



Turning the Unturnable Patient: A Nursing Guideline for Prevention of Hospital Acquired Pressure Ulcers

Samantha Jamison, RN, MN, CCRN-CMC-CSC; Sasha Nelson, RN;
Jennifer Boeckmann, BSN, RN, CCRN; Katie Britton, RN, BSN; Margaret Petit, CWOCN
Abbott Northwestern Hospital, Allina Health, Minneapolis, MN



PRESSURE ULCER DEFINITIONS

Since 2003, Minnesota hospitals have been reporting stage III and stage IV pressure injuries to the state as Adverse Health Events (AHE). Beginning in 2007, hospitals also started reporting unstageable pressure injuries.

Stage 3 Pressure Injury: Full-thickness skin loss

- Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present
- Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

Stage 4 Pressure Injury: Full-thickness skin and tissue loss

- Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer.
- Slough and/or eschar may be visible. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

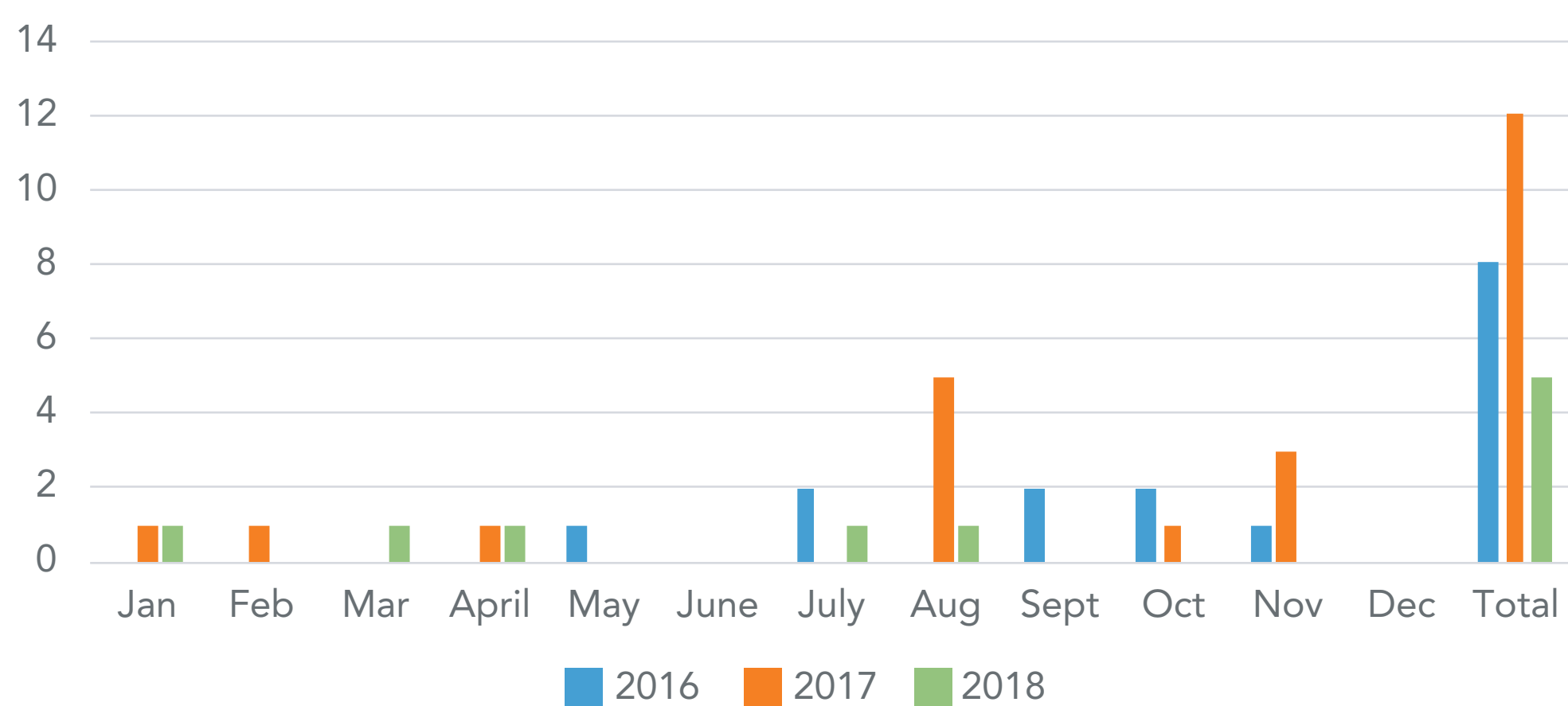
Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss

- Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed.¹

¹National Pressure Ulcer Advisory Panel. "NPAUP Pressure Ulcer Stages/Categories." www.npuap.org/resources/educational-and-clinical.../npaup-pressure-injury-stages/

Abbott has made great strides reducing our injuries to patients due to pressure ulcers. This was confirmed by reviewing our 2018 Pressure Injury Adverse Health Events (AHE). Abbott has nearly 50% less reportable pressure injuries in 2018 than the previous year. (Reporting to the Minnesota Department of Health occurs on a calendar year January-December)

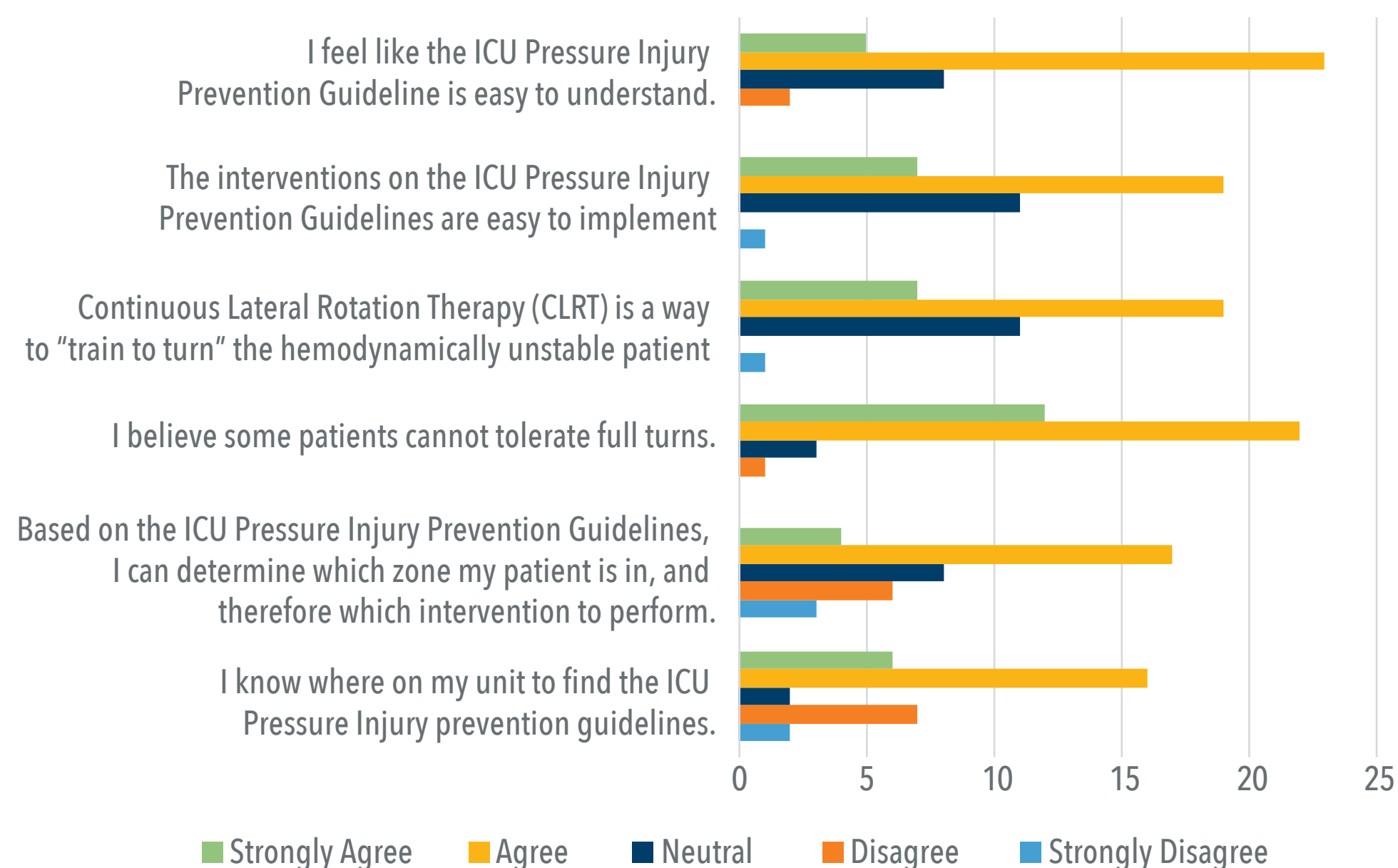
ANW Combined ICU's Pressure Injuries Stage 3, 4, & Unstageable 2016-2018 YTD though Nov.



