Pressure Ulcer Risk Assessment
A to Z

American Medical Technologies
Irvine, California
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Overview & Objectives

• Describe the Importance of Risk Assessments

• Recognize Extrinsic & Intrinsic Factors that Contribute to Risk for the Development of Pressure Ulcers
Assessments

- Pressure ulcer risk assessment
- Detailed initial skin assessment
- Pressure ulcer risk assessment policy
- The implementation and consistent use of a risk assessment tool can reduce the incidence of pressure ulcers by 60%!!!!
Difference Between Skin Assessment and Pressure Ulcer Risk Assessment

Skin
- Skin health
- Variations
- Age / disease related changes

PrU Risk
- Immobility
- Nutrition
- Sensation
- Moisture
Risk Assessment Steps

- Identify:
  - ALL risk factors
  - Pre-existing skin issues

- Assess level of pain

- Include the Resident Assessment Instrument (RAI)

- Identify the automatic high risk resident

- Assess additional factors impacting development, treatment and healing of pressure ulcers
Risk Assessment

- CMS considers a pressure ulcer to be a *sentinel event* in a resident of a LTC facility who had been assessed as being at *low risk* for pressure ulcer development.

- According to CMS:
  - Residents at high risk:
  - impaired transfer or bed mobility
  - Comatose
  - malnourished,
  - end-stage disease

- any other patient is at low risk
## Risk for Pressure Ulcers

<table>
<thead>
<tr>
<th>Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>- altered cognition</td>
</tr>
<tr>
<td>- malnutrition</td>
</tr>
<tr>
<td>- incontinence</td>
</tr>
<tr>
<td>- immunosuppression</td>
</tr>
<tr>
<td>- corticosteroid history</td>
</tr>
<tr>
<td>- fractures</td>
</tr>
<tr>
<td>- diminished pain awareness</td>
</tr>
<tr>
<td>- poor circulation</td>
</tr>
<tr>
<td>- drugs that impair wound healing</td>
</tr>
<tr>
<td>- diabetes</td>
</tr>
<tr>
<td>- dehydration</td>
</tr>
<tr>
<td>- bed rest/chronic immobility</td>
</tr>
<tr>
<td>- intrinsic/extrinsic/iatrogenic factors</td>
</tr>
<tr>
<td>- multisystem trauma</td>
</tr>
<tr>
<td>- significant obesity / cachexia</td>
</tr>
<tr>
<td>- co-morbid conditions</td>
</tr>
<tr>
<td>- paralysis</td>
</tr>
<tr>
<td>- resident refusal</td>
</tr>
<tr>
<td>- previous PrU history</td>
</tr>
<tr>
<td>- altered blood pressure</td>
</tr>
</tbody>
</table>

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• calcaneous
• greater trochanter
• ischial tuberosities
• sacrum
• medial/lateral malleoli
• knee (all aspects)
• olecranon process
• occiput
• ears
• Scapulae
• toes (tight sheets)
• thoracic vertabrae

areas exposed to tubes, lines and/or external devices (casts, splints, etc)
### Extrinsic & Intrinsic Defined

<table>
<thead>
<tr>
<th>Extrinsic</th>
<th>Intrinsic</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Being outside a thing</td>
<td>• Belonging to a thing</td>
</tr>
<tr>
<td>• Originating from outside</td>
<td>• Originating from within</td>
</tr>
<tr>
<td>• Outward or external</td>
<td>• Internal</td>
</tr>
</tbody>
</table>
Extrinsic & Intrinsic Factors

Extrinsic Factors

• Cracked shell due to impact
• Left out in sun
• Left in carton, unable to move or roll

Intrinsic Factors

• Old egg left over from Easter
• Overweight
• Diagnosed with congestive yolk disease
### Intrinsic Risk Factors Which Can Be Eliminated/Modified?

<table>
<thead>
<tr>
<th>Eliminable Risk Factors</th>
<th>Modifiable Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Previous Hx of PrU</td>
<td>• <strong>Altered blood pressure</strong></td>
</tr>
<tr>
<td>• Malnutrition</td>
<td>• Increased temperature</td>
</tr>
<tr>
<td>• Dehydration</td>
<td>• either internal to the</td>
</tr>
<tr>
<td>• Excessive perspiration</td>
<td>patient or at the</td>
</tr>
<tr>
<td>• Urinary/fecal incontinence</td>
<td>patient/surface</td>
</tr>
<tr>
<td>• ↓ sensory perception</td>
<td>• Body build</td>
</tr>
<tr>
<td>• Impaired circulation</td>
<td>• Co-existing health conditions</td>
</tr>
<tr>
<td>• Altered mental status</td>
<td>• malignancy, diabetes,</td>
</tr>
<tr>
<td>• ↓ mobility</td>
<td>stroke, pneumonia, heart</td>
</tr>
<tr>
<td>• Age &gt;70 years</td>
<td>failure, sepsis, renal</td>
</tr>
<tr>
<td></td>
<td>failure, anemia, immune</td>
</tr>
<tr>
<td></td>
<td>compromised</td>
</tr>
<tr>
<td></td>
<td>• Acute illness</td>
</tr>
</tbody>
</table>
Low Blood Pressure as a Risk Factor

- Systolic BP <100 mmHg
- Diastolic BP <60 mmHg
- Hypotension may shunt blood flow away from the skin to more vital organs
- Decreases skin tolerance for pressure by allowing capillaries to close at lower interface pressures
Extrinsic Factors

- Treatment protocols
- Failure to recognize risk
- Patient handling techniques
- Use of restraints
- Hygiene
- Medications
- Emotional stress
- Smoking
Risk Assessment Tools

