VUH Pressure Injury Prevention Champion Class

FY 2024

Objectives

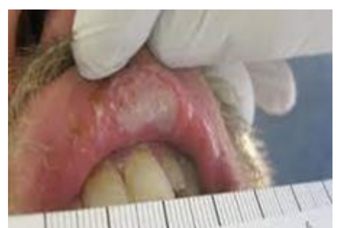
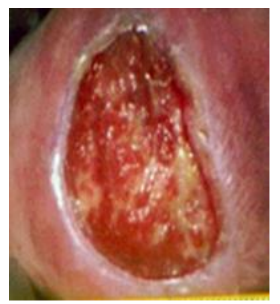
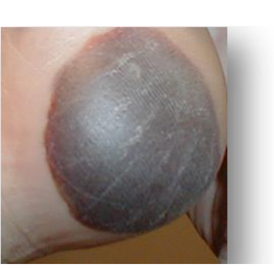
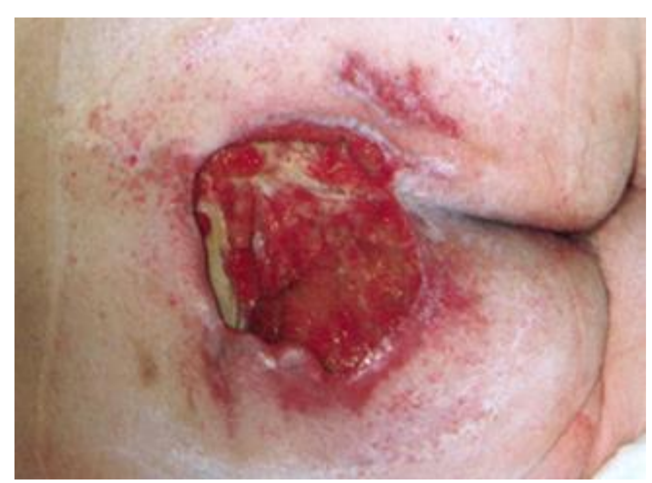
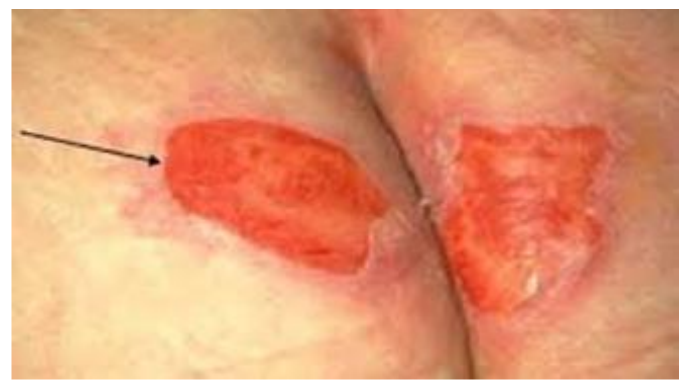
1. Define the role and responsibilities of the unit-based Pressure Injury Prevention Champion
2. Discuss the pathophysiology of a pressure injury, recognize potential causes, and identify patient populations at risk for developing a PI
3. Discuss best practice for pressure injury prevention related to pressure and shear/friction reduction, moisture management, and surface pressure redistribution
4. Discuss pressure injury risk assessment and prevention documentation requirements
5. Demonstrate and/or verbalize appropriate pressure injury prevention strategies based on the patient's risk factors

Purpose

- Prevent patient harm
  - Pain
  - Delayed recover
  - Longer hospital stay

- Patients who develop a HAPI are 2.8 times more likely to die during their hospital stay and 1.69 times to die within 30 days of discharge.

- Cost of PI to hospital
  11 billion aggregate cost annually (https://europepmc.org/article/nbk/nbk54557)

Skin Champion Remodeling

The role of the "Skin Champion" is shifting from when it was originally introduced at VUH, based on findings from a Failure Modes and Effect Analysis (FMEA) that was conducted on the VUH Pressure Injury Prevention and Identification Program

The goals is for Champions to be focused more on prevention

The "Skin Champion" title will change to "Pressure Injury Prevention Champion" as these champion are trained on PI prevention strategies.

Pressure Injury Prevention (PIP) Champion Roles and Responsibilities

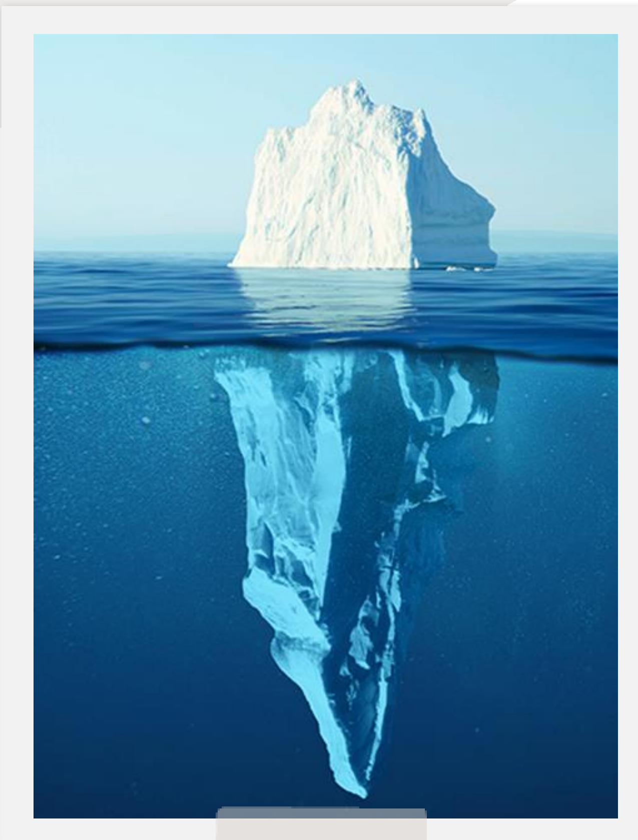
Provide at the elbow support to bedside staff for pressure injury prevention by:

- Participating in 50% monthly/quarterly PI surveys (6 out of 12) and use findings to drive unit-based interventions
  - **Or** complete PI prevention related activities in partnership with unit leadership, such as K-Card rounding, repositioning audits, etc.
- PI prevention monthly education (flyer, presenting info/data at unit board/staff meeting, rounding, etc.)
- Acting as liaison between bedside staff, manager, CNS, Nursing Education Specialist, and Wound Experts
- Encourage participation in the VUH Pressure Injury Prevention (PIP) Committee Meeting

PIP Champion Competency

- PIP Champions must:
  - Complete initial training
    - Pre-existing Skin Champions will need to go through PIP Champion Training to be trained on prevention strategies
  - Annual competency must be completed to maintain PIP Champion status
    - The competency will align with the roles and responsibility of the PIP Champion.

