

Piloting an Alternating Pressure Overlay to Mitigate Pressure Injury.

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BACKGROUND:

Pressure injuries are a painful, costly, and preventable complication. The presence or absence of a pressure injury is a nurse sensitive indicator and reflective of quality nursing care. The patient in the head and neck perioperative setting is at risk for the development of pressure injuries due to inherent risk factors associated with surgery. Comparison of current practice, best evidence-based practice, and assessment of the head/neck surgical population identified the need for increased vigilance and new pressure injury prevention strategies.

OBJECTIVE:

To pilot an alternating pressure (AP) overlay to mitigate intra-operative pressure injury of head/neck patients when surgery was scheduled for four or more hours.



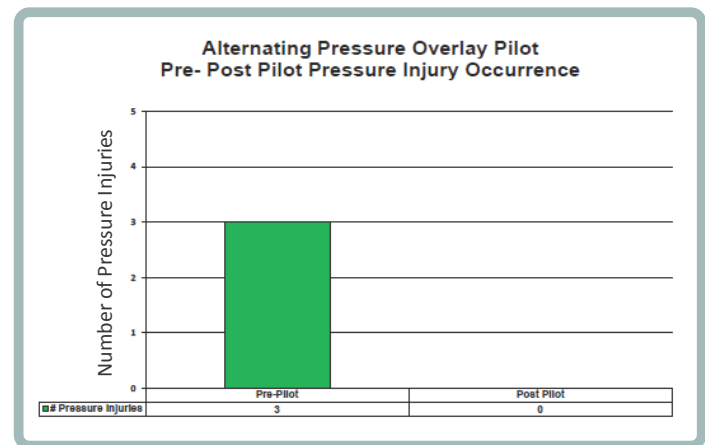
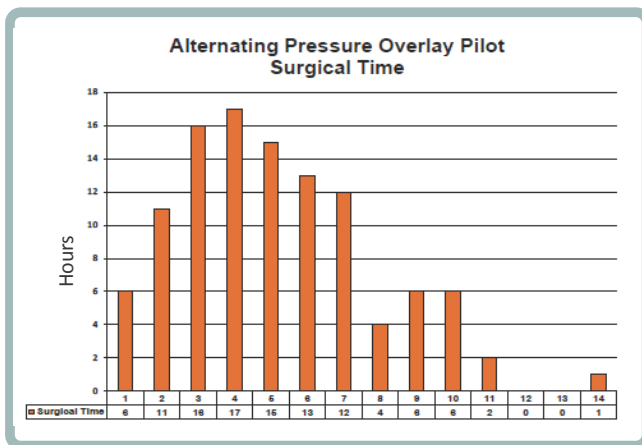
METHODS:

Interdisciplinary team was assembled to investigate and evaluate additional measures to mitigate pressure injury development in the head/neck surgical population of a 350+ bed acute care hospital in Colorado. AP overlay was selected as a supplementary measure of prevention in addition to AORN pressure injury prevention best practice recommendations and NPUAP/EPUAP recommendations. Over a 12 month period, a low profile alternating pressure surface was placed on the operating room table for head and neck procedures lasting four hours or greater.

RESULTS:

109 head and neck surgery patients with complete medical charting were included in the study: mostly male subjects, average age of 58.14 years and average surgical time of 5.5 hours. In the 12 months prior to implementation of the AP surface, 3 pressure injuries were reported in this surgical population. After implementing the AP surface, no patient developed perioperative pressure injuries. The estimated cost benefit to the hospital by implementing the AP surface was \$86,920 (prevention of 3 pressure injuries).

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CONCLUSION:

Correct application and utilization of an alternating pressure surface may be an effective supplementary measure to mitigate risk of pressure injury. This technology should be considered for use in surgical cases scheduled for 3 hours or greater regardless of service line.

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