Hospital Acquired Pressure Injuries (HAPIs)

For Traveler RNs
What is a Pressure Injury?

• Localized damage to the skin and/or underlying tissue, as a result of pressure or pressure in combination with shear.

• Usually occur over bony prominence but may also be related to a medical device or other object.
Bony prominences

- Back of head
- Shoulder blades
- Elbows
- Spine
- Sacrum
- Trochanter
- Ischial tuberosity
- Ears
- Shoulder
- Rib cage
- Hips
- Knees
- Ankles
- Heels
- Toes
What do pressure injuries look like?

- Skin can be intact or open
- Injury can vary in depth and size
- May be painful or in an area with decreased sensation

Stage 1

Intact skin, red, does not blanch

Stage 2

Partial loss of dermis, shallow, red or pink wound bed
Stage 3 Pressure Injuries

Ischium

Sacrum

Heel
Stage 4 Pressure Injuries

Muscle

Bone

Tendon
Unstageable Injuries
Deep Tissue Injuries
Deep Tissue Injuries

DTIs
Pressure

‘Inside out’ or ‘Bottom up’

Internal shear

Subcutaneous fat

Muscle

Bone

PUs
Pressure

Superficial shear

Skin

‘Outside in’ or ‘Top down’
What puts people at risk for pressure injuries?
PAMC Pressure Injury Guideline - RNs

4 eyes in 4 hours

• RN and 2\textsuperscript{nd} caregiver do a head-to-toe skin check together, within 4 hours of arrival to the unit.

• RN documents \textit{skin assessment and} Braden or Braden Q \textit{risk assessment} within 4 hours of arrival to the unit.

• Start Braden based interventions.
Decreased Sensory Perception (Braden < 2)
Limited ability or complete inability to feel or communicate pain/discomfort

Eliminate sources of pressure
- Eliminate sheet wrinkles & clear devices/objects from under patient
- Use bed extender to prevent feet pushing against end of bed
- Adjust critical care beds so heels sit in low pressure zone
- Limit time on bedpan

Relieve/redistribute pressure
- Pad locations with skin-to-equipment contact
  - Under/around tubes, hard chair arm rests
- Apply foam dressings to bony prominences
  - Elbows, spine, hips, sacrum
- Float heels off the bed
- Use chair cushion when up in chair

Protect skin under/around medical devices
- Inspect skin at least twice daily
- Reposition medical devices when patient condition allows
  - Reposition nasogastric tube q shift
- Refit/resize problematic devices & remove as soon as patient condition allows

Bed extender:
Heel protection
Foam dressings:
Boots:
Pressure injuries from mechanical devices

Assess skin under device
Moisture (Braden ≤ 2)
Skin occasionally moist, very moist, or constantly moist

Keep skin clean, dry, and moisturized. Minimize exposure to excessive moisture.

### Manage incontinence
- Attempt toileting q 2 hour
- Remove depends/diaper to increase air flow
- Replace cloth pad with paper wicking chux
- Clean skin & apply barrier promptly after episodes of incontinence.
  **Barriers range in protection, see Attachment C**
- Use male/female external catheter
- Use fecal management system for liquid stools

Keep skin folds clean and dry. Use a moisture-wicking antimicrobial fabric in skin folds to wick moisture away.
- Beneath pannus, under breasts, in groin

For patients with pressure injuries who also have moisture problems, a specialty bed that circulates air might be beneficial. Ask Wound Therapy.

<table>
<thead>
<tr>
<th>Medline Remedy Skin Care Products (Attachment C)</th>
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<tbody>
<tr>
<td>Paper wicking chux:</td>
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<tr>
<td>Cleanse High Risk Skin</td>
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<td>------------------------</td>
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<tr>
<td>Phytoplex Hydrating Foaming Body Cleanser</td>
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- **Mfr# MSC092104UNSC Lawson# 591797**
- **Mfr# MSC0924004UNSC Lawson# 591803**
- **Mfr# MSC092532UNSC Lawson# 458201**
- **Mfr# MSC0922ZP04H Lawson# 575410**
- **Mfr# MSC092542 Lawson# 432033**

**No-rinse**
- Gentle cleansing of wounds in all stages.
- Mist or stream spray
- Non-ionic surfactant
- Non-cytotoxic

**Use on intact, irritated or denuded skin**
- Removes barrier pastes and creams, blood and fecal material
- OK for all ages

**Protect/Treat**
- Prevents/treats rash and macerated skin caused by wetness, urine and/or stool
- Temporarily protects and relieves chapped or cracked skin

- **Purple** is for pretty/preventative
- **Green** is for clean
- **Blue** is for barrier protection
- **Orange** is for open wound
**Decreased Activity & Mobility** *(Braden < 2)*

**Activity:** Walks occasionally, chair or bed fast.
**Mobility:** Makes frequent slight changes in body position to totally immobile