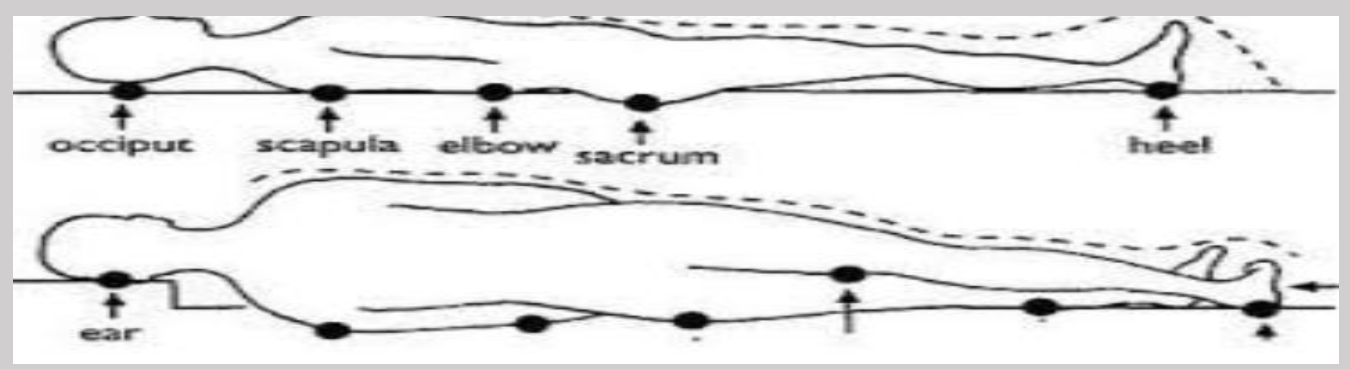
What is a Pressure Injury

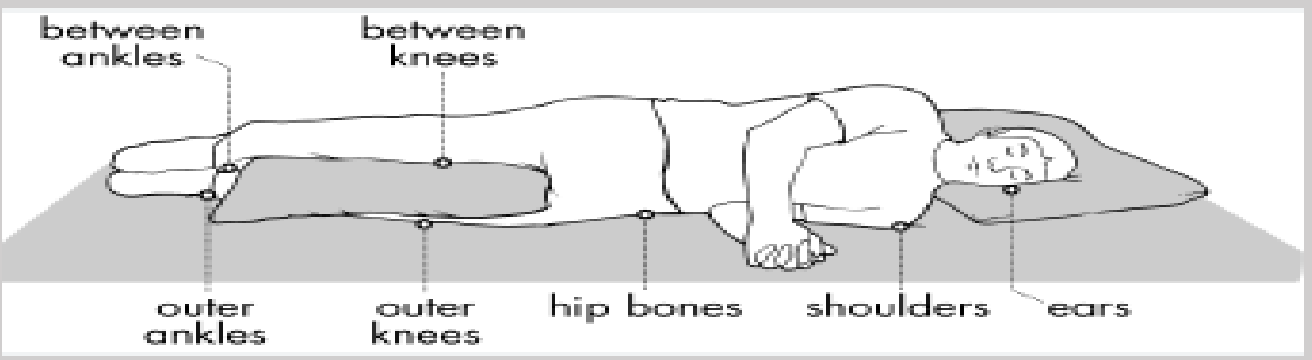


The visible injury may be just the "*tip of the iceberg*"

- Localized damage to the skin and underlying soft tissue
  - Open or intact skin
- Multiple factors can lead to PI development
- Nursing Sensitive Indicator
- Cone-shape distribution

BONY PROMINENCES





Skin Assessment Reminders

Skin Assessment

- Complete a head-to-toe skin assessment, assessing all pressure points including those underneath preventive foam dressings and around medical devices.

Skin Assessment Frequency

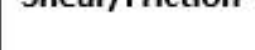
- Complete a head-to-toe skin assessment assessing all pressure points:
  - ✓Within 8 hours of admission;
  - ✓Every shift; AND
  - ✓With significant change in the patient's condition

Braden Risk Scale

- Complete a Braden Risk Scale:
  - ✓Within 8 hours of admission;
  - ✓Every shift; AND
  - ✓With significant change in the patient's condition

Braden PI Risk Score

- Braden PI risk score = **18 or less**
- Additional Considerations:
  - If a patient has an existing PI, they should be considered "at risk" regardless of Braden
  - Interventions to reduce PI risk target the Braden sub-scores is located on the PIPs website
  - Sub-score definitions and suggestions for intervention items are also found in e-Star sidebar

BRADEN RISK FACTORS (if yes)	Then consider these **INTERVENTIONS** for your patient
Mobility • Makes no changes in body positions • Very limited on movements **Activity** • Bedfast • Ambulation is limited to non-existent **Sensory** • Unresponsive • Very limited response to stimuli	Turning Schedule Reposition q 2 hours Chair Cushion Repositioning system Heel boot Mepilex sacral heel foam Mepilex heel
Shear/Friction  • Needs maximum or moderate assistance in moving • Slides down in bed or chair frequently	Trapeze Repositioning system Mepilex sacral Mepilex heel
Nutrition • NPO or clear liquids for greater than 5 days • Eats less than 50% of meals per day • Receives less than optimum tube feeds	 ***Consider Nutrition Consult***
Moisture • Constantly wet from urine or stool • Linens changed once per shift	Criticaid ointment 3M barrier spray Barrier cloth wipes <u>Other items to consider:</u> -Condom catheter -PureWick female catheter -Rectal pouch -Bowel management

