

Implementation of 4 Eyes Skin Assessment in the Pediatric PACU

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Introduction: Hospital Acquired Pressure Injuries (HAPIs) are a detrimental, yet preventable condition that can lead to infection, decreased function, and scarring. It is estimated to cost healthcare systems between \$11-12 billion per year. National attention has been focused on reducing the incidence of HAPIs.

Identification of the problem: Surgical patients have increased risk for PI development due to induced immobility and surgical positioning. While current evidence estimates the occurrence of perioperative-acquired PIs to be between 12-66%, data is not available for this setting at the University of Iowa Children's Hospital. Focused postoperative skin assessments are necessary to identify PIs. Tracking incidence rates can propel further work to prevent injuries from occurring.

QI question/Purpose of the study: Will the implementation of a 4 eyes skin assessment in a pediatric post-anesthesia care unit demonstrate early identification of an increased number of perioperative-acquired pressure injuries?

Methods: Pre-surveys were sent to perioperative nursing staff to assess knowledge, beliefs, and behaviors surrounding HAPIs. After staff education and creation of an in-room algorithm, the skin assessment process was implemented. Skin integrity reports were tracked to determine incidence rates of perioperative skin breakdown.

Outcomes/Results: During the ten-week pilot, 7 patient safety reports were filed in relation to skin integrity. Previous year's data identified 7 reports prior to 4 eyes implementation, showing increase in recognition of perioperative pressure concerns. Weekly chart audits identified an average of 53.6% patient assessment completion.

Discussion: Following the ten-week pilot, staff reported an increase from 35% to 100% completion in 4 eyes assessments. Post-survey data further demonstrated significant increase in confidence when performing and documenting assessments. The 53.6% assessment completion indicates room for improvement and suggests with more completion, higher incidence of perioperative skin breakdown is possible.

Conclusion: Implementation of staff education, in room algorithms, and 4 eyes skin assessment in PACU leads to early identification of PIs occurring in operating rooms, improved positioning practices, and increased patient satisfaction.

Implications for perianesthesia nurses and future research: The data reinforced the essential role of perianesthesia nurses in PI prevention. Further improvement opportunities should focus on preventative measures in the intraoperative setting such as floating heels and the use of gel for shoulder rolls. Improved reporting and tracking methods could also be explored.

Creehan, S., & Black, J.M. (2022). Defining Practices to Avoid Hospital-Acquired Pressure Injuries in the Operating Room. *Journal of Wound, Ostomy & Continence Nursing*, 49, 89-96.

Gefen, A., Alves, P., Ciprandi, G. et al. Device related pressure ulcers: SECURE prevention. *J Wound care* 2020; 29 (Sup2a): S1-S52