Building a Brighter Tomorrow: Reducing HACs in the Pediatric ICU

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Background:

- Hospital-acquired conditions (HACs) compromise patient safety and create significant financial strain.
- A single central line-associated bloodstream infection (CLABSI) can cost approximately $48,108 and delay patient discharge (Forrester, 2022; Li, 2024).
- While prior studies have focused on reducing individual HACs through standardized rounding, our pediatric intensive care unit (PICU) adopted a broader, integrated approach targeting multiple HACs simultaneously.

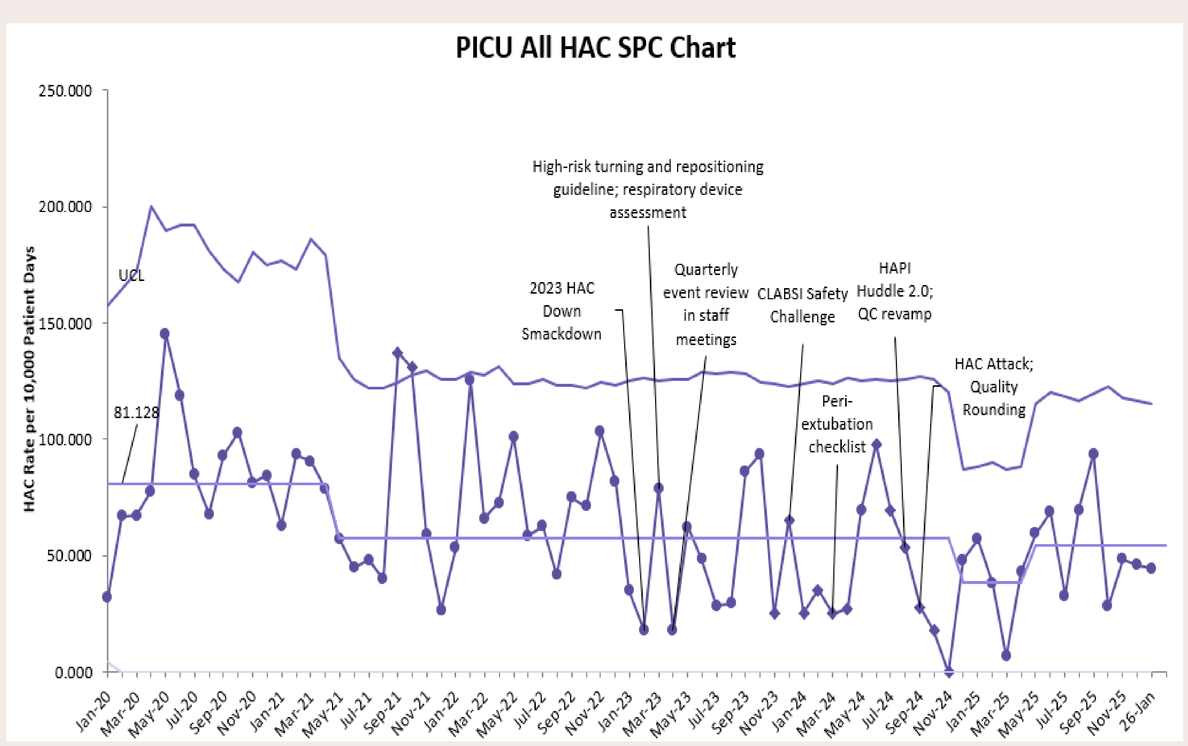
Methods:

Launched Quality Champions (QCs) Program (2022):

- Introduced a nursing-led initiative to reduce HACs
- Specially trained bedside nurses empowered to:
  - Lead quality improvement efforts
  - Promote evidence-based best practices
  - Conduct routine quality rounds
  - Reinforce policy adherence and provide staff education

Program Redesign (2024):

- Added structured QC onboarding and training
- Implemented standardized data tracking protocols
- Introduced targeted coaching strategies for bedside staff



Results:

- Over 4,600 patient rounds completed by QCs in six months post-redesign.
- HAC rates decreased by 45.9% over two years:
  - From 75.74 events per 10,000 patient days (2023) to 40.97 events per 10,000 patient days as of July 2025
- Broader positive outcomes included:
  - Improved staff knowledge and engagement
  - Strengthened bundle compliance
  - Enhanced interdisciplinary communication and safety culture

Conclusions:

- Empowering quality-minded nurses as QCs effectively drove sustainable culture change.
- The initiative achieved significant reductions in HACs within a high-acuity pediatric setting.
- This model proves the impact of nurse-led quality improvement programs in enhancing patient safety, improving outcomes, and reducing organizational costs.
- Facilitated direct observation of bedside practices, allowing QCs to identify gaps and implement targeted education and workflow changes.

References:
1. Li, Q. C., Codde, J., Karnon, J., & Hince, D. (2024). Achieving and sustaining reduction in hospital-acquired complications in an Australian local health service. *BMJ Open Quality,* 13(4). 1-10. https://doi.org/10.1136/bmjoq-2024-002940
2. Forrester, J. D., Maggio, P. M., & Tennakoon, L. (2022). Cost of health care–associated infections in the United States. *Journal of Patient Safety*, 18(2), e477-e479. https://doi.org/10.1097/pts.0000000000000845