Braden Scale for Risk Assessment Tool

Sensory Perception

Moisture

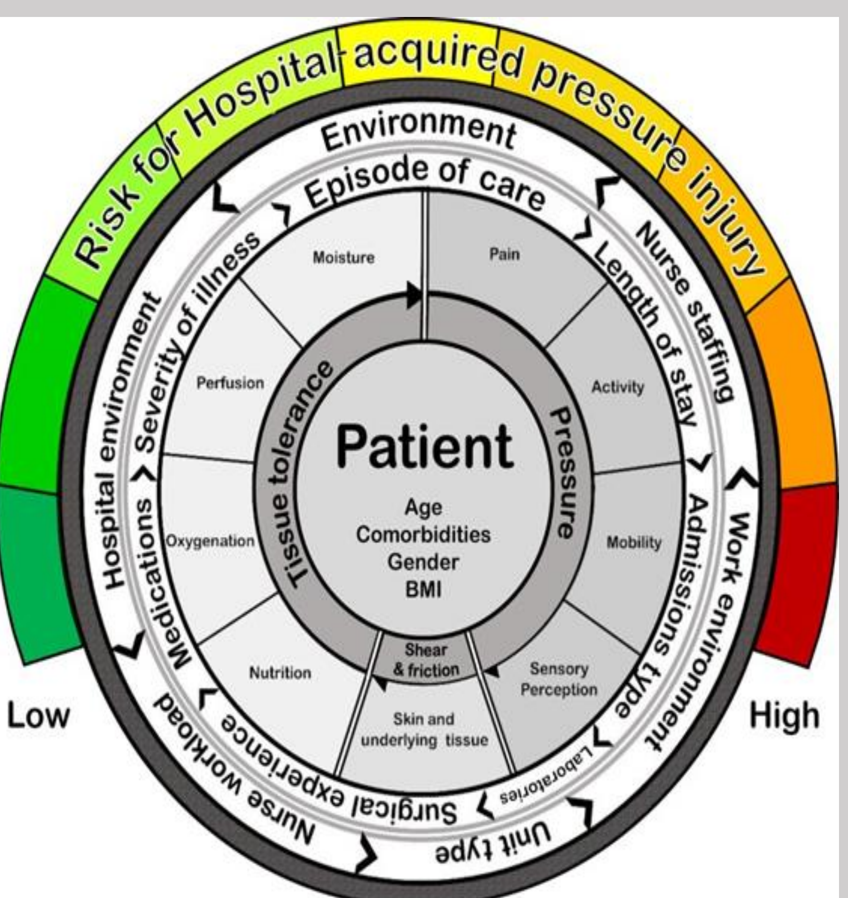
Activity

Mobility

Nutrition

Friction & Shear

Additional PI Risk Factors



Medical device = 2.4x risk
Oxygen support = 5x risk
Vasopressor use = 8x risk
Length of Stay greater than x risk days = 7.5x risk

Higher glucose, BUN and creatinine levels
Low Albumin and Hemoglobin levels
Chronic conditions
Extreme BMIs (morbid obesity or underweight)
Extreme temperatures (hypothermia and fever)
Patients with an admit to ICU or surgical unit

Low bed turnover
Nurse staffing (hours per day)
Nursing skill mix
Expertise of staff

VUAH Pressure Injury (PI) Prevention and Treatment Guidelines

Perform skin assessment and Braden risk scale within 8 hours of admission, every shift, and with significant change in patient condition (i.e., surgery, decline in condition).

"AT RISK" IS 18 OR LESS

PREVENTION GUIDELINES: INITIATE FOR ALL AT RISK PATIENTS AND FOR ANY STAGE PRESSURE INJURY

- Consider pressure redistribution devices: air chair cushion, foam heel boots, foam dressings, bed (see Bed Selection Guidelines)
- Reposition: q2 hours while in bed; KEEP OFF area of pressure injury
- Chair considerations: For patient unable to reposition themselves, reposition at least q1 hour; Consider sitting limitations (2 hours for at risk patient; 1 hour, TID for patient with ischial or sacral PI; Modify/reduce sitting schedule if PI worsens)
- Shear/Friction reduction: Turn & position system, pull/slippery sheets, overbed trapeze, hover mat
- HOB less than or equal to 30 degrees *unless clinically contraindicated*
- Initiate adult urinary & fecal incontinence guidelines

-AND-

STAGE 1

- ❑ Prevention guidelines (see above)
- ❑ Apply foam dressing. Change twice a week and prn*

*If dressing must be changed >1x/day, remove dressing and use barrier cream tid and prn only

STAGE 2

- ❑ Prevention guidelines (see above)
- ❑ Intact blister: DO NOT OPEN OR DRAIN
- ❑ Open stage 2: Cleanse with normal saline, apply foam dressing. Change twice a week and prn*

*If dressing must be changed >1x/day, remove dressing and use barrier cream tid and prn only

REQUIRED: Notify Provider for Adult Wound consult for DTI, stage 3, 4, & unstageable PI and follow instructions below:

STAGE 3 & DTI

- ❑ Prevention guidelines (see above)
- ❑ Cleanse with NS, protect periwound with skin sealant wipe or spray
- ❑ Apply foam dressing; Change twice a week and prn

STAGE 4

- ❑ Prevention guidelines (see above)
- ❑ Cleanse with NS, protect periwound with skin sealant wipe or spray
- ❑ Apply dressing: NS moistened kerlix roll gauze, cover w/ ABD pad and secure, change q12h

UNSTAGEABLE

- ❑ Prevention guidelines (see above)
- ❑ Apply dry gauze dressing; Change daily

OTHER:

- Consider consults to Nutrition, PT/OT, Case Management/Social Work
- Provide patient and family education: "Pressure Injury Prevention: Help Us Protect Your Skin" (eDocs), Krames HealthSheets, Mosby's/Elsevier, and/or GetWell Network
- Discharge planning: Wound care supplies and instructions, home health referral, bed and chair devices
- DOCUMENT: Assessment, interventions, education, consults, discharge planning

MC 9803 (04/2021)

VANDERBILT HEALTH

You can ask the patient's primary team for a consult to the Adult Wound Team with concerns for ANY pressure injury

