Pressure Injury¹ (PI) Assessment and Management

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.

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¹ Pressure Injury: A localized injury to the skin and/or underlying tissue usually over a bony prominence or related to medical devices/other objects, as a result of pressure, or pressure in combination with shear and/or friction
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ASSESSMENT

- Complete skin assessment¹ and PI risk assessment using age appropriate scale² within 2 hours of arrival/admission/transfer³ and every shift
- Two Registered Nurses (RNs) concurrently assess and cosign the assessment in the medical record

EVALUATION OF INJURY

Impaired skin/tissue integrity over a bony prominence or under medical devices/other objects due to pressure etiology?

- Yes
  - Skin intact?
    - Yes
      - Blister present?
        - Yes
          - Serous (clear fluid) filled blister
            - Stage 2⁴
        - No
          - Blood (dark red, purple) filled blister
            - Deep tissue pressure injury (DTPI)
              - Consult CWOCN
    - No
      - Follow PI Prevention/Progression Bundle, see Appendix E

- No
  - Skin blanchable with erythema/redness?
    - Yes
      - Follow PI Prevention/Progression Bundle, see Appendix E
    - No
      - Skin dark red, purple, maroon?
        - Yes
          - Consult CWOCN
        - No
          - Follow PI Prevention/Progression Bundle, see Appendix E

STAGING

See Page 3 for partial thickness skin loss or full thickness skin loss

INTERVENTIONS

- Follow PI Prevention/Progression Bundle, see Appendix E
- Notify Physician
- Add LDA
- Follow PI Prevention/Progression Bundle, see Appendix E
- Report PI in SI reporting system

CWOCN = certified wound ostomy and continence nurse
LDA = lines, drains, airways, tubes or wounds
SI = safety intelligence
EHR = electronic health record

¹ See Appendix A for Bony Prominences: Common Sites of Pressure Injury and Appendix B for Pressure Injury Staging System
² See Appendix C for Braden Scale (ages 9 and older) or Appendix D for Braden Q Scale (ages 8 and younger)
³ Arrival/admission/transfer includes any movement between the following areas: inpatient units, perioperative areas, Acute Cancer Care Center, Clinical Decision Unit (CDU). If PI is identified at the time of admission from the outside facility or home, the PI is considered to be community-acquired. If identified at any other time during hospital stay, the PI is considered to be hospital/unit acquired.
⁴ For Stage 1 and 2, activate the patient needs screening (PNS) request for CWOCN
⁵ Use institutionally approved mobile device to capture and upload photo - refer to Patient Photograph in the Electronic Health Record (EHR) System Policy (#ADM1134)

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EVALUATION OF INJURY

- Partial thickness skin loss
  - Assess wound bed
    - Viable, red, pink
      - Stage 2
        - DTPI with dermal loss
          - Yellow or subcutaneous tissue present
            - Stage 3
              - Consult CWOCN
            - Black, yellow, white (slough or eschar present)
              - Unstageable PI
  - Dark red, purple, maroon
    - DTPI with dermal loss
      - Muscle, bone or tendon exposed?
        - Yes
          - Stage 4
            - Consult CWOCN
        - No
          - Yellow or subcutaneous tissue present
            - Stage 3
              - Consult CWOCN
            - Black, yellow, white (slough or eschar present)
              - Unstageable PI
  - Full thickness skin loss
    - Wound bed visible, unobscured?
      - Yes
        - Consult CWOCN
      - No
        - Black, yellow, white (slough or eschar present)
          - Unstageable PI

STAGING

INTERVENTIONS

- Follow PI Prevention/Progression Bundle, see Appendix E
- Notify Physician
- Add LDA flowsheet in EHR for PI and document assessment
- Take photo(s) of PI and link with LDA in the patient’s chart
- Report PI in SI reporting system

DTPI = deep tissue pressure injury

1. For Stage 1 and 2, activate Patient Needs Screening (PNS) request for CWOCN
2. All preventable stages 3, 4, and unstageable PIs are reportable adverse events. These are reported to the Texas Department of State Health Services (DSHS) through the Department of Patient Safety and Accreditation
3. Use institutionally approved mobile device to capture and upload photo - refer to Patient Photograph in the Electronic Health Record (EHR) System Policy (#ADM1134)
Common sites of pressure injury when lying down

Common sites of pressure injury when sitting in a wheelchair

Shear effect

Effect of friction

Images from MD Anderson resources

1 Shear occurs when skin and adjacent bony surface slide across one another
2 Friction occurs when skin moves against support surfaces

APPENDIX A: Bony Prominences: Common Sites of Pressure Injury

Impaired skin/tissue integrity over a bony prominence or under medical devices/objects
## APPENDIX B: Pressure Injury Staging System

<table>
<thead>
<tr>
<th>Stage 1: Non-blanchable erythema of intact skin</th>
<th>MASD(^1): Erythematous skin damage due to moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intact skin with a localized area of non-blanchable erythema</td>
<td>Etiology is moisture as opposed to pressure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2: Partial-thickness skin loss with exposed dermis</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 3: Full-thickness skin loss</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>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. Slough and/or eschar may be visible.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 4: Full-thickness skin and tissue loss</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>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. Epibole (rolled edges), undermining and/or tunneling often occurs.</td>
<td></td>
</tr>
</tbody>
</table>

MasD = moisture associated skin damage

\(^1\) MASD is not considered to be a pressure injury. Description is added for the purpose of comparison.
**APPENDIX B: Pressure Injury Staging System - continued**