• **Norton Scale:**
  • oldest, developed in 1961

• **Gosnell’s Scale:**
  • based on further refinement of Norton

• **Braden Scale:**
  • published 1987.
  • Most common risk assessment tool used in clinical setting
Pressure Ulcer Risk Assessment

• Determine if person at risk for pressure ulcers
  – On admission
  – Repeat as regularly & frequently as required by patient acuity
  – Or when a change in status
  – Ref. National Pressure Ulcer Advisory Panel=NPUAP.org

• Consider clinical setting
  – Acute care: on admission: at least every 48 hours
  – LTC: On admission\readmission, weekly for 1st 4 weeks, then quarterly
    Any time a change in patient’s status and/or discharge/return from hospital.
  – Home Health: On admission reassess every visit
Recommendations for Risk Assessments and Reassessments

- WOCN, AMDA
- Initial risk assessment at admission or readmission
- Reassess weekly for the first 4 weeks
- At least weekly during routine care (i.e. at bath)
- Then quarterly
- Or whenever the resident’s condition changes or deteriorates
How often are you doing pressure ulcer assessments in your setting?
<table>
<thead>
<tr>
<th>Sensory Perception</th>
<th>Moisture</th>
<th>Activity</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Nutrition</th>
<th>Friction &amp; Shear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Completely Immobile</td>
<td>1. Very Poor</td>
<td>1. Problem</td>
</tr>
<tr>
<td>4. No Limitations</td>
<td>4. Excellent</td>
<td></td>
</tr>
</tbody>
</table>
Braden Scale Scores

- Mild Risk = 15 - 18
- Moderate Risk = 13 - 14
- High Risk = 10 – 12
- Very High Risk = 9 or below

**If other major risk factors are present (e.g., age, fever, poor dietary intake of protein, diastolic pressure <60, and/or hemodynamic instability), advance to next level of risk.**
Risk Assessment
NOT Only A Number

Number **meaningless** unless risk factors identified

• **PrU** risk assessments should:
  – Identify each **specific** risk factors
  – POC should intervene for **each identified risk** factor
Prevention and Risk Factors

• Identify
• Remove
• Modify
• Stabilize risk factors
• To the BEST of your ability
• DOCUMENT, DOCUMENT, DOCUMENT
Risk Assessment

• Prevention and early intervention of at-risk patients is essential
• Thorough systems review
• Observation and palpation of patient’s skin is key!
Risk Assessment and POC

- Risk assessment
  - Address each in the resident’s **plan of care**
  - Risk assessment directs interventions
    - Offloading/positioning/heel elevation
    - Pressure redistribution and support surfaces (bed/wheelchair)
    - Nutrition & hydration
    - Dietary consult or re-consult
    - Consider resident food preferences, social & cultural differences
    - Medication review (topical & systemic)
    - Functional mobility (rehab services)
    - Interventions for incontinence
    - Specialist consults (vascular, endocrine, surgeon, psych, etc.)

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CMS: **Avoidable Pressure Ulcers**

- Resident developed a pressure ulcer and the facility **DID NOT DO** one or more of the following:
  - Evaluate the resident’s clinical condition and pressure ulcer **risk factors**
  - Define and implement interventions that are consistent with resident needs, goals, and recognized standards of practice
  - Monitor and evaluate the impact of the interventions
  - Revise the interventions if appropriate
CMS: Unavoidable Pressure Ulcers

- Resident developed a pressure ulcer even though the facility:
  - Evaluated the resident’s clinical condition and *risk factors*
  - Defined and implemented interventions that are consistent with resident needs, goals, and recognized standards of practice
  - Monitored and evaluated the impact of the interventions
  - Revised interventions as appropriate
CMS-F314
Mandated Daily Monitoring
Risk Assessment Summary
Don’t Crack the Egg

• Use a clinically validated tool
• Obtain training
• Use the full version of a risk assessment tool
• Carefully match the resident’s clinical presentation to the risk assessment tool’s descriptors
• Remember that PrU risk assessment & skin assessment are different tools with different goals
• Make independent assessments (do not copy other people’s work)
Review Questions

1. A skin assessment is all that is needed to assess your patient’s risk for pressure ulcer development.
   **True or False**

2. The Braden Scale includes the following parameters:
   - A. Mobility, skin health, age
   - B. Moisture, nutrition, hypotension
   - C. Mobility, moisture, activity
   - D. Activity, skin health, hypotension

3. An unavoidable pressure ulcer occurs when risk factors are evaluated, interventions implemented, the patient monitored and interventions evaluated.
   **True or False**
Questions?

For more information about this presentation or other educational activities, please contact info@amtwoundcare.com
References

- Slide 4 & 17
- Barbara Braden, 1989, “Clinical Utility of the Braden Scale for Predicting Pressure Sore Risk”.
- Slide 6
  Ayello EA, Braden B. Why is pressure ulcer risk assessment so important? Nursing 2001;31(11):74-80. Adapted for Advances in Skin & Wound Care with permission from Lippincott Williams Ff Wilkins.
- Slide 7
  (Bergstrom, 1997, Gosnell 1973, Moolten, 1972)
- Slide 11, 12 & 13
  (University of Iowa Pressure Ulcer Prevention and Treatment Algorithm)
References Continued

• Slide 18
  Guideline for Prevention and Management of Pressure Ulcers; WOCN Clinical Practice Guideline Series 2003
  Pressure Ulcers in the Long-Term Care Setting; Clinical Practice Guideline; AMDA 2008

• Slide 24