Five-Layer Foam Dressings

Sacral

Heel

4x4 Square

5 Layer Foam Sacral Dressing Application

1. Area to protect. Assess the patient's anatomy and determine appropriate dressing positioning.

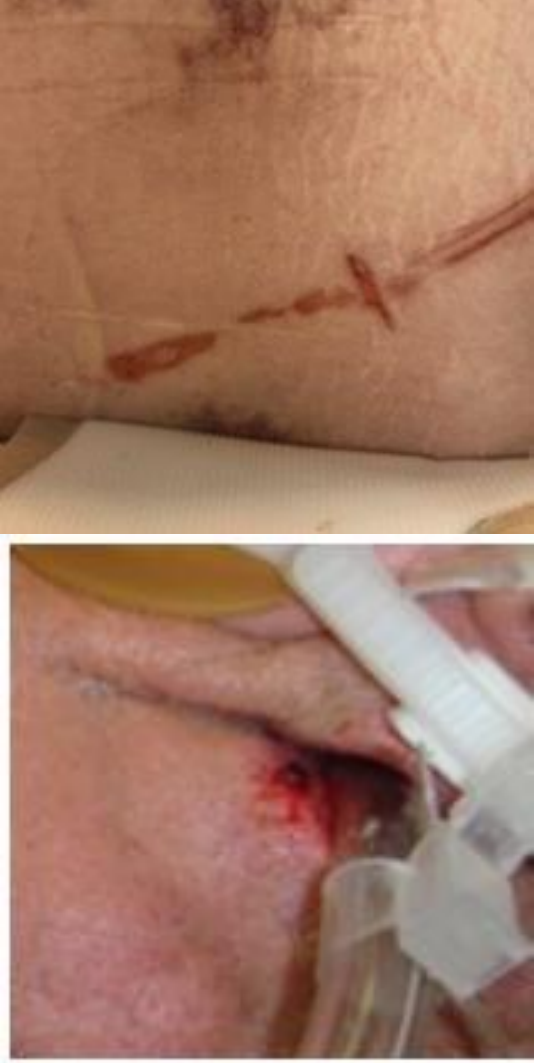
2. After skin is prepared, remove the center release film by gently pulling on pink-lined edge.

3. Hold buttocks apart. Apply dressing to sacral area and into upper aspect of gluteal cleft, with dressing "base" positioned to cover coccyx area.

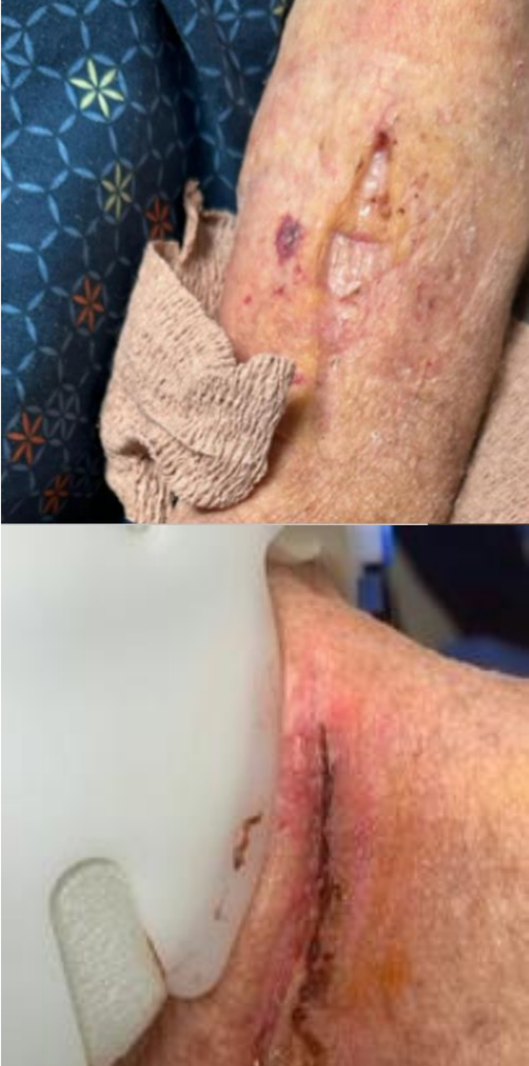
4. Remove side release films and gently smooth each side into place.

5. Product placement.

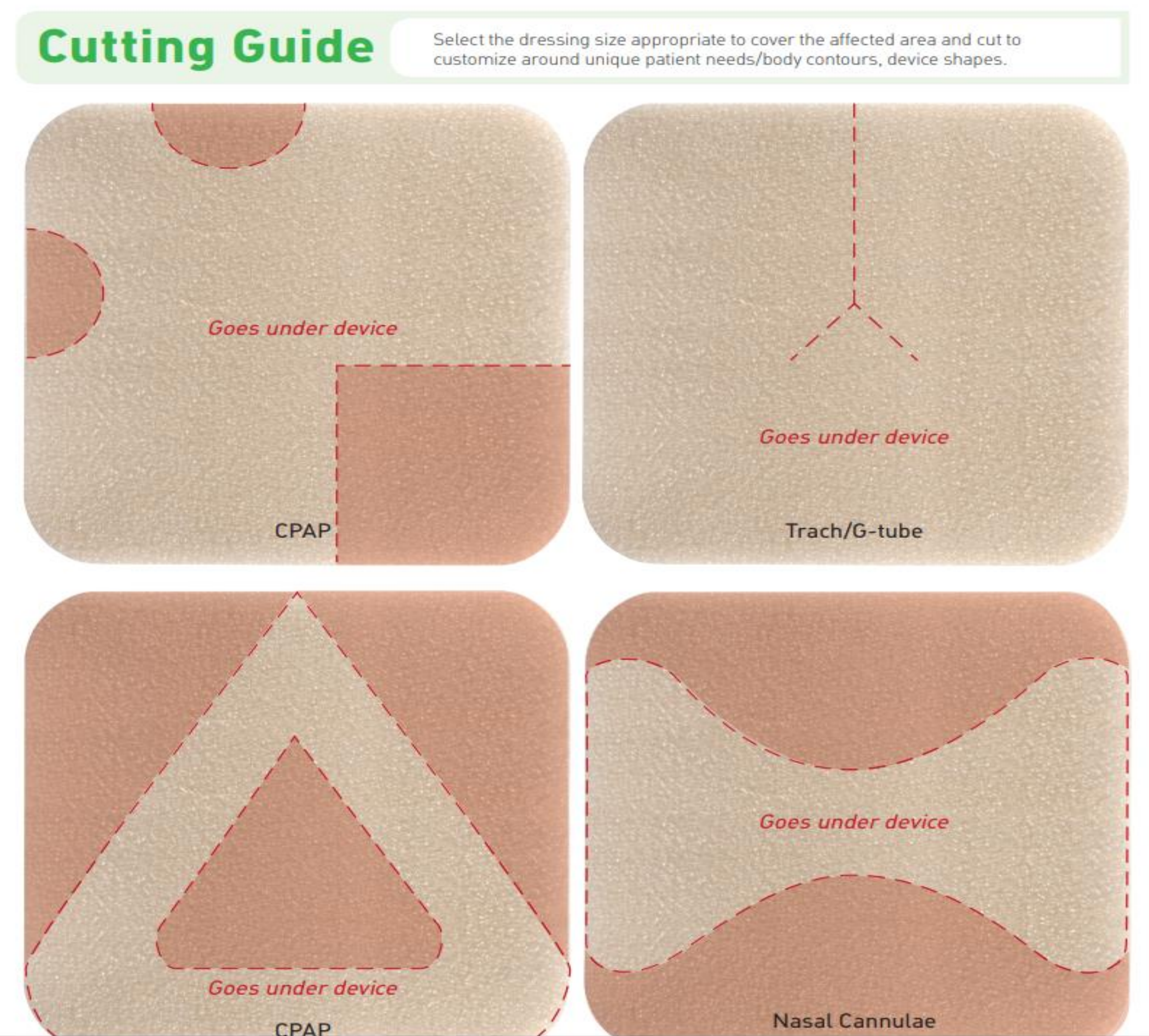
6. Press and smooth the dressing to ensure the entire dressing is in contact with the skin.



