Common Causes of Skin Breakdown in the Health Care Setting

- **Skin tears** due to thin skin that has lost its elasticity
- **Maceration** (irritation of the skin with superficial open areas) secondary to urine and/or fecal contamination
- **Lower leg ulcers** secondary to circulation concerns (arterial and/or venous insufficiency), loss of protective sensation (neuropathy) and complications of diabetes which leads to circulatory and loss of sensation issues.
- **Pressure Ulcers**

Pressure Ulcers

A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction.

NPUAP 2007
Contributing Factors: Friction

Risk Factors

- Unavoidable:
  - Means you identified all risk factors,
  - Put interventions in place & implemented them,
  - Up-dated the care plan as appropriate, and
  - The individual still developed a pressure ulcer despite this
- Formulating your plan of care by assessing the person’s INDIVIDUAL risk factors for skin breakdown
Risk Assessment Tools

**A COMPREHENSIVE RISK assessment in Long Term Care** should be completed:

- Upon admission
- *Weekly for the first four weeks after admission*
- With a change of condition (including pressure ulcer formation, change in mobility and/or continence status, decrease in weight, etc.)
- Quarterly/annually with MDS

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Risk Assessment Tools

**A COMPREHENSIVE RISK assessment in Acute Care** should be completed:

- Upon Admission
- Daily

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Risk Assessment Tools

**A COMPREHENSIVE RISK assessment in Home Care** has no clear guidance, however WOCN recommends:

- Upon admission
- With every visit
Risk Assessment Tools

- Use a recognized risk assessment tool such as the Braden Scale or Norton
- Use the tool consistently
- Regardless of the overall score of the risk assessment, assess each individual risk factor

Risk Assessment Tools

- No risk assessment tool is a comprehensive risk assessment
- Incorporate the risk assessment into the plan of care

Risk Assessment Tools

BRADEN SCALE

- Mobility
- Activity
- Sensory Perception
- Moisture
- Friction & Shear
- Nutrition

*Please note: Using the Braden scale requires obtaining permission at www.bradenscale.com or (402) 551-8636
Breaking Down the Braden

Risk Factor: Immobility
• Anything that contributes to limiting mobility should also be listed as a risk factor:
  ✓ Diagnosis: CVA, MS, Paraplegia, Quadriplegia, end stage Alzheimer’s/Dementia, etc.
  ✓ Fractures and/or casts
  ✓ Cognitive impairment
  ✓ Pain
  ✓ Restraints or medical equipment

Breaking Down the Braden

Activity:
• List on the care plan if they are:
  ✓ Chairfast
  ✓ Bedbound

Breaking Down the Braden

Impaired Sensory Perception
• Also list those factors leading to the sensory impairment:
  ✓ CVA, paraplegia, quadriplegia, etc.
  ✓ Cognitive impairment
  ✓ Neuropathy

Note how many of these are the same risk factors for immobility
Breaking Down the Braden

• The interventions are basically the same for:
  • immobility,
  • impaired sensory perception, and
  • decreased activity (chairfast or bedbound)
• Goal is to promote circulation & decrease the pressure

Immobility, decreased activity and/or impaired sensory perception interventions

• Pressure Redistribution: The ability of a support surface to distribute load over the contact area of the human body.
  • This term replaces prior terminology of pressure reduction and pressure relief support surfaces
• Overall goal of any support surface is to evenly distribute pressure over a large area

Immobility, decreased activity and/or impaired sensory perception interventions

Support surfaces for the bed:
  • Foam
  • Low Air-loss
  • Air fluidized
• Document on care plan type and date implemented
Immobility, decreased activity and/or impaired sensory perception interventions

Support surfaces for the bed: continued

• Not a substitute for turning schedules
• Heels may be especially vulnerable even on low air loss beds

• All wheelchairs should have a cushion
• Air and gel is more aggressive than foam products
• A sitting position = the head is elevated more than 30 degrees
• All sitting surfaces should be evaluated for pressure redistribution
Immobility, decreased activity and/or impaired sensory perception interventions

- When positioning in a chair consider:
  - Postural alignment
  - Weight distribution
  - Sitting balance
  - Stability
  - Pressure redistribution
- Recommend an OT/PT screen

DONUT
- Do NOT use DONUTS for pressure relief

Immobility Interventions
Immobility, decreased activity and/or impaired sensory perception interventions

• Develop an INDIVIDUALIZED turning & repositioning schedule
• Current recommendations are:
  • Turn and reposition at least every 2 hours while lying
  • Reposition at least hourly in a sitting position (if the resident can reposition themselves in wheelchair encourage them to do so every 15 minutes)

Immobility, decreased activity and/or impaired sensory perception interventions

• Current recommendations are: continued
  • When possible avoid positioning on existing pressure ulcer

F314 Guidance in LTC:
• Tissue tolerance is the ability of the skin and its supporting structures to endure the effects of pressure without adverse effects
• A skin inspection should be done, which should include an evaluation of the skin integrity & tissue tolerance, after pressure to that area has been reduced or redistributed
Immobility, decreased activity and/or impaired sensory perception interventions

F314 Guidance in LTC: continued

• Therefore the turning and repositioning schedule can be individualized

Immobility, decreased activity and/or impaired sensory perception interventions

• F314: "Momentary pressure relief followed by a return to the same position is usually NOT beneficial (micro-shifts of 5 to 10 degrees or a 10-15 second lift)."

