiology*.

Institute for Healthcare Improvement (IHI). (2022). Retrieved from <https://www.ihl.org/help/extranet/Pages/extHelpDataAnalysis.aspx>