Device Related Pressure Injuries



Lite Foam Dressing - Device Related Prevention



Vanderbilt - Fixed Medical Device Dressing Selection Guide

Objective: Protect tissue and minimize friction, shear and moisture from fixed devices using **Mepilex® and Mepilex® Lite**

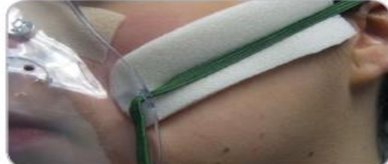
Mepilex® Lite
PMM
4x4 #75441

Mepilex®
PMM
4x4 #75440
4x8 #83549

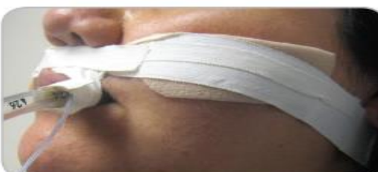
Notations

- Wear time: Up to 7 days
- Fenestrate/cut product PRN to accommodate tube sites
- When cutting products, leave backing film in place. Cut to desired shape
- Products listed on this guide are not suitable for fixation of life sustaining devices
- Dressings with Safetac® technology DO NOT require use of skin barrier products

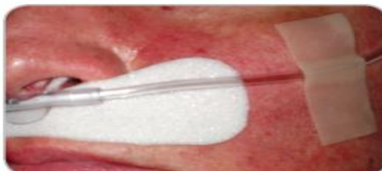
CPAP/BiPAP



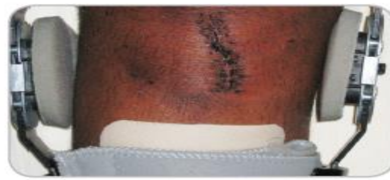
02 Mask Strap



ET Tube with Tape

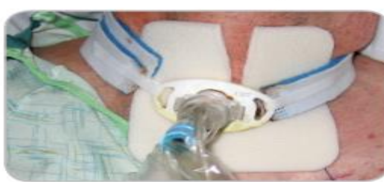


Nasal Cannulae

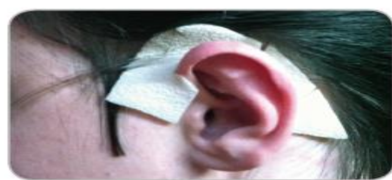


Brace/Cast

Tracheostomy Tie



Tracheostomy



Nasal Cannulae with Ear Protection

C-Collar

Multipodis Boot

G-Tube

See reverse side for **Mepilex®** Cutting Guide

Devices & PI Development

- The presence of a medical device more than doubles risk of HAPI formation
  - Tubes, lines, and drains
  - Trach plates and sutures
  - Padding devices
  - Apply protective dressings beneath BiPap masks if use is greater than 4hrs.

Forehead SpO2 Monitor

- Rotate pulse ox site every 4 hours and PRN
- Adjust the forehead band tension to align green arrows with indictors
  - Green arrow to green bar – do not overtighten
- Do not add anything between the probe and skin
- Attempt to transition back to a finger probe every once per shift

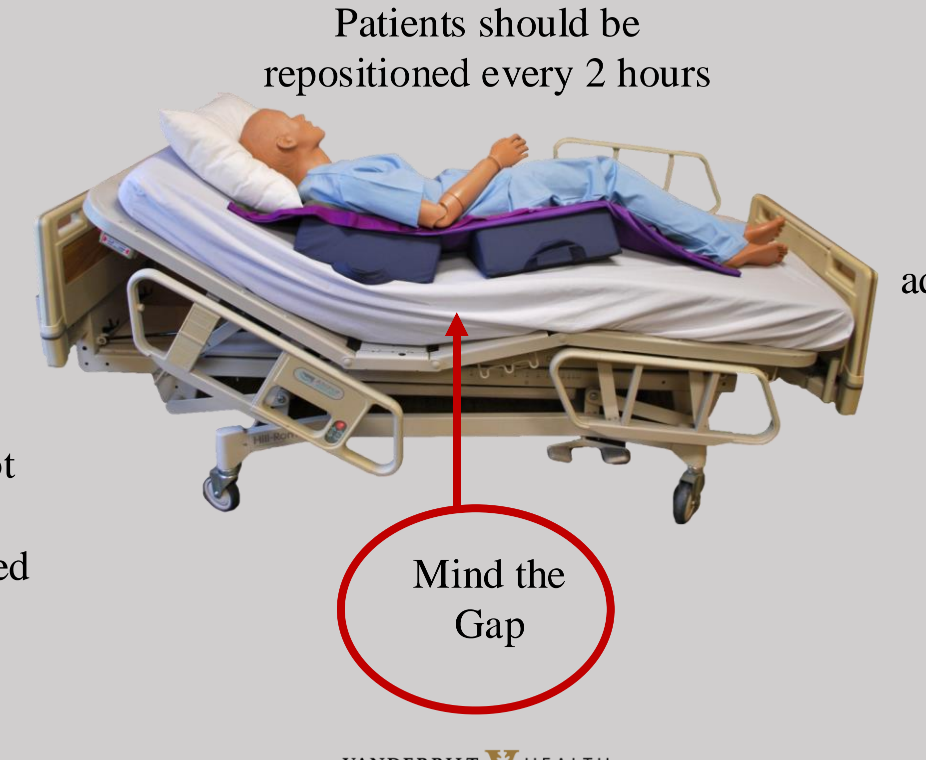
Repositioning Sheet with Wedges

- Positioning Supplies
  - Wedges
  - Slick sheet
  - Hover mat

*****Frequent/adequate repositioning is the most important intervention of all!!*****

Effective Repositioning in the Bed

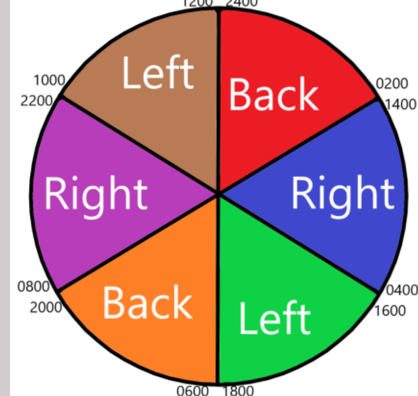
Patients should be repositioned every 2 hours