<table>
<thead>
<tr>
<th>Unstageable: Obscured full-thickness skin and tissue loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deep Tissue Pressure Injury: Persistent non-blanchable, deep red, maroon or purple discoloration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intact or non-intact skin with localized area of persistent non-blanchable, deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Device Related Pressure Injury:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure injury as a result from the use of devices designed and applied for diagnostic or therapeutic purposes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mucosal Membrane Pressure Injury:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure injury is found on mucous membranes with a history of a medical device in use at the location of the injury. Due to the anatomy of the tissue, these ulcers cannot be staged.</td>
</tr>
</tbody>
</table>

*Photos from MD Anderson CWOCN resources*
APPENDIX C: Braden Scale (ages 9 and older)

<table>
<thead>
<tr>
<th>Sensory Perceptions</th>
<th>Complete Limited:</th>
<th>Very Limited:</th>
<th>Slightly Limited:</th>
<th>No Impairment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to respond meaningfully to pressure-related discomfort</td>
<td>Unresponsive (does not moan, flinch, or grasp) to painful stimuli because of diminished level of consciousness or sedation</td>
<td>Responds only to painful stimuli</td>
<td>Responds to verbal commands but cannot always communicate discomfort or need to be turned</td>
<td>Responds to verbal commands</td>
</tr>
<tr>
<td>or</td>
<td>Limited ability to feel pain over most of the body</td>
<td>or</td>
<td>or Has a sensory impairment which limits the ability to feel pain or discomfort over half of the body</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moisture</th>
<th>Complete Moist:</th>
<th>Very Moist:</th>
<th>Occasionally Moist:</th>
<th>Rarely Moist:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree to which skin is exposed to moisture</td>
<td>Skin is kept moist almost constantly by perspiration, urine, etc.</td>
<td>Skin is often but not always moist</td>
<td>Skin is occasionally moist, requiring extra linen change approximately once a day</td>
<td>Skin is usually dry; linen requires changing only at routine intervals</td>
</tr>
<tr>
<td>or</td>
<td>Dampness detected every time patient is moved or turned</td>
<td>or</td>
<td>or</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>Bedfast:</th>
<th>Chairfast:</th>
<th>Walks Occasionally:</th>
<th>Walks Frequently:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of physical activity</td>
<td>Confined to bed</td>
<td>Ability to walk severely limited or non-existent</td>
<td>Walks occasionally during day but for very short distances with or without assistance</td>
<td>Walks outside room at least twice a day and inside room at least once every 2 hours during waking hours</td>
</tr>
<tr>
<td>or</td>
<td>Cannot bear own weight, must be assisted into chair or wheelchair, or both</td>
<td>or</td>
<td>or Spends most of each shift in bed or chair</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Completely Immobile:</th>
<th>Very Limited:</th>
<th>Slightly Limited:</th>
<th>No Limitation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to change and control body position</td>
<td>Does not make even slight changes in body or extremity position without assistance</td>
<td>Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently</td>
<td>Makes frequent though slight changes in body or extremity position independently</td>
<td>Makes major and frequent changes in position without assistance</td>
</tr>
</tbody>
</table>

Continued on next page
APPENDIX C: Braden Scale (ages 9 and older) - continued

<table>
<thead>
<tr>
<th>Nutrition: Usual food intake pattern</th>
<th>1arence</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very Poor:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Never eats a meal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rarely eats more than ½ of any food offered</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Eats ≤ 2 servings of protein (meat or dairy products) per day</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Takes fluids poorly; does not take a liquid dietary supplement or Takes nothing by mouth, is maintained on clear liquids or IV infusions for &gt; 5 days, or both</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Probably Inadequate:**                       |          |   |   |   |
| • Rarely eats a complete meal and generally eats only about ½ of any food offered |          |   |   |   |
| • Protein intake includes only 3 servings of meat or dairy products per day |          |   |   |   |
| • Occasionally takes a dietary supplement or Receives less than optimum amount of liquid diet or tube feeding |          |   |   |   |

| **Adequate:**                                 |          |   |   |   |
| • Eats over ½ of most meals                   |          |   |   |   |
| • Eats a total of 4 servings of protein (meat, dairy products) each day |          |   |   |   |
| • Occasionally refuses a meal but usually takes a supplement when offered or Is on tube feeding or TPN regimen that probably meets most of nutritional needs |          |   |   |   |

| **Excellent:**                                |          |   |   |   |
| • Eats most of every meal                     |          |   |   |   |
| • Never refuses a meal                        |          |   |   |   |
| • Usually eats ≥ 4 servings of meat and dairy products |          |   |   |   |
| • Occasionally eats between meals             |          |   |   |   |
| • Does not require supplementation            |          |   |   |   |

| Friction and Shear: Friction is the resistance to motion of one object moving against another. Shear is the unaligned force of two different parts of the body moving in opposite directions. |          |   |   |   |
| **Problem:**                                  |          |   |   |   |
| • Requires moderate to maximum assistance in moving |          |   |   |   |
| • Complete lifting without sliding against sheets impossible |          |   |   |   |
| • Frequently slides down in bed or chair; repositioning with maximal assistance |          |   |   |   |
| • Spasticity, contractions, or agitation leads to almost constant friction |          |   |   |   |

| **Potential Problem:**                        |          |   |   |   |
| • Moves feebly or requires minimum assistance |          |   |   |   |
| • During a move the skin probably slides to some extent against sheets, chair, restraints, or other devices |          |   |   |   |
| • Maintains relatively good position in chair or bed most of the time but occasionally slides down |          |   |   |   |

| **No Apparent Problem:**                     |          |   |   |   |
| • Moves in bed and in chair independently and has sufficient muscle strength to sit up completely during move |          |   |   |   |
| • Maintains good position in bed or chair    |          |   |   |   |

