

Prevention of Perioperative Pressure Injuries

Bryan Medical Center
Lincoln, NE

Process of Identifying Need

- Wound Ostomy Continence (WOC) nurse reported to the Surgery Unit Based practice committee that 6 pressure injuries were attributed to surgery in June of 2016.
- Surgery staff and leadership unaware of any pressure injuries related to surgical procedure positioning.
- WOC nurses review data and track pressure injuries in the Medical Center
- Need for communication to surgery educators and managers when pressure injures related to the OR procedure, for review by surgery staff
- Hospital acquired pressure injuries are reportable to Centers for Medicare and Medicaid, which affects healthcare costs. Goal would be zero pressure injuries

Process Improvement Methods

- 10 member group of nurses from surgery, outpatient and recovery room and a WOC nurse formed a process improvement team with monthly meetings
- AORN Tool Kit for pressure injury prevention used
- Gap Analysis from tool kit done by members to look at;
 - Specialties of procedures
 - Types of mattresses on OR beds and transport carts
 - Positioning devices used
 - Skin assessments being done
 - Patient process through the Perioperative environment

Results

- Process changes
 - Implemented the Scott Trigger Tool to assess a perioperative patients risk for pressure injury
 - Implemented a skin bundle for those patients found to be at risk
 - Researched best mattresses for pressure reducing, redistributing and relieving (3 R's) and recommended to perioperative managers that any new mattresses have these characteristics
 - Researched and replaced current positioning devices with appropriate devices to better prevent pressure injury
 - Education to Perioperative Services Staff regarding Scott Trigger Tool and Skin Bundle
 - Collaboration between outpatient, preoperative and intraoperative nurses to complete the Scott Trigger Assessment tool preoperatively to determine those patients at risk
 - Scott Trigger Tool implemented into our new electronic documentation system. Nurse receives a Best Practice Advisory alert, letting them know the patient is at risk for pressure injury

Results

- Service Delivery Results
 - Retrospective audit for patients at risk using the tool
 - At Risk – 1551 (40%)
 - Not at Risk – 2355 (60%)
 - Cardiovascular services – 69 at risk patients noted
 - Data coincides with high pressure injury rate identification in CVICU
- Improvement results – **75% Reduction**
 - 2016- 25 Incidence of OR/procedure within 72 hours of wound development
 - 36% of total facility pressure injures
 - 2017 – 6 Incidence of OR/procedure within 72 hours of wound development
 - 9% of total facility pressure injuries

Lessons Learned

- Spotlight our success.
 - Notes and candy to each area of Perioperative Services when results of a 75% reduction in pressure injuries between 2016 and 2017
- Awareness of the issue brings about change in practice
 - Need to continue to keep this issue forefront
 - Discussion at in-service in July 2018
- Replicating this initiative
 - Scott Trigger Assessment is available within our electronic documentation system., so other procedural areas could have access to it.
 - Education to procedural areas on how to use the Scott Trigger and also how to implement the skin bundle
 - Presentation was done in February to the Heartland Health Alliance (HHA) hospitals regarding our improvement process and results

Lessons Learned

- Sustain gains
 - Continue to monitor number of patients at risk and are we implementing the skin bundle
 - Continue to receive communication from WOC regarding any pressure injury attributed to the OR, so a case review can be done
 - Education to new staff in orientation
 - Continue to evaluate support surface advancements and replace our equipment as needed
 - Keep initiative in front of staff by reporting continued success.
 - As of June of 2018 only 1 pressure injury in medical center attributed to OR



SCOTT TRIGGERS

Review patient record and complete data in left column. Place a check in the right column if the answer is YES. If two or more YES answers are present, this may indicate an increased risk of perioperative pressure ulcers. Use Perioperative Pressure Ulcer Prevention Plan (PPUPP) of care.

SCOTT TRIGGERS*	Does it meet these qualifications?	If YES, please check here.
Age _____	Age 62 or Older	
Serum Albumin _____g/L or BMI	Albumin level <3.5 g/L or BMI <19 or >40	
ASA score (circle) 1 2 3 4 5	ASA score 3 or greater	
Estimated surgery time in hours/minutes _____	Surgery time over 3 hours or 180 minutes**	
Two or more YESES = HIGH RISK SURGICAL PATIENT		
Assessment Comments:		
<p>SKIN BUNDLE</p> <ul style="list-style-type: none"> <input type="radio"/> ___ Perform Pre-op skin inspection <input type="radio"/> ___ Offload heels <input type="radio"/> ___ Preventative dressing (Mepilex sacrum or other areas) <input type="radio"/> ___ Pads for high risk body areas <input type="radio"/> ___ Reposition if able <input type="radio"/> ___ Use only approved positioning devices 		

*Scott Triggers® is a set of evidenced-based factors (named for nurse/program founder Susan Scott) identified as predictors of highest risk for pressure ulcer development in the study (e.g., age 62 or older, Albumin level below 3.5 and ASA score 3 or greater). Scott, SM. Progress and Challenges in Perioperative Pressure Ulcer Prevention. *JWOCN*. 2015;42(5):480-5

**Surgery time is calculated from the time into the Operating Room until the time out of the Operating Room.

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