Wedges create an adequate 30-degree turn

HOB < 30 degrees if not clinically contraindicated

Mind the Gap



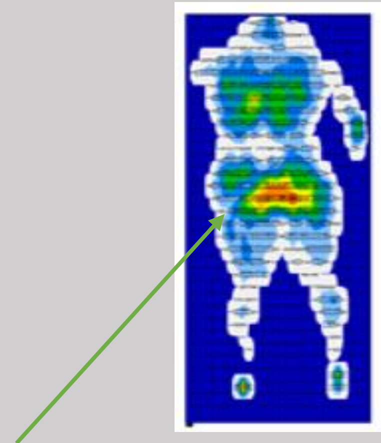
Chair Considerations

- If a patient is sitting at the bedside chair, consider the following time limits:
  - 2 hours max in chair for at risk patient
  - 1-hour TID for patient with ischial or sacral pressure injury
  - Patients should shift their weight in the chair every 15 minutes
  - If the patient is unable to shift their weight, reposition them in the chair every hour

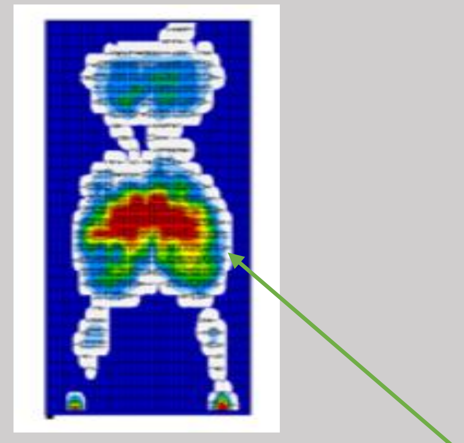
Pressure Injury (PI) Prevention and Sitting

In sitting positions, the pressure is higher than in lying postures.

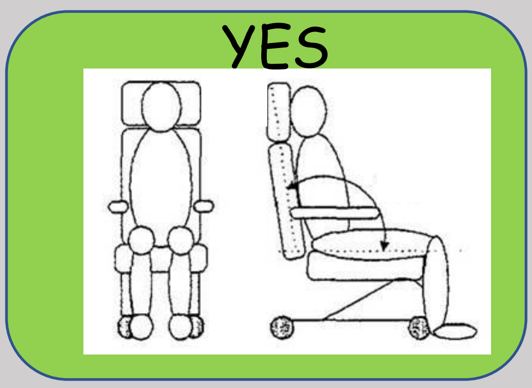
The risk of pressure injury is *greatly increased* during sitting periods.



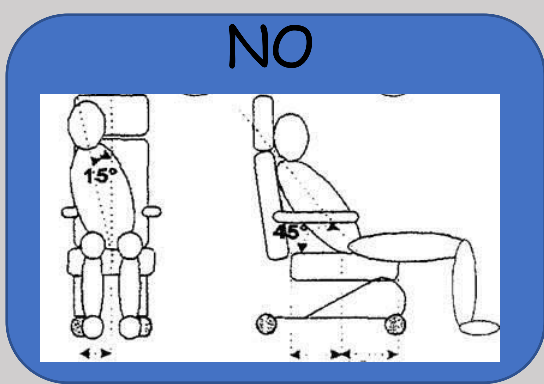
Pressure map in supine position



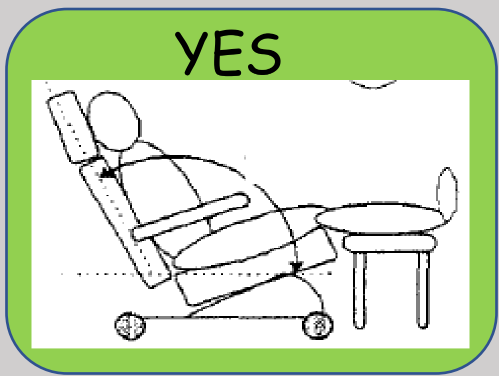
Pressure map in sitting position



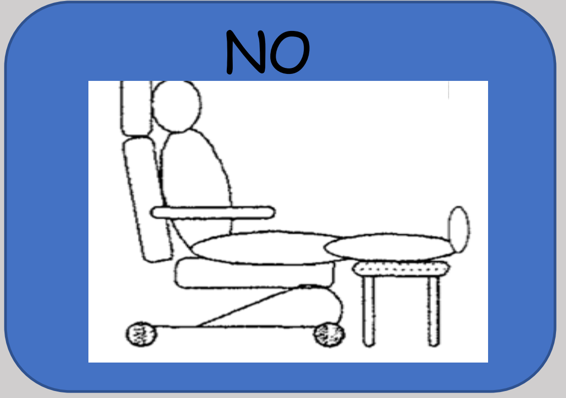
If chair does not recline, sit patient upright with feet on the ground.



Maintain proper position and alignment in chair.
Slouched or slid-down postures create significant increases in pressure.



If chair reclines, lean patient back and elevate legs on a rest.
Preferred chair position if patient has an ischial PI.



Do not sit patient upright with feet elevated

Chair Cushion Reminders

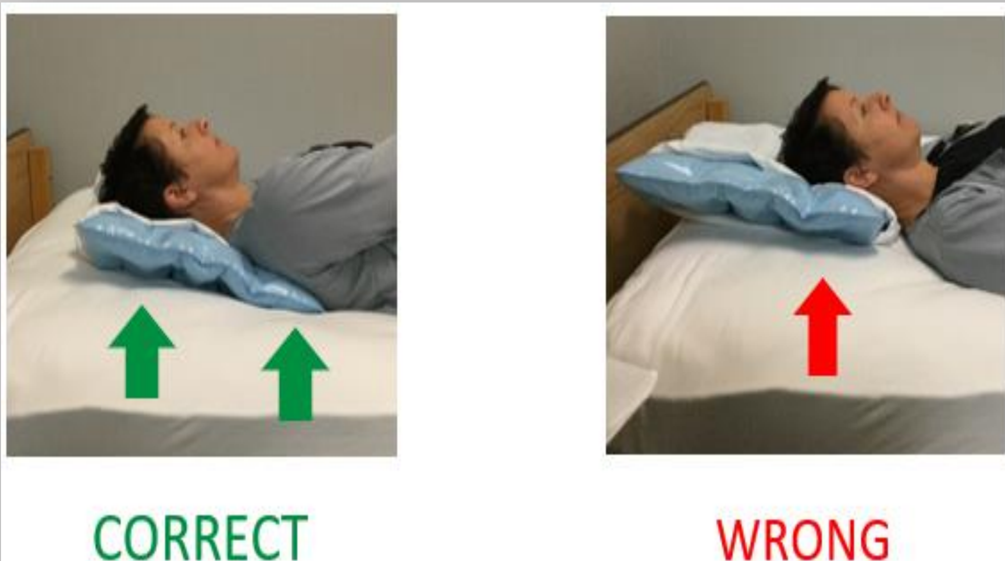
- Standard vs Bariatric Chair Cushions
- Micro-turns in the bed
- Pillows are NOT adequate offloading devices for chair