| **Friction**                                  |          |   |   |   |
| **Problem:**                                  |          |   |   |   |
| • Requires moderate to maximum assistance in moving |          |   |   |   |
| • Complete lifting without sliding against sheets impossible |          |   |   |   |
| • Frequently slides down in bed or chair; repositioning with maximal assistance |          |   |   |   |
| • Spasticity, contractions, or agitation leads to almost constant friction |          |   |   |   |

| **Potential Problem:**                        |          |   |   |   |
| • Moves feebly or requires minimum assistance |          |   |   |   |
| • During a move the skin probably slides to some extent against sheets, chair, restraints, or other devices |          |   |   |   |
| • Maintains relatively good position in chair or bed most of the time but occasionally slides down |          |   |   |   |

| **No Apparent Problem:**                     |          |   |   |   |
| • Moves in bed and in chair independently and has sufficient muscle strength to sit up completely during move |          |   |   |   |
| • Maintains good position in bed or chair    |          |   |   |   |

Note: See Appendix E for Pressure Injury Prevention/Progression Bundle based on Braden Scale score

IV = intravenous
TPN = total parenteral nutrition

N/A
### APPENDIX D: Braden Q Scale (ages 8 and younger)

<table>
<thead>
<tr>
<th>Sensory Perception</th>
<th>Mobility</th>
<th>Activity</th>
<th>Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unresponsive (does not moan, flinch, or grasp) to painful stimuli because of diminished level of consciousness or sedation or limited ability to feel pain over most of body surface</td>
<td>Does not make even slight changes in body or extremity position without assistance</td>
<td>Confined to bed</td>
<td>Skin is kept moist almost constantly with perspiration, urine, drainage, etc.</td>
</tr>
<tr>
<td>Responds only to painful stimuli</td>
<td>Makes occasional slight changes in body or extremity position but is unable to completely turn self independently</td>
<td>Ability to walk severely limited or nonexistent</td>
<td>Cannot bear own weight or must be assisted into chair or wheelchair</td>
</tr>
<tr>
<td>Responds to verbal commands but cannot always communicate discomfort or need to be turned or has sensory impairment that limits ability to feel pain in 1 or 2 extremities</td>
<td>Makes frequent although slight changes in body or extremity position independently</td>
<td>Walks occasionally during day but for very short distances, with or without assistance</td>
<td>Spends most of each shift in bed or chair</td>
</tr>
<tr>
<td>No Impairment: Responds to verbal commands Has no sensory deficit that limits ability to feel or communicate pain or discomfort</td>
<td>No Limitations: Makes major and frequent changes in position without assistance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1. **Completely Immobile:** Does not make even slight changes in body or extremity position without assistance.
2. **Very Limited:** Makes occasional slight changes in body or extremity position but is unable to completely turn self independently.
3. **Slightly Limited:** Makes frequent although slight changes in body or extremity position independently.
4. **No Limitations:** Makes major and frequent changes in position without assistance.

**Activity**

The degree of physical activity

**Mobility**

The ability to change and control body position

**Moisture**

Degree to which skin is exposed to moisture

**Sensory Perception**

The ability to respond in a developmentally appropriate way to pressure related discomfort

**Bedfast:** Confined to bed

**Chair Fast:**

- Ability to walk severely limited or nonexistent
- Cannot bear own weight or must be assisted into chair or wheelchair

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**Continued on next page**

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### APPENDIX D: Braden Q Scale (ages 8 and younger) - continued

<table>
<thead>
<tr>
<th>Friction – Shear</th>
<th>Significant Problem:</th>
<th>Problem:</th>
<th>Potential Problem:</th>
<th>No Apparent Problem:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Friction:</strong></td>
<td>Spasticity, contracture, itching or agitation leads to almost constant thrashing and friction</td>
<td>Needs moderate to maximum assistance in moving</td>
<td>Moves freely or needs minimum assistance</td>
<td>Able to completely lift patient during a position change; moves in bed and chair independently and has sufficient muscle strength to lift up completely during move</td>
</tr>
<tr>
<td><strong>Shear:</strong></td>
<td>Skins and adjacent bony surface slide across one another</td>
<td>Complete lifting without sliding against the sheets is impossible</td>
<td>During a move, skin probably slides to some extent against sheets, chair, restraints, or other devices</td>
<td>Maintains good position in bed or chair at all times</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nutrition Usual food intake pattern</th>
<th>Very Poor:</th>
<th>Inadequate:</th>
<th>Adequate:</th>
<th>Excellent:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPO or maintained on clear liquids, or IV lines for &gt; 5 days or albumin &lt; 2.5 mg/dl or never eats a complete meal</td>
<td>Is on liquid diet or tube feedings or TPN that provide inadequate calories or minerals for age or albumin &lt; 3 mg/dl or rarely eats a complete meal and generally eats only about ½ of any food offered</td>
<td>Is on tube feedings or TPN that provides adequate calories and minerals for age or eats over ½ of most meals</td>
<td>Is on a normal diet that provides adequate calories for age. For example: Eats or drinks most of every meal or feeding.</td>
<td></td>
</tr>
<tr>
<td>Rarely eats more than ½ of any food offered</td>
<td>Protein intake includes only 2 servings of meat or dairy products per day</td>
<td>Eats a total of 4 servings of protein (meat, dairy products) each day</td>
<td>Never refuses a meal</td>
<td></td>
</tr>
<tr>
<td>Protein intake includes only 2 servings of meat or dairy products per day</td>
<td>Takes fluids poorly</td>
<td>Occasionally will refuse a meal but usually take a supplement if offered</td>
<td>Usually eats a total of 4 or more servings of meat and diary products</td>
<td></td>
</tr>
<tr>
<td>Does not take a liquid dietary supplement</td>
<td></td>
<td>Occasionally will refuse a meal but usually take a supplement if offered</td>
<td>Occasionally eats between meals</td>
<td>Does not need supplementation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tissue Perfusion and Oxygenation</th>
<th>Extremely Compromised:</th>
<th>Compromised:</th>
<th>Adequate:</th>
<th>Excellent:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypotensive (MAP &lt; 50 mmHg or &lt; 40 mmHg in a newborn) or the patient does not physiologically tolerate position changes</td>
<td>Normotensive; oxygen saturation may be &lt; 95% or hemoglobin may be &lt; 10 mg/dL or capillary refill may be &gt; 2 seconds; serum pH &lt; 7.4</td>
<td>Normotensive; oxygen saturation may be &lt; 95%; hemoglobin may be &lt; 10 mg/dL or capillary refill may be &gt; 2 seconds; serum pH is normal</td>
<td>Normotensive; oxygen saturation &gt; 95%; normal hemoglobin; capillary refill &lt; 2 seconds</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** See Appendix E for Pressure Injury Prevention/Progression Bundle based on Braden Q Scale score

