

Innovate to Elevate: Reducing Pressure Injuries

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Purpose

The WellSpan Surgery and Rehabilitation Hospital (WSRH) 53-bed Inpatient Rehabilitation Unit (IRU) and Brain Injury Unit (BIU) faced elevated hospital-acquired pressure injury (HAPI) numbers in FY23. HAPIs pose a significant challenge, affecting over 2.5 million patients annually in U.S. acute-care facilities and resulting in 60,000 deaths.

Supporting Description of Need for Practice Innovation

The IRU and BIU reported 13 HAPI for FY23. Of those, 62% (8) were heel-associated HAPI. Root cause analysis identified common factors in the heel HAPI cases:

- 3 patients had darkly pigmented skin
- 2 patients wore CAM boots that were not removed
- 6 patients had lower extremity surgery within 30 days
- 2 patients developed HAPI on both heels

Quarterly NDNQI audits revealed heels were not consistently floated off the bed per NPIAP guidelines. Chart reviews showed inconsistent use of pressure relief interventions for heel protection.

Darkly pigmented patients are particularly vulnerable, as PIs may not be as easily detectable, potentially leading to delays in prevention and treatment.

Our hospital's wound nurses (1.1 FTE total), in collaboration with the interprofessional team, implemented an innovative, proactive heel HAPI prevention plan over six months with the goal to reduce HAPI incidences.

Measures and Indicators to Accomplish Outcome

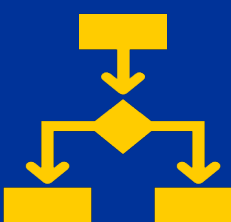
Proactive Heel HAPI Pressure Injury Prevention Plan:



May 2023: Floating heels process improved through real-time education by House Supervisors and Wound Nurses.



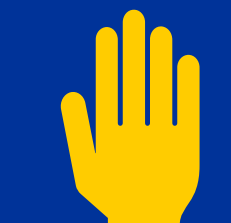
July 2023: Wound nurse visual assessment for any patient with Braden Score ≤ 18 who have had any lower extremity surgery within the past 30 days.



July 2023: Implementation of an innovative, clinical "Decision Tree: Heel Pressure Injury Prevention" tool.



January 2024: 2 licensed personnel skin check when patient returns from a leave of absence (LOA) from the unit ≥ 24 hours.



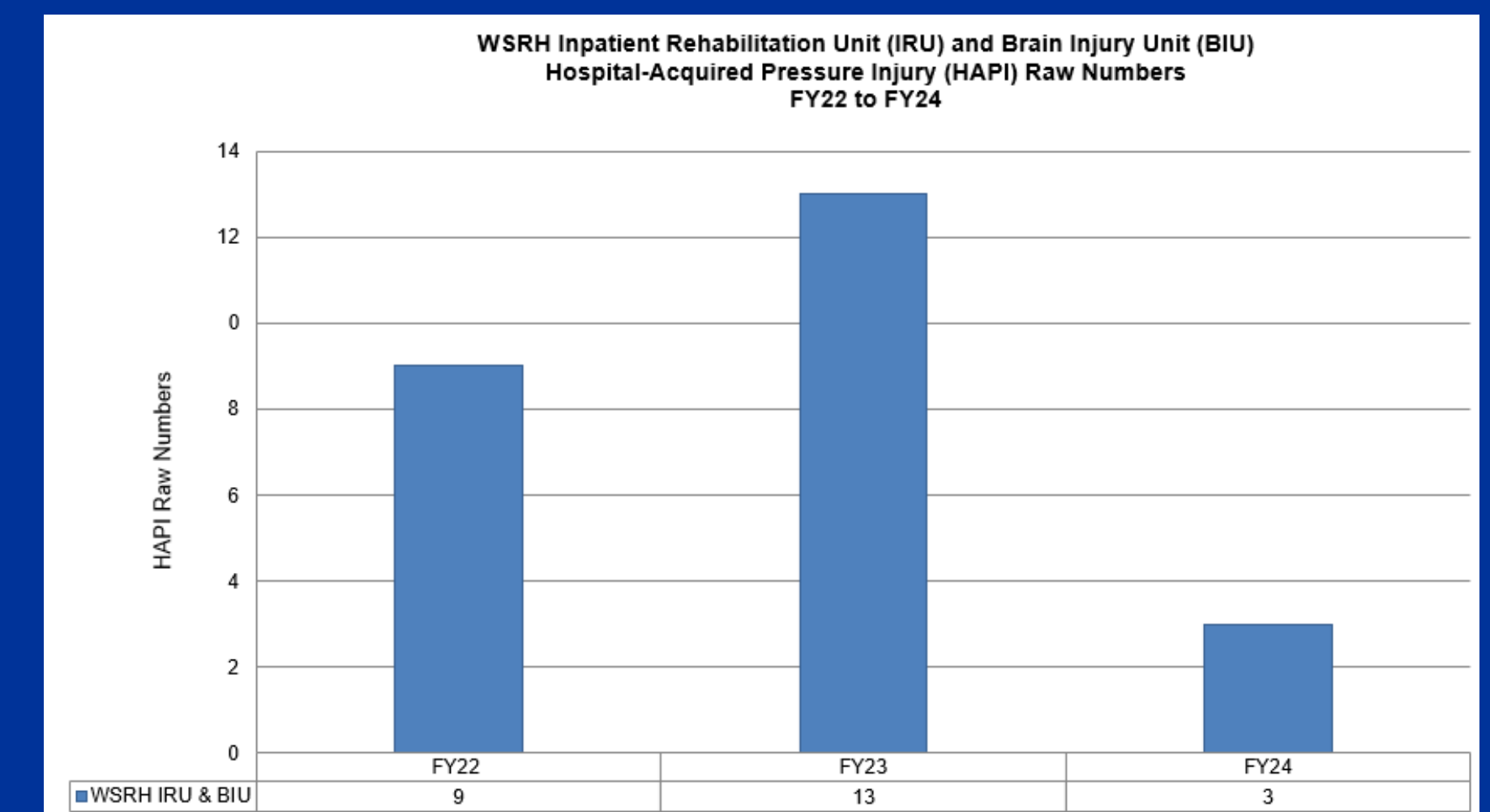
February 2024: Education on evidence-based assessment techniques for darkly pigmented skin provided to nursing and therapy teams.

Data monitoring of process changes and impact, include:

- Pressure injury prevention for patients with Braden Score ≤ 18 on admission
- Daily heel observation compliance for Braden ≤ 18 with minimum of 5 patients audited daily
- Admission skin assessment by 2 licensed personnel
- HAPI rate(s): Heel-specific HAPI rate & HAPI raw numbers
- HAPI root cause and patient case study analysis

Outcomes

The IRU & BIU achieved a 76.92% reduction in overall HAPI numbers, with only 1 heel-associated HAPI in FY24 through the innovative, proactive prevention plan.



Conclusions

Consistent monitoring, analysis, education, and interprofessional collaboration are key to sustaining and improving HAPI prevention, especially for at-risk patients.

References

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