Reducing the Incidence of Skin Breakdown in the Surgical Patient

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Purpose

- Skin breakdown is a persistent clinical challenge that compromises a patient’s condition resulting in extended hospital stays.
- To evaluate the effectiveness of application of Sacral and Heel multilayer dressings (Mepilex) prior to surgical procedures in preventing skin breakdown

Background

- Pressure ulcers develop due to pressure, shear, and moisture of the skin.
- Patient’s positioning in the operating room and the inability to reposition increases risk for skin breakdown.
- Patient’s physiological status further compromises their potential for skin breakdown.
- Extended surgery is a risk factor in the development of pressure ulcers.
- HAPU is identified as a National Nurse Sensitive Indicator.

Assessment

- Intraoperative nurses at Providence St. Vincent Medical Center do not have a process for head to toe assessment and documenting of preoperative and postoperative skin condition.
- Planning for patients at risk for development of pressure ulcers directly affects outcomes.

PICOT

In perioperative patients with an anticipated postop LOS of 48+ hours, does completion of a perioperative skin assessment tool and applying prophylactic dressing for high-risk patients compared to current practice achieve reduction in worsening of pre-existing ulcers and reduction in new pressure ulcers at 48 hours postop.

Goals

- To decrease incidence and severity of sacral and heel pressure ulcers in the surgical patient.
- To increase nursing knowledge and promote pre and post-operative skin assessment.
- To improve interdepartmental communication and patient handoffs to promote best patient care.

Intervention

- Educational sessions on dressing application.
- Educational sessions on assessment and documentation.
- Preoperative skin assessment.
- Application of multilayer dressings for prevention vs. treatment on the sacrum and heels of patients if placement did not interfere with surgical prep.
- Immediate postoperative skin assessment.
- 48 hour postoperative skin assessment.

Evaluation

- n=48
- Average Braden Score 21; SD 2.6.
- 0 identified pressure ulcers were identified immediately postoperatively, on POD #1, or POD #2.
- Lack of systems to identify baselines of surgical acquired pressure ulcers resulted in an inability to evaluate a quantifiable benefit of multilayer dressings.
- Retrospective chart reviews identified variations of documentation, access to information limitations & communication breakdown.

Next Step

- The evidence identifies a potential lack of knowledge and/or inconsistencies in assessment & documentation supporting a recommendation for continued education.
- Development of a process to identify, document and communicate alterations in skin between departments.
- Continued evaluation of multilayer dressings for pressure ulcer prevention is supported in the literature.

References


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