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## APPENDIX E: Pressure Injury Prevention/Progression Bundle

### Conduct a pressure injury admission assessment for all patients

- **Use a structured risk assessment, such as the Braden Scale to identify patients at risk for pressure injury**
  - Braden scale for patients age 9 and older
  - Braden Q scale for patients age 8 and younger
- **Conduct a head-to-toe assessment on admission**
- **Inspect all of the skin upon admission or transfer (within 2 hours)**
  - 2-nurse skin assessment and cosign on admission or transfer
- **Consider general risk factors including:**
  - Age (elderly/pediatric patients)
  - Immobility
  - Incontinence
  - Nutritional status
  - History of previous pressure injury
  - Impairments in blood flow to the extremities from vascular disease, diabetes or tobacco use
  - Length of surgery (> 3 hours)
  - Operating room (OR) positioning
  - Lines/Drains/Airways
  - Number of intra-operative hypotensive episodes
  - Duration of intra-operative low body temperature
  - Medical devices
  - Nutritional status
  - Anti-embolic stockings (AES)
  - Halo
  - Sequential compression devices (SCD)
  - Functional capacity pre and post procedure

Guidelines adopted from the National Pressure Advisory Panel (NPIAP) and National Institute of Health (NIH)

**Note:** Clinical judgment must be used to determine patient needs. Interventions may be initiated at any time, even if patient’s Braden/Braden Q Score are above the recommendation herein.

*Continued on next page*
APPENDIX E: Pressure Injury Prevention/Progression Bundle - continued

**Inspect skin and reassess risk for all patients every shift**

- Perform head-to-toe skin assessment every shift for signs of pressure injury
- Assess ALL bony prominences and pressure points (see Appendix A) and give special attention to the following areas:
  - Sacrum, coccyx, buttocks, back, heels, ischium, trochanters, elbows, occiput
  - Areas beneath medical devices (e.g., tracheostomy collar, Foley catheter, nasal cannula, SCD/AES)
- Inspect body surfaces subject to pressure or pressure in combination with friction/shear
- Pay close attention to the following:
  - Skin folds especially for bariatric patients
  - Skin over the occiput for neonates/pediatric patients
- Palpate skin to assess temperature, moisture, and consistency
  - When inspecting darkly pigmented skin, look for changes in skin tone, skin temperature and tissue consistency compared to adjacent skin
  - Moistening the skin assists in identifying changes in color
- Consider bedfast and chair fast patients to be at risk for development of pressure injury
- Use age-appropriate Braden Scale to assess for risk of pressure ulcer development. The RN is responsible for:
  - Assessing the patients and determining the Braden/Braden Q Score
  - For patients with a total Braden Score/Braden Q Score ≤ 14, order a low air bed/mattress
  - Implementing interventions based on the subscale score of the Braden/Braden Q Score
  - Developing a plan of care based on the areas of risk, rather than on the total risk assessment score

**Manage Moisture and Promote Skin Care: (see Appendix H for MASD prevention/treatment)**

(Implement interventions for Moisture subset score ≤ 3)

- Perform head-to-toe skin assessment every shift for signs of pressure injury
- Assess ALL bony prominences and pressure points (see Appendix A) and give special attention to the following areas:
  - Sacrum, coccyx, buttocks, back, heels, ischium, trochanters, elbows, occiput
  - Areas beneath medical devices (e.g., tracheostomy collar, Foley catheter, nasal cannula, SCD/AES)
- Keep skin/skin folds clean and dry
  - Cleanse skin promptly after episodes of incontinence
  - No diaper unless indicated
  - Apply appropriate moisture barrier cream
  - Establish a toileting schedule
  - Bowl management system, if indicated
- Use mild/pH-balanced cleanser and apply moisturizer to dry, intact skin
- Limit to 2 layers of linen (no more than 3 layers if additional layers indicated)
  - 2 layers: fitted sheet and draw sheet
  - Use breathable incontinence pads (e.g., Covidien pads, Ultrasorb pads)
  - If patient is on low air loss mattress, limit 2 layers (draw sheet or loose fitted sheet with incontinence pad)
- Apply appropriate moisture or protective skin barrier (e.g., Remedy Clear-Aid, Remedy Nutrashield)
- Order appropriate specialty pressure redistribution surface (bed/mattress) if Braden/Braden Q Moisture subset scores are ≤ 2 (see Appendix F)

Guidelines adopted from the National Pressure Advisory Panel (NPIAP) and National Institute of Health (NIH)

Note: Clinical judgment must be used to determine patient needs. Interventions may be initiated at any time, even if patient’s Braden/Braden Q Score are above the recommendation herein.