• “Off-loading” is considered 1 full minute of pressure RELIEF

Immobility, decreased activity and/or impaired sensory perception interventions

• Pain management
• Release restraints at designated intervals
• Do not place Individuals directly on a wound when ever possible or limit the time on the area
**Immobility, decreased activity and/or impaired sensory perception interventions**

- Pad and protect bony prominences (note: sheepskin, heel and elbow protectors provide comfort, and reduce shear & friction, but do NOT provide pressure reduction)
- Do not massage over bony prominences

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**Breaking Down the Braden**

**Moisture**

- Incontinence of bladder
- Incontinence of bowel
- Excessive perspiration

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**Breaking Down the Braden**

Interventions to protect the skin from moisture

- Peri-care after each episode of incontinence
- Apply a protective skin barrier (ensure skin is clean before application)
- Individualized B & B Program
- Foley catheter and/or fecal tubes/pouches as appropriate (in LTC for stage III or IV only)
Breaking Down the Braden

Interventions to protect the skin from moisture
- 4x4’s, pillow cases or dry cloths in between skin folds
- Bathe with MILD soap, rinse and gently dry
- Moisturize dry skin
- Keep linen dry & wrinkle free

Breaking Down the Braden

- If there is already an elimination problem on the care plan that addresses the interventions:
  - List “incontinence of bowel and/or bladder” as a risk factor under skin integrity, however,
  - State under interventions:
    - See elimination problem

Breaking Down the Braden

- At risk for friction and shear
  ✓ Needs assistance with mobility
  ✓ Tremors or spasticity
  ✓ Slides down in bed and/or the wheelchair
  ✓ Agitation
Breaking Down the Braden

• Interventions for Friction and Shear
  • Lift -- do not drag -- individuals
  • Utilize lifting devices
  • Elbow or heel pads
  • Protective clothing
  • Protective dressings or skin sealants
  • Raise the foot of the bed before elevating

Breaking Down the Braden

• Interventions for Friction and Shear continued
  • Wedge wheelchair cushions (therapy referral)
  • Pillows

Breaking Down the Braden

• Nutritionally at Risk
  ✓ Serum Albumin below 3.5g/dl
  ✓ Pre-Albumin 17 or below (more definitive than an albumin level)
  ✓ Significant unintended weight loss
  ✓ Very low or very high body mass index
• Nutritionally at Risk continued
  ✓ Inability to feed self
  ✓ Poor appetite
  ✓ Difficulty swallowing
  ✓ Tube fed
  ✓ Admitted with or history of dehydration

• Interventions for Nutritional deficits
• Dietary consult to determine interventions
  • Provide protein intake of 1.2-1.5 gm/kg/body weight daily
  • WOCN’s guideline also recommends 35-40 kcalories/kg of body weight/day

• Interventions for Nutritional deficits
• Dietary consult to determine interventions
  • Provide a simple multivitamin (unless a resident has a specific vitamin or mineral deficiency, supplementation with additional vitamins or minerals may not be indicated)
  • Appetite stimulants
  • Providing food per individual preferences
  • Provide adequate hydration
Breaking Down the Braden

- If nutrition is already addressed on the care plan:
  - List “nutritionally at risk” as a risk factor under skin integrity, however,
  - State under interventions:
    - See nutritional problem

Other Risk Factors

- Overall diagnoses that can lead to skin breakdown:
  - Anything that impairs blood supply or oxygenation to the skin (cardiovascular or respiratory disease)
  - History of pressure ulcers
  - End stage diseases (renal, liver, heart, cancer)

Other Risk Factors

- Overall diagnoses that can lead to skin breakdown:
  - Diabetes
  - Anything that renders the individual immobile
  - Anything that can affect his/her nutritional status (inability to feed themselves)
  - Anything that affects his/her cognition
Other Risk Factors

- Medications or Treatments, such as:
  - Steroid therapy
  - Medications that decrease cognitive status
  - Renal dialysis
  - Head of bed elevation the majority of the day
  - Medical Devices (tubes, casts, braces, shoes, positioning devices)

Other Risk Factors

- Individual choice
  - Be specific as to what the individual is choosing not to do or allow
    - List interventions and alternatives tried on the plan of care (do not delete)
    - Document date and location of risk/benefit discussion on care plan
    - Re-evaluate at care planning intervals

Overall Prevention Interventions

- Monitor skin – this should be listed on all plans of care
  - Inspect skin daily by caregivers
    - Inspect bony prominences
    - After pressure has been reduced/redistributed
    - Under medical devices (cast, tubes, orthoses, braces, etc).
Skin Inspection

- Skin should be inspected in Long Term Care:
  - Upon Admission by Licensed staff
  - Daily with cares by caregivers
  - Weekly by Licensed staff
  - Upon a PLANNED discharge

Skin Inspection

- Skin should be inspected in Acute care:
  - Upon Admission to ED/hospital
  - Upon Admission to the Unit
  - Daily
  - Upon Discharge

- Skin should be inspected in Home Care:
  - Upon Admission
  - With each visit
  - Upon planned discharge

Other Considerations for Prevention Interventions

- Monitoring & management of diabetes
- Provide adequate psychosocial support
- Obtain a PT, OT, Dietary, Podiatrist, and/or Wound Care Consultation as appropriate
- Involve primary physician and/or appropriate physician support
- Educate/involve the individual and/or family members
RISK ASSESSMENT EXERCISE
Using the Braden Tool

Case Study - Ima Sweetie
• 75yo female
• Suffered from a stroke affecting her right side.
• Progressed to the point where she can use a walker, independently for short distances.
• Suffers from depression and does not like to leave her room.
• Is intermittently incontinent and requires pad changes qshift. However, she does not inform staff/family when she has been incontinent.

Case Study - Ima Sweetie
• Prefers to spend most of her day laying in her bed on right side, despite attempts to reposition q2 hrs.
• States she has diminished sensation on her right side and occasionally slides down in her chair at the evening meal.
• Eats about half of each meal served, and occasionally will take dietary supplements