



# Implementation of a New PICC Dressing to Decrease PICC-related Infections in the NICU

Ashraf Kharrat, Erin Karlson, Angela Neish, Marisa Kucha, Janet MacAlpine, Collette Pryce-Jones, Gillian Chan, Yenge Diambomba, on behalf of the Nosocomial Infection Task Force



## Background

- Sepsis continues to be a major contributor to morbidity and mortality in the NICU.
- Increased mortality and long-term neurodevelopmental impairments in infants with sepsis.
- While the rate of PICC-related infections has been decreasing, we have had ongoing issues with PICC dressings and subsequent PICC-related infections.

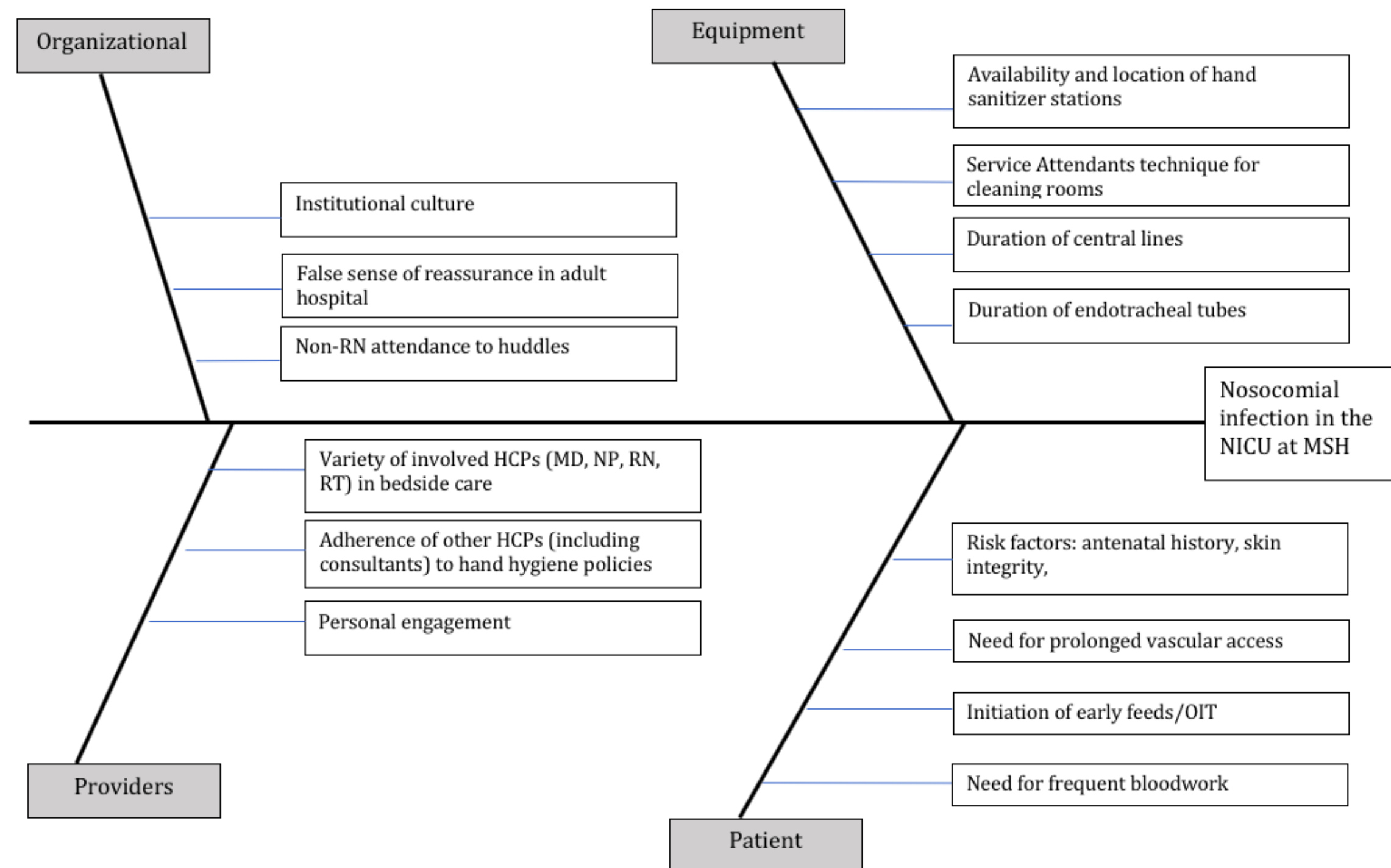
## Aim Statement

To reduce the rate of CLABSIs in the NICU from 22% to 15% by June 2025.