Continued on next page
APPENDIX E: Pressure Injury Prevention/Progression Bundle - continued

Optimize Nutrition and Hydration
(Implement interventions for Nutrition subset score ≤ 2)

- Consider hospitalized patients to be at risk for under nutrition and malnutrition from their illness or from being on prolonged NPO and/or clear liquid diet for > 3 days
- Review nutritional factors and assess hydration status
  - Observe for muscle mass loss and weight loss
  - Results in more prominent bones
  - Impacts mobility
  - Observe for edema and signs of reduced blood flow
  - Increases risk for skin breakdown
- Monitor patient’s weight for significant changes
  - ≥ 2 % in 1 week
  - ≥ 7.5% in 3 months
- Monitor associated signs/symptoms that impact patient’s nutritional status (e.g., nausea, vomiting, diarrhea, anorexia, cachexia)
- Request for Nutrition Services consult
  - Uses a valid and reliable screening tool to determine risk of malnutrition
- Assist patients at mealtimes to increase oral intake
- Assess adequacy of oral, enteral and parenteral intake
- Evaluate change in dietary pattern and monitor oral intake
- Encourage intake of nutritional supplements if ordered

Guidelines adopted from the National Pressure Injury Advisory Panel (NPIAP) and National Institute of Health (NIH)

Reposition, Mobilize, and Minimize Pressure, Friction, or Shear
(Implement interventions for Sensory Perception Subset Score ≤ 3, Mobility Subset Score ≤ 3, Activity Subset Score ≤ 3, Friction/Shear Subset Score ≤ 2, Tissue Perfusion Subset Score ≤ 2)

Note: Pressure redistribution over bony prominences is a primary concern

- Turn/reposition1 patients every two hours while in bed and every one hour when up in chair to optimally offload bony prominences and/or relieve pressure
  - Use wedge or fluidized positioner (e.g., Z-flo) for positioning
  - Utilize a turning schedule (e.g., turn clocks)
- When patient is up in chair, instruct patient to shift position every 15 minutes and assist with full relief of weight every hour
- Use pressure-redistribution surfaces
  - Use specialized support surfaces (such as mattresses, beds, and cushions), see Appendix F
  - Nurse to place order for specialty bed2,3 with “Patient supplies: No Cosign Required” order mode
  - Consider the level of immobility, exposure to shear, skin moisture, perfusion, body size and weight of the patient when choosing a support surface
  - Use breathable incontinence pads when using microclimate management surfaces
  - Keep the head of bed at < 30 degree angle (unless contraindicated)
  - Ensure linen is free of wrinkles and bed is free of objects that may cause pressure (e.g., needle cap, call light, etc.)
  - Ensure right size of bed linen (e.g., fitted sheet)
  - Use a pressure redistributing chair cushion for patients sitting in chairs or wheelchairs (e.g., EHOB™ Waffle Seat Cushion or ROHO® Seat Cushion)
  - Float heels off the bed using pillows or heel off-loading device (e.g., Multi-podus boots – Prevalon®)
  - Ensure right size of antibiologic stockings and remove every 8-12 hours
  - Use appropriate silicone foam barrier (e.g., Biatain® or KerraFoam™)
  - Place thin foam or breathable dressings under medical devices (e.g., Mepilex® lite), see Appendix G
  - Lift patient or use transfer aids. Take measures to prevent dragging patient during repositioning and transfer. (e.g., slide board – MaxiSlide; mechanical lifts – Hoyer lift; AirTAP)
  - Avoid positioning patients on an area of erythema or pressure injury
  - Request a Rehabilitation Medicine Services consult
    - Occupational therapy for sensory deficits and activities of daily living (ADL)
    - Physical therapy for mobility and exercise

1 Microturns/incremental weight shifts may be performed for the hemodynamically unstable patients
2 Screen for contraindications and discuss with CWOCN/Physical Therapy/Rehab Services
3 Request for Envela™ bed requires a physician’s order

Note: Clinical judgment must be used to determine patient needs. Interventions may be initiated at any time, even if patient’s Braden/Braden Q Score are above the recommendation herein.

Continued on next page

Department of Clinical Effectiveness V3
Approved by the Executive Committee of the Medical Staff on 06/21/2022
APPENDIX E: Pressure Injury Prevention/Progression Bundle - continued

**Educate**

**Note:** Utilize an interdisciplinary and patient-centered care approach

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Engage all healthcare professionals/staff</strong></td>
<td></td>
</tr>
<tr>
<td>○ Notify physician upon discovery of pressure injury</td>
<td></td>
</tr>
<tr>
<td>○ Discuss patients at risk and patients with active pressure injury during hand-off, pod brief, physician rounding, interdisciplinary or family care conferences</td>
<td></td>
</tr>
<tr>
<td>○ Utilize the Clinical Practice Guidelines (CPG) in developing action plans for education and intervention</td>
<td></td>
</tr>
<tr>
<td><strong>Educate all nursing staff</strong></td>
<td></td>
</tr>
<tr>
<td>○ Utilize the CPG in developing action plans for education and intervention</td>
<td></td>
</tr>
<tr>
<td>○ Update the Patient Needs Screening (PNS) assessment throughout the inpatient stay</td>
<td></td>
</tr>
<tr>
<td>○ Ensure timely consults with Nutrition, PT/OT, and CWOCN as appropriate</td>
<td></td>
</tr>
<tr>
<td>○ Ensure physician and caregiver notification upon discovery of pressure injury</td>
<td></td>
</tr>
<tr>
<td>○ Ensure Escalation and documentation of patient's declination of care ¹</td>
<td></td>
</tr>
<tr>
<td><strong>Educate and engage patient and caregiver</strong></td>
<td></td>
</tr>
<tr>
<td>○ Patients at risk of PI: educate patient and caregivers about PI risk factors and PI prevention bundle</td>
<td></td>
</tr>
<tr>
<td>○ Patients with active PI: educate patient and caregivers about management and prevention of wound progression</td>
<td></td>
</tr>
<tr>
<td>○ Provide educational materials and resources</td>
<td></td>
</tr>
<tr>
<td>- Patient Education Online (Pressure Injury Prevention)</td>
<td></td>
</tr>
</tbody>
</table>

