Pressure Ulcer Prevention: Risk Assessment, Interventions & Care Planning
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Common Causes of Skin Breakdown

- 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

Common Causes of Skin Breakdown (cont’d)

- 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: Secondary from Pressure and/or Shear

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.

Pressure Ulcers

THE EFFECTS OF PRESSURE

16 mmHg
32± mmHg
32 mm
Pressure Ulcers

Contributing Factors

Contributing Factors: Shear

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
Risk Assessment Tools

- A comprehensive risk assessment in acute care should be completed:
  - Upon admission
  - Daily

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

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

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

Breaking Down the Braden

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
• Not a substitute for turning schedules
• Heels may be especially vulnerable even on low air loss beds
Immobility, decreased activity and/or impaired sensory perception interventions

- 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

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)
  - When possible avoid positioning on existing pressure ulcer

Immobility, decreased activity and/or impaired sensory perception interventions

- F314 Guidance in LTC:
  - Tissue tolerance is the ability of the skin and it’s supporting structures to endure the effects of pressure with out adverse effects
  - A skin inspection should be done, which should include an evaluation of the skin integrity and tissue tolerance, after pressure to that area, has been reduced or redistributed
  - Therefore the turning and repositioning schedule can be individualized
Immobilty, 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 whenever possible or limit the time on the area
- 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

Breaking Down the Braden

- Moisture
  - Incontinence of bladder
  - Incontinence of bowel
  - Excessive perspiration

Moisture

- 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)

Moisture

- 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

Moisture

- 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

• At risk for friction and shear
  – Needs assistance with mobility
  – Tremors or spasticity
  – Slides down in bed and/or the wheelchair
  – Agitation

Friction and Shear

• 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
  – 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
  – Inability to feed self
  – Poor appetite
  – Difficulty swallowing
  – Tube fed
  – Admitted with or history of dehydration

Nutrition

• 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

• 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

• Interventions for Nutritional deficits
  – 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
Other Risk Factors not on the Braden

- 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 not on the Braden

- 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 not on the Braden

- 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 not on the Braden

- 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/re-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

Questions?

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