

Intraoperative Prevention of Healthcare Associated Pressure Injury (HAPI) Joanne Hopen, MSN, RN, CNOR

Background

Introduction of a therapeutic, reusable and cost-effective product to prevent HAPIs during intraoperative positioning was presented to the surgical services director, administrators, material managers, and team members. Overlook Medical Center (OMC) primarily uses foam egg crates for intraoperative positioning.

The information presented to the team included benefits of gel pad positioners, such as: optimal protection for dependent body surfaces; financial savings by purchasing reusable positioning pads instead of singleuse foam; increased support staff accessibility because they will not be assigned to cut foam; available storage space used for foam mattresses; and diminished bulk waste that comports with OMC's mission of 'Greening the OR'.

- Surgical patients are uniquely susceptible to the development of pressure ulcers as a result of multiple complex risk factors that only occur in the perioperative environment" (AORN p.1).
- "Even with the use of a high-quality foam or gel mattress on the OR table, additional gel pads should be used if necessary " (L. . Strasser, p. 355).



The leadership team agreed to a trial of gel pad positioners. An educational presentation was provided to all OR team members.

A nine-week pilot period was launched, and data was collected through an audit. The feedback from the team members was compiled and analyzed.



Review of materials and labor costs show a savings of up to \$60,000/year. A decreased volume of purchased foam will save the department \$14,937/year. During the pilot period, reduction in foam use freed up valuable storage and shelving space. Staff, no longer assigned to cutting foam egg crate mattresses into usable sizes, will save the department approximately \$44,109/year in total hourly wages dedicated to this task.

Reducing foam pad wastage has an environmental benefit. The annual carbon footprint is reduced through the elimination of 1,521 lbs. of waste.

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Methods

Results

Implications

AORN positioning guidelines emphasize the vulnerability of the anesthetized patient, rendering them immobile puts them at an increased risk of developing a HAPI. Viscoelastic products, such as gel pads, are acknowledged in the AORN guidelines to create a superior pressure redistribution surface. "When available, gel products are the best aids to use as they promote even pressure distribution and ensure skin protection" (L.A. Strasser, p. 357).

In the article, "The National Cost of Hospital-Acquired Pressure Injuries in the US," researchers reported, "Our analysis suggests that a HAPI could cost \$10,708 per patient on average, exceeding a total of approximately \$26.8 billion in the United States annually based on 2.5 million reported cases" (W.V. Padula, p.634). HAPIs pose a significant financial burden to the healthcare industry and risk the well-being of surgical patients.





Conclusion

Preventative positioning is a critical element of intraoperative care. Surgery, anesthesia and limited mobility while in the OR add to the risk of impaired skin integrity and the development of a HAPI.

Gel pads support many of OMC's goals in the OR by:

- Preventing HAPIs
- Reducing environmental waste by 1,521 lbs. annually
- Decreasing labor costs by \$44,109 annually
- Saving \$14,937 annually in material costs



References

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