¹ Refer to the institutional policy attachment Inpatient Declination of Care Escalation Process (#ATT3479)

Guidelines adopted from the National Pressure Injury Advisory Panel (NPIAP) and National Institute of Health (NIH)

**Note:** Clinical judgment must be used to determine patient needs. Interventions may be initiated at any time, even if patient’s Braden/Braden Q Score are above the recommendation herein.
## APPENDIX F: Low Air Loss/Pressure Redistribution Surface (Bed/Mattress)

<table>
<thead>
<tr>
<th>Bed</th>
<th>Indication</th>
<th>Weight Capacity</th>
<th>Bed</th>
<th>Indication</th>
<th>Weight Capacity</th>
</tr>
</thead>
</table>
| Centrella® max               | First line for at risk patients:  
  ● Braden Score ≤ 14  
  ● Moisture Subset Score ≤ 2 | 32-227 kg       | Progressa® Smart+ Bed        | First line for at risk patients:  
  ● Braden Score ≤ 14  
  ● Moisture Subset Score ≤ 2 | 30-225 kg (66-495 lbs) |
| Envision® E700               | Second line for at risk patients:  
  ● Braden Score ≤ 14  
  ● Moisture Subset Score ≤ 2 | 32-180 kg       | Envella™ Air Fluidized Bed    | First line for at risk patients:  
  ● Braden Score ≤ 14  
  ● Moisture Subset Score ≤ 2  
  ● At least one of the following conditions:  
    ○ Status post flap or graft  
    ○ Severe pain  
    ○ Poor nutrition/emaciation  
    ○ Multiple pressure injuries or large in size involving more than one turning surface | 30-160 kg (66-352 lbs) |
| TotalCare® Bariatric Plus Pulmonary | Note: Equipped with Continuous Lateral Rotation Therapy (CLRT) and Percussion and Vibration therapy | 90-225 kg (198-495 lbs) | Compella™ Bariatric Bed CLRT | First line for at risk patients:  
  ● Braden Score ≤ 14  
  ● Moisture Subset Score ≤ 2  
  Note: Equipped with CLRT and Percussion and Vibration therapy | 113-454 kg (248-998 lbs) |

1 Screen for contraindications and discuss with CWO CN/Physical Therapy/Rehab Services. Not recommended for a patient with an unstable spine or pulmonary disease. The fluid-like surface doesn’t provide sufficient support for a patient with an unstable spine and the lack of firm support makes it difficult for patients to cough effectively for patients with pulmonary disease.

2 Request for Envella™ bed requires a physician’s order.

Note: Equipped with CLRT and Percussion and Vibration therapy.
### APPENDIX G: Medical Device Related Pressure Injury Prevention

#### Standard interventions for ALL devices:
- Assess site and surrounding skin every shift and as needed
- Replace protective or securement device per standards and when visibly soiled (e.g., spinal brace)
- Consult appropriate discipline for concerns regarding device that is not routinely removed
- Pad, secure or reposition devices to minimize pressure, tension, and/or discomfort
- Provide appropriate routine care associated with type of medical device

<table>
<thead>
<tr>
<th>Location</th>
<th>Device</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>BiPAP &amp; CPAP masks</td>
<td>- Place gel skin barrier(^1) on the bridge of the nose and where the mask rests on the face&lt;br&gt;- The gel skin barrier(^1) is to be used in conjunction with a face mask BiPAP/CPAP mask&lt;br&gt;- Foam barrier may be utilized on the bridge of the nose or side of the mouth when using an under the nose BiPAP/CPAP mask, full face mask (mask above the eyebrows and under the chin) or a nasal BiPAP/CPAP mask&lt;br&gt;- Do not layer gel barrier(^1) and foam barrier together. These barriers are to be used independently of one another.</td>
</tr>
<tr>
<td>Face/Ears</td>
<td>Oxygen Devices: nasal cannula(^2), simple mask, venturi mask, and non-rebreather mask</td>
<td>- Foam barrier: Evaluate the patient’s skin for skin irritation/discholoration or indentations at the bridge of the nose, cheeks, around the mouth, behind the ears, and the outside area of the ears&lt;br&gt;- Practice: Apply thin foam padding between the oxygen device and affected area if applicable&lt;br&gt;- Avoid over tightening of mask strap or nasal cannula&lt;br&gt;- Apply thin foam padding on the cheeks between the skin and HFNC pads where the device rests on the patient's face&lt;br&gt;- Place thin foam padding behind the ears if applicable&lt;br&gt;- HFNC headgear/harness is to be opened/separated apart and anchored around the crown of the head. HFNC straps must remain around the crown of the head, off and above the ears.&lt;br&gt;- HFNC tubing should be pointed to the same side as where the high flow machine is placed. This will prevent pulling of the nasal cannula and prevent tension friction to the surrounding areas.&lt;br&gt;- Ensure that the tubing is clipped to the patient’s gown utilizing the provided circuit clip&lt;br&gt;- Avoid over-tightening of the HFNC’s strap</td>
</tr>
<tr>
<td>Face/Ears</td>
<td>High flow nasal cannula (HFNC)</td>
<td>- Practice: Rotate site at least once every shift and as needed&lt;br&gt;- Keep probe wire away from the patient</td>
</tr>
<tr>
<td>Forehead</td>
<td>Forehead SpO2 probe</td>
<td>- Practice: Rotate site at least once every shift and as needed&lt;br&gt;- Keep probe wire away from the patient</td>
</tr>
</tbody>
</table>