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<th><strong>In bed repositioning:</strong> to offload pressure, start with q 2 hour turns, inspect skin with turns and increase turn frequency if needed.</th>
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<td><strong>In chair repositioning:</strong> Use chair cushion. Instruct patient to shift weight every 15min, if able. If unable, assist patient to offload pressure every hour with short moments of standing or leaning forward from sitting position.</td>
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<td><strong>Apply repositioning sensor if utilized in unit (i.e., LEAF)</strong></td>
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<td><strong>AVOID positioning patient on pressure injuries</strong></td>
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<td>➢ If pt has a L buttock pressure injury, reposition on R side &amp; supine</td>
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<td><strong>Float heels with pillows or offload with heel protecting boots</strong></td>
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<td><strong>Encourage patient mobility &amp; discuss starting PT/OT with LIP</strong></td>
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<tr>
<td>➢ Up in chairs for meals, use lift equipment to walk halls</td>
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<tr>
<td><strong>Wedges:</strong></td>
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<td><strong>Chair Cushion:</strong></td>
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<td><strong>Early Ambulation:</strong></td>
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When patient is “Independent” with positioning, ensure patient can (and is!) effectively repositioning self. If not, start a repositioning schedule and modify your Braden score.
Repositioning with LEAF ICUs, PCU, 3W, 5N

Leaf Patient Monitoring System wirelessly monitors a patient's position, movement and activity.

The Leaf Patient Monitoring System consists of a wearable sensor that continuously monitors patient position/movement and provides staff with notifications when patient repositioning is required to prevent pressure injuries.

If your patient is on LEAF you document “patient being monitored by LEAF” once per shift.
Poor Nutrition (Braden ≤2)
Rarely eats complete meal, occasionally takes dietary supplement, inadequate tube feed intake, NPO or clears liquids > 5 days

Assess barriers to achieving optimal nutrition
- chewing difficulties, impaired swallowing, social isolation

Order Nutrition Consult
- If Nutrition Braden Subscale ≤2
- With any stage pressure injury

Encourage eating and drinking
- Ensure water is available & encourage intake if appropriate
- Assist to set up tray and feed patient
- Order snacks/meals that pt likes
- Obtain order for nutritional supplements. Consider administering oral meds with liquid nutritional supplements instead of water.
- Avoid empty calories: cake, cookies, sodas, energy drinks

Record accurate fluid/food intake to help Dietitians assess adequate intake
Risk for Friction & Shear (Braden < 2)

Moves feebly/potential drag and shear with movement. Min to max assist. Pt slides down in bed or chair. Almost constant friction from spasticity, contractures, or agitation.

Use lift equipment for repositioning & transfers, never drag pt
- Hovermatt, tube slide sheets, ceiling lifts, slide boards

Apply foam dressings to protect areas at risk for shear damage
- The sacrum for patients who slide down in bed
- Elbows and heels for patients who shift themselves up in bed

Keep skin moisturized to provide some protection

Protect contracted/spastic extremities
- skin sleeves, padded rails, foam dressings, creative & frequent repositioning

Place Head of Bed @ 30 degrees or less (unless contraindicated).

Avoid massage over reddened areas/bony prominences

Avoid foam rings/cut-outs, synthetic sheepskin, & donut devices.
Decreased Tissue Perfusion & Oxygenation  (Braden Q for pediatrics)

- **Continuous pulse oximetry & cardiorespiratory monitoring**
- **Increased frequency of monitoring** (e.g. VS, areas of potential or impaired circulation such as extremities with casts, etc.)
- **Normalize temperature** (e.g. warm fluids, antipyretics as needed; discontinue cooling blankets as soon as possible)
- **Collaborate with LIP to optimize systemic perfusion:**
  - **preload**: fluid bolus
  - **contractility**: inotropes, correct hypoxia, electrolyte & acid-base imbalances, and hypoglycemia/hypocalcemia, treat poisoning
  - **afterload** [SVR]: vaspressors or vasodilators
  - **Heart rate**: chronotropes for bradycardia, antiarrhythmics, correct hypoxia, pacing
- **Collaborate with LIP to optimize oxygen delivery:**
  - **Right device** (e.g. size, disease process)
  - **Adequate HGB**
  - **Secretion clearance** (e.g. suction, incentive spirometry)
  - **Promote ambulation & repositioning** (e.g. prone)
PAMC Guideline - if you find a pressure injury:

- **Cleanse** with sterile water, sterile saline, or wound cleanser
- **Stage** it using NPIAP definitions
- **Photograph** injury for EPIC chart
- **Cover** with foam dressing until wound team makes care recommendations.
- **Eliminate** source of **pressure** from injured area when possible.
- Order **Wound Consult** if stage 2 or greater
- Order **Nutrition Consult**
- Notify **Charge Nurse**.
- Notify **LIP** for all stage 2 and greater pressure injuries.
- Complete a **UOR**.
- **Document** interventions.
Wound Team

- The Wound Team is comprised of Physical Therapists with specialized wound care training.
- We have a Wound Therapist scheduled 7 days/week.
- They manage:
  - Debridements
  - Complex wounds
  - Pressure injuries (stage 2 or greater)
  - Wound Vacs
- Order a wound consult with stage 2 or greater pressure injuries.
Big Picture: How PAMC prevents HAPIs

- Assign NDNQI training for pressure injury staging
- Skin Integrity Council – members on each unit
- Monthly prevalence studies
- UORs
- Run at-risk reports, round on those patients more frequently
- Clinical Nurse Specialists track and report pressure injuries daily at Clinical Operations