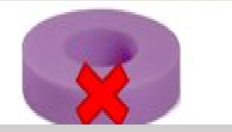
Head and Occipital PI Prevention Strategies

- Position cushion under shoulders, not just head

- Indications:
  - Patients with Braden 18 or less that does not reposition their own head
  - Existing head wound or PI
  - Neck contracture

- Contraindications:
  - Unstable spine patients





VUH HEEL RELIEF: NURSING CONSIDERATIONS

BRADEN SCORE 16-18

OR

PATIENT REFUSES HEEL LIFT BOOT

Mepilex heel dressing and pillows

correct

incorrect

*** Place 1 pillow longitudinally along the length of each calf**

BRADEN SCORE 15 or LESS

Heel Lift Boots

***Consider bariatric heel lift boot if your patient is using bariatric prevention items (generally over 250 lbs).**

HEEL /FOOT PI PRESENT

Heel Dressing +Heel Lift Boots

- If no prescribed wound dressing apply Mepilex heel foam

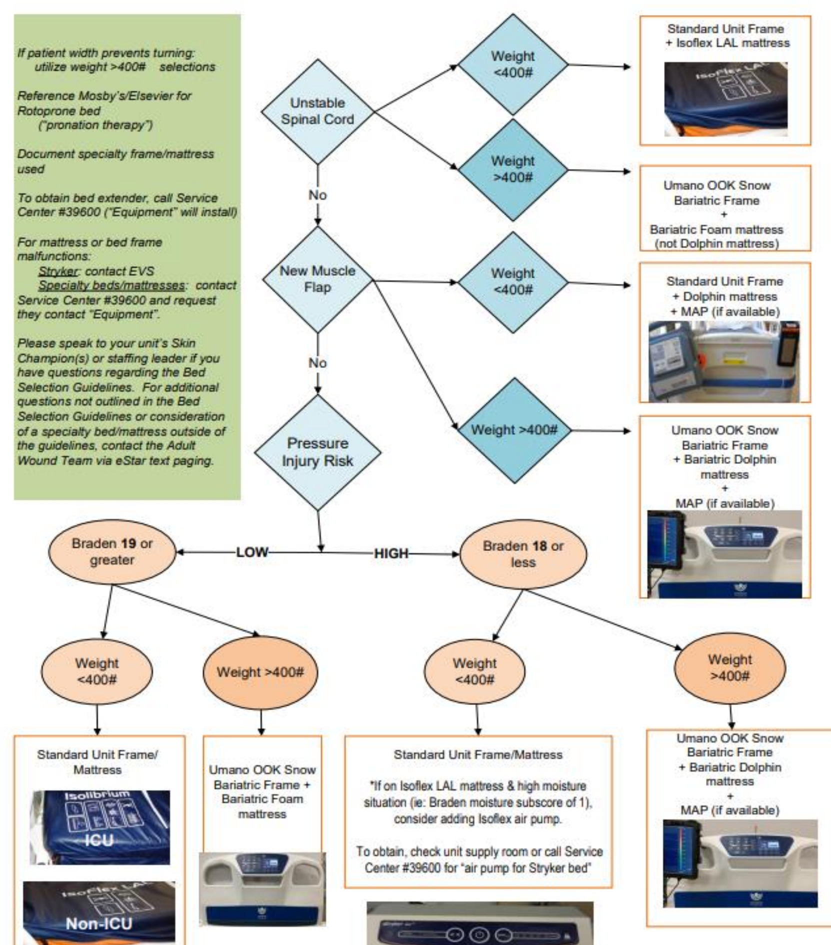
Mepilex Heel Foam Item # 37351 | **Standard Heel Lift Boot Item #172731** | **Bariatric Heel Lift Boot Item #1004407**

Updated Dec. 2023

Beds at VUH

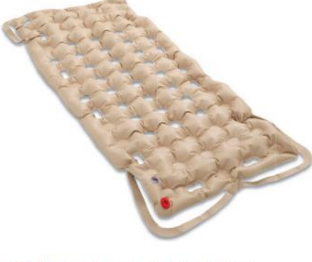
- Most units have specific beds and mattresses for their typical patient population.
  - Isolibrium
  - Isoflex LAL
    - Low air loss pump – high moisture

- Specialty Beds
  - Dolphin Bed
  - Bariatric dolphin bed



ED Waffle Overlay

- For stretchers in the Emergency Department **only**
- Always place a sheet on top of overlay
- Contraindications:
  - Unstable spine/spinal precautions
  - Recent sacral flap or graft surgery
  - Patient with suicide precautions



The tailbone area and heels are at high risk for pressure injuries[1]

Pressure injuries (bed sores) can develop when pressure is put on bony areas for long periods of time. This can occur when people with fragile skin are moved in bed.

- 2.5 million patients are affected by pressure injuries each year[2]
- Pressure injuries can develop within 2 hours of experiencing pressure[3]

The WAFFLE Overlay Protects You

The WAFFLE Overlay helps take pressure off of bony areas by gently lifting you off the surface when you are lying down for long periods of time. The WAFFLE Overlay is easy to inflate with our hand pump, in an average of 42 strokes.

- Lifts bony areas off the bed when properly inflated
- Allows your body to sink into the product, helping increase comfort
- Unique venting holes provide airflow to keep you comfortable

Quick Tip
Your WAFFLE Overlay should only look about

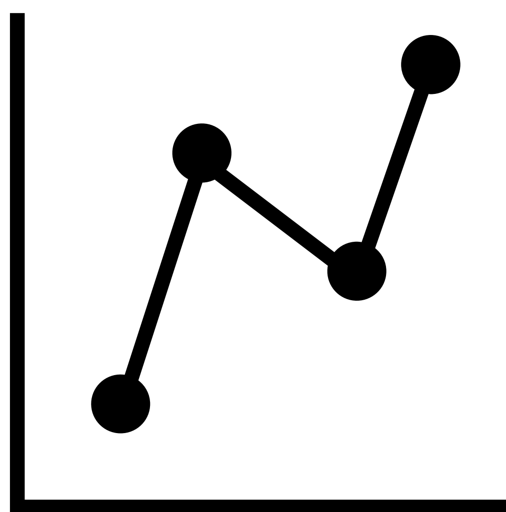
60% FULL

Take the hand pump with you for any inflation needs

Please remove when patient is transferred to an inpatient bed!