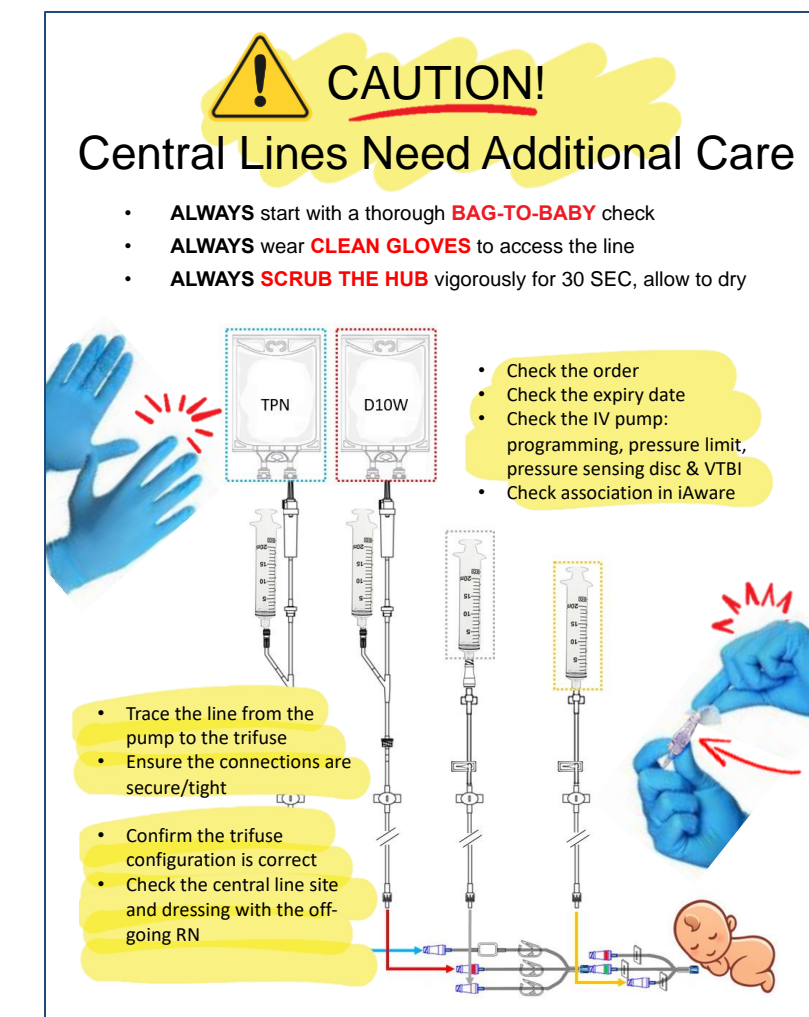
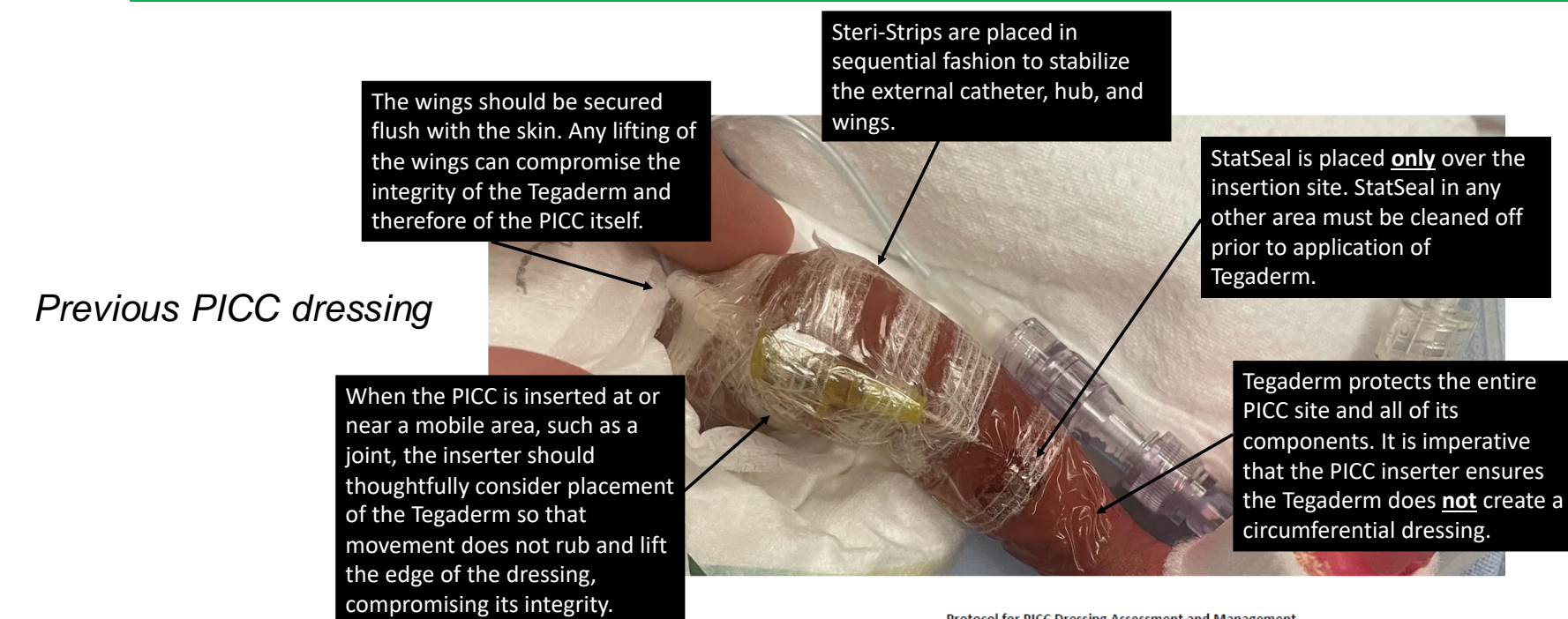
## Process Outline