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\(^1\) RT provides gel skin barrier and assists in securing BiPAP/CPAP mask with gel barrier<br>\(^2\) Use a soft nasal cannula
## APPENDIX G: Medical Device Related Pressure Injury Prevention - continued

### Standard interventions for ALL devices:

- Assess site and surrounding skin every shift and as needed
- Replace protective or securement device per standards and when visibly soiled (e.g., spinal brace)
- Consult appropriate discipline for concerns regarding device that is not routinely removed

<table>
<thead>
<tr>
<th>Location</th>
<th>Device</th>
<th>Intervention</th>
</tr>
</thead>
</table>
| Neck       | Endotracheal tube (ETT) | Practice RT to reposition the ETT every 4 hours unless otherwise ordered by provider  
Breathing tube will not be repositioned if the patient is nasally intubated or other contraindications apply  
If using a commercial ETT holder or tape, allow two fingers’ width between the strap and the patient’s neck  
Ensure ETT holder/bumper is positioned correctly (above the upper lip, bumper not in the eye area, etc.)  
Ventilator circuit should be placed on the ventilator’s circuit holder in effort to avoid pulling on the face and ETT/Trach  
Change ETT holder as appropriate (e.g., when soiled, when adhesive is holding device in place, etc.) |
| Trach collar | Foam barrier         | If applicable, place appropriate dressing (e.g., gauze/drain sponge) or foam padding (cut to size) between the edge of the trach collar and patient's skin |
|             | Practice              | Allow two fingers’ width between the strap and the patient’s neck              |

*Continued on next page*
### APPENDIX G: Medical Device Related Pressure Injury Prevention - continued

<table>
<thead>
<tr>
<th>Location</th>
<th>Device</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upper Extremities</strong></td>
<td>Arterial line</td>
<td>Use soft splint to position wrist as needed</td>
</tr>
<tr>
<td></td>
<td>O₂ saturation probe</td>
<td>• Rotate site daily and as needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Keep probe wire away from the patient</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• For pediatric patients, use pediatric probe</td>
</tr>
<tr>
<td></td>
<td>Arm sling</td>
<td>• Readjust every 2 hours when in use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Monitor for increasing edema</td>
</tr>
<tr>
<td><strong>Lower Extremities</strong></td>
<td>SCD</td>
<td>• Remove SCD and assess skin every shift and as needed</td>
</tr>
<tr>
<td></td>
<td>AES/lymphedema wrap</td>
<td>• Remove AES and assess skin every shift and as needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure correct size; no wrinkles</td>
</tr>
<tr>
<td></td>
<td>Knee immobilizer</td>
<td>• Check every 2 hours for proper alignment and pressure point checks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Monitor for increasing edema</td>
</tr>
<tr>
<td></td>
<td>Shrinker (for below the knee amputation)</td>
<td>Release for 1 hour daily</td>
</tr>
<tr>
<td><strong>Heels/Feet</strong></td>
<td>Heel offloading device</td>
<td>• Ensure correct application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Adjust stabilizer as appropriate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Monitor for increasing edema</td>
</tr>
<tr>
<td></td>
<td>Orthopedic boots</td>
<td>• Ensure correct size and application</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Monitor for increasing edema</td>
</tr>
<tr>
<td><strong>Abdomen</strong></td>
<td>Feeding tube (e.g., J-tube, PEG tube)</td>
<td>• Place foam padding between the tube bumper and the patient's skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use silicone tape for additional securement</td>
</tr>
<tr>
<td></td>
<td>Abdominal binder</td>
<td>• Remove binder every shift to assess skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure correct size; no folded areas</td>
</tr>
<tr>
<td><strong>Thigh/Penis</strong></td>
<td>Indwelling urinary catheter, three-way urinary catheter/continuous bladder irrigation, external urinary catheter (condom catheter/external female catheter)</td>
<td>• Ensure correct size of catheter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use appropriate securement device to secure catheter (with enough slack)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use silicone tape for additional securement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rotate thighs (where tubing is taped/secured)</td>
</tr>
</tbody>
</table>

AES = anti-embolic stockings  
J-tube = jejunostomy tube  
PEG = percutaneous endoscopic gastrostomy  
SCD = sequential compression device  

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### APPENDIX G: Medical Device Related Pressure Injury Prevention - continued

<table>
<thead>
<tr>
<th>Location</th>
<th>Device</th>
<th>Intervention</th>
</tr>
</thead>
</table>
| Other               | Cast                          | ● Place appropriate gauze dressing/abdominal pad/foam padding beneath the cast’s edge/brim  
|                     |                               | ● Assess for allowance of 2 finger breadth under the cast  
|                     |                               | ● Monitor for increasing edema  
| Braces/Collar (e.g., spinal brace, cervical collar, hip abduction brace, knee brace, etc.) |                               | ● Remove brace/collar and assess skin every shift and as needed  
|                     |                               | ● Place appropriate gauze dressing/abdominal pad/foam padding under the device  
|                     |                               | ● Monitor for increasing edema  
| Drains (e.g., JP-drain, nephrostomy tube, etc.) |                               | ● Place foam padding between the tube bumper and the patient's skin  
|                     |                               | ● Use silicone tape for additional securement  
|                     |                               | ● Change dressing every other day and as needed  
| Tubes (e.g., rectal tube) |                               | ● Direct tubing away from the patient  
|                     |                               | ● Use silicone tape for additional securement  
| Other tubing (e.g., IV tubing) |                               | ● Direct tubing away from the patient  
|                     |                               | ● Apply small foam padding under the tubing as appropriate  
|                     |                               | ● Use silicone tape for additional securement  
| Pads and wires (e.g., cardiac monitor device, EEG, etc.) |                               | ● Direct wires away from the patient  
|                     |                               | ● Rotate pad placement (as appropriate)  
| Other potential objects (e.g., call light, needle cap, etc.) |                               | ● Ensure linens are free of wrinkles (smooth wrinkles every two hours when turning)  
|                     |                               | ● Ensure there are no objects caught under the patient’s skin  