Fluidized Positioner

Only approved on certain inpatient units



Incontinence and Risk for PI Development

- Adult patients with urinary incontinence are 3.7 times more likely to develop a PI
- Adult patients with urinary incontinence and formed fecal incontinence have a 3.8 times greater risk of developing a PI
- Adult patients with urinary and liquid fecal incontinence have up to a 22 times greater risk of developing a PI

Incontinence Management Devices

Chux Pad

External Catheters

Rectal Pouch

Stool Management System

- Provider order required

Additional Considerations

- Patient should not be lying on an existing PI
- Turn patient's head with their body
- Ensure patients who can reposition themselves are doing so and frequently
- Page provider if patient refuses turning and document patient refusal

STRATEGIES FOR PATIENT & FAMILY ENGAGEMENT WITH TURNING/REPOSITIONING

STATEMENTS TO AVOID:

- Is it alright to reposition you?
- May I turn you now?
- Do you want to be turned now?

USE THESE STATEMENTS INSTEAD:

- **It is time for you to be repositioned**. Can I get anything for you before we start?
- It is good that you are comfortable, but you are at (high/very high) risk to develop a pressure injury (bed sore). I want to make sure that doesn't happen.
- You agreed we could reposition in 15 mins, let's review the importance of this, or I can have the charge nurse review the plan with you.
- We have reviewed your repositioning schedule, and this is the agreed time. Prolonged pressure causes pressure injury development and **it is my job to keep you safe**.
- Frequent small positioning shifts can help prevent pressure injuries.

ESCALATION PATHWAY IF YOUR PATIENT REFUSES TURNING/REPOSITIONING:

1. **Ask** the patient why they are refusing to turn, and try to address the issues (i.e. pain, comfort)
2. **Educate** why repositioning is important to keep the patient safe and prevent pressure injury development
3. **Escalate to the Shift Leader** if patient continues to refuse
4. Use "Pressure Injury Progression" photos to **illustrate potential consequences**
5. **Escalate to NP/Physician team** (i.e. during rounds) if patient continues to refuse after trying above methods
6. **Document** each patient refusal and education/escalation interventions

eStar Documentation and Resources

All Doc | Intervention | Lines/Drains/Airways | CRRT | Withdrawal Assessments | Restraints (NV) | Resp Support

Accordion | Expanded | View All

1m 5m 10m 15m 30m 1h 2h 4h 8h 24h Interval Start: 0700 Reset Now

ED to Hosp-Admission (Current) from 10/25/2023 in Vander...

	11/5/2023 1200	1300
Skin All		
Skin Assessment		
Skin Problem		
Skin ReAssessment	Done	
Skin Color/Condition		
Rash Location/Character		
Oral Mucosa		
Mucositis Grade		
Cleft Lip Description		
Cleft Palate Description		
Flap Check?		
Leech Therapy?		
Mouth Care/Interventions	Oral swabs; Hypophar...	
Skin Breakdown Control		
Skin Interventions/Temperature Management		
Braden Scale		
Sensory Perceptions		
Moisture		
Activity		
Mobility		
Nutrition		
Friction and Shear		
Braden Scale Score		
Braden Risk Level		
Activity/Musculoskeletal All		

11/5/23 1300

Skin Assessment

Select single option (F5)

Previous: Problem

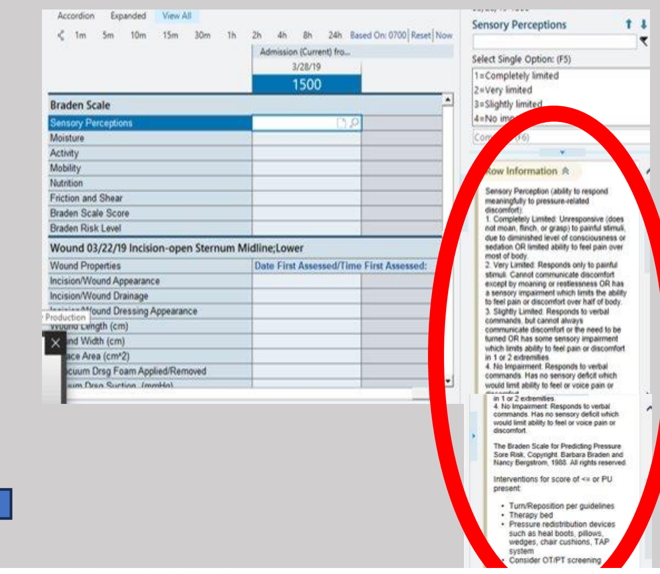
- WNL
- WEL
- OEL
- Problem

Comments (Alt+M)

Group Information

- Skin Tear Guidelines
- VUAH Skin Care Incontinence Guidelines
- Pressure Injury Stages
- Pressure Injury Prevention and Treatment - Adult
- Pressure Injury Prevention and Treatment - Pediatric
- Bed Selection Guidelines - Adult
- Bed Selection Guidelins- Pediatric
- SOP: Transdermal Heating and Cooling

Row Information



B. Pressure injury prevention interventions to include but not limited to:

1. Pressure redistribution devices;
2. Moisture management;
3. Shear/friction reduction;
4. Repositioning; and
5. Referrals (e.g., nutrition team, PT, OT).

Consulting the Adult Wound Team

A consult to the Adult Wound Team is required for patients with a Stage 3,4, unstageable, or DTI pressure injury

- You are encouraged to consult the adult wound team for ANY PI, especially if you are unsure of the stage

Page the patient's primary team asking for a consult to the Adult Wound Team

For any questions, you may directly contact the Adult Wound Team via eStar Paging

Resources

- PolicyTech
  - Pressure Injury Prevention SOP
  - Wound Photography SOP

- VUMC Pressure Injury Prevention Website
  - Bed Selection Guideline
  - VUH PI Prevention and Treatment Guidelines
  - PIP Product Tip Sheet
  - VUH Heel Considerations
  - Adult Incontinence Skin Care Guidelines