- We employed several strategies to obtain both qualitative and quantitative data to explore the causes of rising NI rates, including reviews of index cases and safety reports, and surveying front-line staff.
- PICC infections were noted to be the greatest burden of nosocomial infection, most of which of the PICC maintenance type.

## Root Cause Analysis



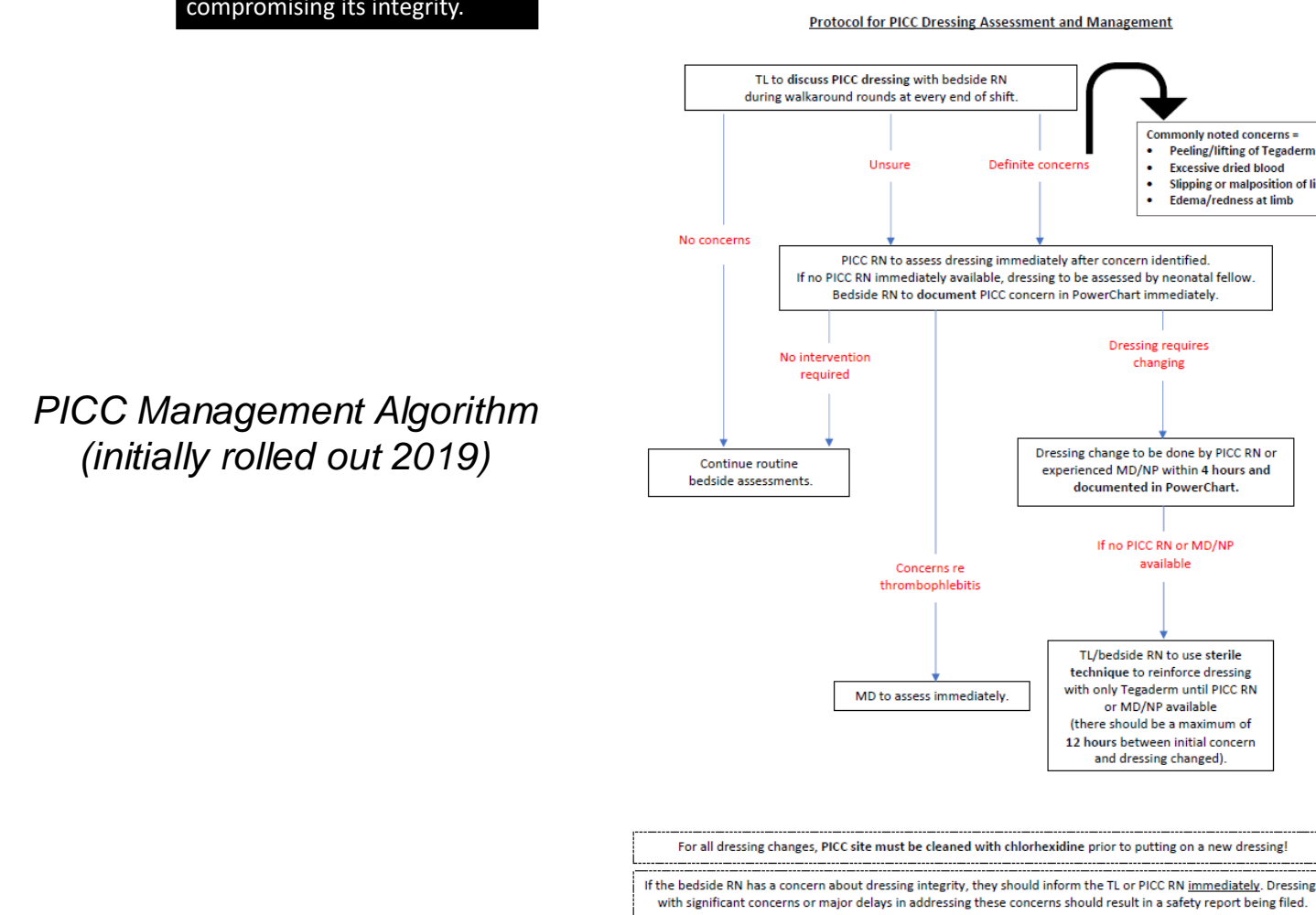
## Intervention



Central line poster (initially rolled out 2022)



New Sorbaview Dressing (rolled out October 2024)



## Implementation Strategy

- Various education strategies to ensure all of the MSH NICU workforce is