SURVEY RESULTS 2018 USABILITY/FUNCTIONALITY OF NURSING GUIDELINES

38 ICU staff RNs filled out a survey assessing usability and functionality of the Skin Guidelines. While just over half of nurses surveyed felt like they were able to use the guidelines to determine the zone and interventions needed for their patient (Question #2) nearly the same amount felt that some patient's cannot tolerate full turns (Question #3). Based on the results of the survey, opportunity remains to provide staff with education changing the current culture that hemodynamically unstable patients are simply "untunable".

ICU RN Knowledge of Pressure Injury Prevention Guidelines



GUIDELINES OF CONTINUOUS LATERAL ROTATION THERAPY (CLRT)

- CLRT is an available turning function on ICU beds that is utilized if the patient is intolerant to standard repositioning due to hemodynamic instability.
- CLRT slowly increases the rotation by a percentage so the patient "learns to turn" over a 3 hour period. Patients are rotated from side to side in a turn of less than 40 %. After this 3 hour period, the nurse is instructed to attempt a standard turn, determine the patient's hemodynamic stability, and assess the patient's skin.
- IF the patient tolerates standard turn, CLRT is discontinued and the patient is turned every 2 hour per protocol.

ICU Pressure Injury Prevention (PIP) Guideline

- S** - Skin inspection every shift documented
- K** - Keep pressure off – assess under and around medical devices
- I** - Incontinence and moisture management
- N** - Nutrition is optimized
- N** - No time supine, early mobilization per guideline – HOB ≤ 30°

Interventions for all patients:

- Raise knees before elevating HOB to minimize shear
- Always float heels
- Minimize layers ≤3 (sling/sheet/under pad)
- Use wound care order set for interventions (#30844)
- Nasal securement device for nasal tubes
- Bite block removed if not needed
- Preventative Mepilex sacral/coccyx dressing
- Shift weight Q15min while up in chair

Patients who are immobile (Braden mobility sub score of 1 or 2) AND have met one of the following criteria go to the yellow level:

- Patient has extremely compromised oxygenation and/or circulation (on high PEEP, FiO2 or high dose vasopressors).
- Pre-existing sacral/coccyx wounds
- BMI ≤ 19

Additional Interventions:

- Utilize 30° wedges to off-load sacrum/coccyx (No Time Supine!)
- Advance Mobility per Progressive mobility guideline

If any of the following clinical findings which prevent turning present go to the red level:

- Development of life threatening arrhythmia with symptomatic response (VF/VT/SVT) – this does NOT include asymptomatic a fib
- Active fluid resuscitation (i.e. No volume going in = no systemic blood pressure)
- Active hemorrhaging
- Change in baseline hemodynamic parameters (BP, HR, O₂ sat, RR, etc) that does not recover within 10 minutes of position change and is not an expected result based on diagnosis
- Increased ICP ≥ 25mmHg x 1minute time during activities

Additional Interventions:

- Continuous Lateral Rotation Therapy (CLRT) – "training to turn" – start SLOW with LOW angles of turning /with frequent limb/head repositioning. (see back for CLRT)
- Retrial full turns at least every 4 hours – allow 10 minutes for recovery
- Microshifts every 1 hour
- Use 15° wedges to offload sacrum/coccyx

The goals of this algorithm include:

- 1) Increasing nursing confidence in repositioning unstable patients
- 2) Provide nurses with alternative turning options if manual repositioning is not tolerated
- 3) Increase nursing adherence to algorithm interventions
- 4) Reduce hospital acquired pressure ulcers in the ICU. We believe implementing this algorithm will increase compliance and confidence in the critical care team to "turn the untunable" patient.



ABBOTT NORTHWESTERN HOSPITAL PATIENT POPULATION

Abbott Northwestern is a 650 bed quaternary level teaching and specialty hospital. We are recognized as a Comprehensive Stroke Center and provide highly specialized care and interventions including extracorporeal membrane oxygenation (ECMO).

Abbott serves over 200,000 patients from across the Twin Cities and Upper Midwest and is the largest private hospital in the Twin cities. Our Intensive Care Units consist of 30 Neuro/Medical/Surgical ICU beds and 32 Cardiovascular ICU beds.