JP drain = Jackson-Pratt drain  
IV = intravenous  
EEG = Electroencephalography
APPENDIX H: Moisture-Associated Skin Damage (MASD) Prevention/Treatment

MASD is inflammation and erosion of the skin caused by prolonged exposure to urine, stool, saliva, mucus, perspiration, wound exudate, or any other type of drainage (any substance which causes “irritation” to the skin). Gluteal, abdominal, and groin skin folds are high moisture areas. **Note: MASD may progress to Pressure Injury.**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Risk Factors</th>
<th>Prevention</th>
<th>Treatment</th>
</tr>
</thead>
</table>
| **Intertriginous Dermatitis (ITD)** | ● Inflammatory skin condition of opposing skin surfaces caused by moisture  
● Linear breaks in the skin at the base of skin folds caused by overhydration of the skin due to trapped moisture and friction exerted by opposing skin folds  
● Most commonly occurs in the inframammary, axillary and inguinal skin folds  
● Alkaline pH of the skin in these areas support the growth of bacteria and fungus  
"Mirror-image" appearance on each side of the skin fold  
Skin can be erythematous, macerated, oozing, or draining  
Patients report itching, pain, burning, and odor | ● Diaphoresis  
● Diabetes  
● Broad spectrum antibiotic therapy  
● Obesity  
● Steroids  
● Poor hygiene  
● Chemotherapy | ● Use non-perfumed cleansers  
● Use non-talc powders  
● Avoid use of lotions or ointments under skin folds  
● Ensure skin folds are dry at all times  
● Reduce heat and moisture  
● Reduce skin to skin friction  
● Contain or divert urine/stool as appropriate (e.g., condom catheter, rectal pouch)  
● Use absorptive/wicking products between skin folds (e.g., moisture-wicking fabric - interDry Ag, pillowcase, etc.)  
● Apply moisture barrier cream if indicated (dimethicone-based only) | ● Apply moisture-wicking fabric (e.g., interDry Ag)  
○ Leave 2 inch area of strip exposed to air to allow for wicking of moisture  
● Apply antifungal powder only if candidiasis  
○ Apply lightly after cleaning and pat dry the area |
| **Periwound MASD** | ● Damage due to prolonged contact between periwound skin and wound exudate  
● Mechanisms of injury include maceration and inflammation | Pre-existing wound | ● Use appropriate dressing to manage exudate (i.e., pouch or dressing)  
● Change dressing if saturated  
● Change pouch weekly or as needed (e.g., leaking)  
● Apply non-alcohol liquid barrier film if indicated  
● Apply cream based barrier products in areas where adhesion is not required |
| **Peristomal MASD** | Prolonged or recurrent exposure of peristomal skin to drainage from urinary or fecal stoma, tracheostomy, or gastrostomy | Stoma | ● Establish secure pouching system  
● Ensure correctly sized pouch opening (protection of all peristomal skin)  
● Ensure appropriate pouch change frequency  
● Correct causative factors (e.g., diarrhea, peristomal hernia) |

Continued on next page
### APPENDIX H: Moisture-Associated Skin Damage (MASD) Prevention/Treatment - continued

<table>
<thead>
<tr>
<th>Problem</th>
<th>Risk factors</th>
<th>Prevention</th>
<th>Treatment</th>
</tr>
</thead>
</table>
| Incontinence-Associated Dermatitis (IAD) | • Skin damage caused by prolonged or repetitive exposure to stool and/or urine  
• Typically superficial, appears erythematous with patchy areas of skin loss and/or with candidiasis  
• Source of moisture is external | • Urinary and/or fecal incontinence  
• Altered mental status  
• Loss of normal “gut” flora  
• Poor skin condition  
• Diapers usage | • Identify “at risk” patients  
• Early use of protective barrier products  
• Contain or divert urine/stool as appropriate (e.g., condom catheter, rectal pouch)  
• “Wick” urine and liquid stool away from skin (“Wick” means to absorb and draw off)  
• Use only breathable, absorptive pads  
• Limit diaper use  
• Routine skin care for patients on diaper  
• Cleanse the skin promptly following episodes of incontinence  
• Use appropriate perineal cleansers/perineal wipes  
• Apply moisture barrier products | Intact Skin:  
• Routine skin assessment and care  
• Routine application of moisture barrier products  

Wet, Denuded Skin:  
Create “crusting” over denuded skin (“crusting” creates a “dry” surface and allows for easier application of barrier ointment)  

Steps of “Crusting”:  
1. Apply pectin powder to denuded area then brush excess powder off  
2. Spray a layer of non-alcohol barrier film to seal the powder |
SUGGESTED READINGS


MD Anderson Institutional Policy # ADM1134 – Patient Photograph in the Electronic Health Record (EHR) System Policy

MD Anderson Institutional Policy # CLN0686 – Pressure Injury Assessment and Prevention Policy


Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care.
This practice consensus statement is based on majority opinion of the Pressure Injury experts at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

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