up-to-date regarding key messaging (challenges: large workforce, rotating staff including residents/fellows).

Email info bulletins

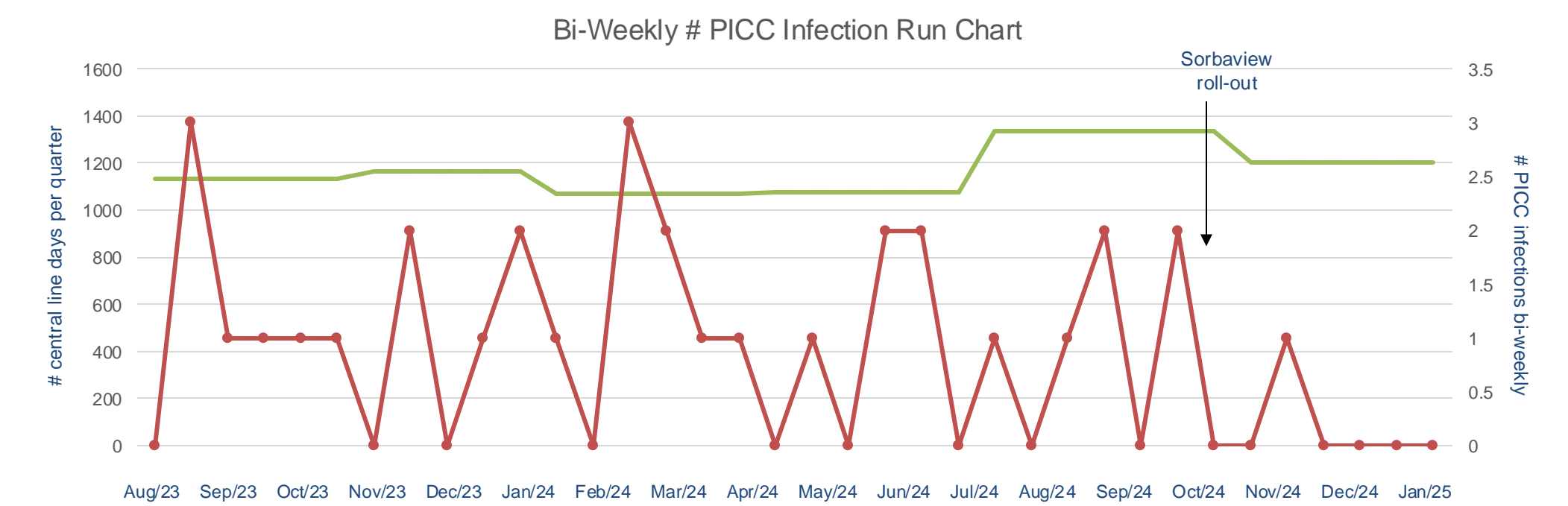
PICC team education sessions

Quality Champions

Quality multidisciplinary huddles

Audit compliance

## Evaluation



- Monthly review of all NI cases by Quality RN.
- Detailed review of all cases by MD + Quality RN.
- Cases presented at Morbidity Rounds q 2 weeks.

Since roll-out, we have had only 1 infection in 3 months (rate of 1.7 → 0.3 infections per month).

## Next Steps

Ongoing auditing and review

Decreasing non-CLABSI infections

Focus on UTIs