PRESSURE ULCERS AND SYSTEMS BREAKDOWN

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WHAT’S IN A NAME?

- 1777: Decubitus is the oldest term used
- 1942: studies and papers were starting to be published using Decubitus
- 1959: Ischemic Ulcers were noted
- 1975: Bedsores
- 1980's: Pressure Sores
- 1990's: Pressure Ulcers
- June 2016: Pressure Injuries

NEW DEFINITION

Pressure Injury: A pressure injury is localized damage to the skin and/or underlying soft tissue usually over a bony prominence or related to a medical or other device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue.

- NPUAP (National Pressure Ulcer Advisory Panel, 2016)
CURRENT CMS DEFINITION

Pressure Ulcer: 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.

- RAI Manual page M-4 adapted from those recommended by the National Pressure Ulcer Advisory Panel (NPUAP) 2007 Pressure Ulcer Stages

SO WHAT DO WE CALL IT???

CMS has always supported Best Practice so either Pressure Ulcer or the new Pressure Injury will be acceptable.

DEATH AND LAWSUITS

- Powell found a 129% higher death rate for pts admitted to LTC who developed a pressure ulcer than those who did not.
- Burd et. al reported a risk of death among geriatric patients who developed a pressure ulcer to be 4 times greater than the norm, & 6 times greater in those whose pressure ulcers did not heal.
- Estate of Cote: Arizona jury awarded $16.7 million in punitive damages and $2.5 million in Compensatory damage against a SNF

- Pressure Ulcers are Easy Pickings for Lawsuits: Provider April 2016 pg 35-37
**Statistics in Aged Care**

- Prevalence Rates: 4.1% to 32.2%: Number of individuals with a PU at a specific point in time
- Incidence & Facility Acquired Rates: 1.9% to 59%: Incidence is the number of new pressure ulcers that develop during a specific time period, such as a year.
- Significant variations in study methods and methodological rigor limit the value of these data points.

**Costs**

- Latest figures shows the average cost for treating a pressure ulcer is over 1 billion annually and additional $2.2 million in Medicare Hospital Days
- Cost for treatment $6,000 to $60,000 depending on size and stage
- Some sources indicate cost per ulcer can be up to $90,000


**At the Beginning...**

- F 314: Pressure Ulcers based on comprehensive assessment of a resident, the facility must ensure that:
  - Resident receives care, consistent with professional standards of practice, to prevent pressure ulcers and does not develop pressure ulcers unless the individual’s clinical condition demonstrates that they were unavoidable.
  - A resident with pressure ulcers receives necessary treatment and services consistent with professional standards of practice to promote healing, prevent infection, and prevent new ulcers from developing.
**WHAT HAPPENS**

• Systems breakdown:
  – The surveyor finds the pressure ulcer
  – We have no documentation in the chart or on the TAR
  – Dressings are not being changed or are soiled

**INTENT**

• Resident does not develop pressure ulcers unless clinically unavoidable and the facility provides care and services to
  – Promote prevention of pressure ulcer development
  – Promote the healing of pressure ulcers that are present (including prevention of infection to the extent possible)
  – Prevent development of additional pressure ulcers

**WHAT HAPPENS**

• Resident develops a pressure ulcer on our watch
• We do not adequately address risk factors
• Wound gets infected
• Care Plan states we are doing something and we aren’t such as heel protectors to be on and they are not
• Nurses are not doing weekly skin checks and are relying on the CNAs to let them know if there is a problem
• Physician not notified of the event
**Pressure Ulcer Definition**

A pressure ulcer is any lesion caused by unrelieved pressure that results in damage to the underlying tissue(s). Although friction and shear are not primary cause of pressure ulcers, friction and shear are important contributing factors to the development of pressure ulcers.

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**External Factors**

<table>
<thead>
<tr>
<th>Pressure</th>
<th>Friction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue layers slide against each other, disrupts or angulates blood vessels</td>
<td></td>
</tr>
</tbody>
</table>

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**Shear**

Tissue layers slide against each other, disrupts or angulates blood vessels.
Incontinence
Maceration
Denudation

**AVOIDABLE**

- Means the resident developed a PU and that the facility did not do one or more of the following
  - Evaluate the residents' clinical condition and PU risk factors
  - Define and implement interventions consistent with resident needs, goals, and standards of practice
  - Monitor and evaluate the impact of interventions or revise interventions as appropriate

**UNAVOIDABLE**

- The resident developed a pressure ulcer though the facility evaluated the resident's clinical condition and PU factors, defined and implemented interventions consistent with resident needs, goals, and recognized standards of practice, monitored and evaluated the impact of the interventions and revised the approaches as appropriate
CRITICAL STEPS IN PRESSURE ULCER PREVENTION AND HEALING

• Identifying the individual resident at risk for developing PU
• Identify and evaluating the risk factors and changes in the resident’s condition
• Identifying and evaluating factors that can be removed or modified
• Implementing individualized interventions to attempt to stabilize, reduce or remove underlying risk factors
• Monitoring the impact of the interventions and modifying the interventions as appropriate

VALIDATED RISK ASSESSMENT TOOLS

• Commonly used:
  – Braden
  – Norton

![Braden Scale](image)
**BRADEN SCALE**

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

- 23 points possible.
- Lower score = more risk.
- Risk predicting score of 18 or less.
- 18 for individuals with darker skin & those 75 & over.
- Direction for use in tool itself.

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**NORTON SCALE**

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>4=good</th>
<th>3=Fair</th>
<th>2=Poor</th>
<th>1=Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Condition</td>
<td>Alert</td>
<td>Apathetic</td>
<td>Confused</td>
<td>Stupor</td>
</tr>
<tr>
<td>Mental State</td>
<td>Ambulant</td>
<td>Slightly limited</td>
<td>Very limited</td>
<td>Immobile</td>
</tr>
<tr>
<td>Activity</td>
<td>Full</td>
<td>Walks with help</td>
<td>Chair bound</td>
<td>Bed rest</td>
</tr>
<tr>
<td>Mobility</td>
<td>Not</td>
<td>Occasional</td>
<td>Usually Urine</td>
<td>Double incontinence</td>
</tr>
</tbody>
</table>
WHAT HAPPENS?
• We complete the form but we don’t do anything with the information
• Lack of follow through

SYSTEMS/PROCEDURES
• Must ensure:
  – Assessments are timely and appropriate
  – Interventions are implemented, monitored and revised as appropriate
  – Changes in condition are recognized, evaluated, reported to the practitioner and addressed

QUALITY ASSESSMENT AND ASSURANCE COMMITTEE
• Evaluates existing strategies to reduce the development and progression of PU
• Monitor the incidence and prevalence of pressure ulcers
• Ensure that facility policies and procedures are consistent with current standards of practice
What Happens?

• If we are cited for PU we may also get cited for the QA process
• Seen especially if we are cited for F314 several years in a row
• System breakdown

Prevention

• First step is the identification of the resident at risk of developing pressure ulcers
  – Admission evaluation helps define the initial care approaches
  – Identify pre-existing signs (Deep Tissue Injury)
  – Harder to identify in darkly pigmented skin
  – Elders: have decreased subcutaneous tissue and lean muscle mass, decreased skin elasticity and impaired circulation or innervation

Comprehensive Assessment

• Minimum requirements:
  – Risk factors
  – Pressure points
  – Under nutrition and hydration deficits
  – Moistures and the impact of moisture on skin
**PREVENTION STRATEGIES**

- Repositioning at least q2h when in bed, q1h when up in chair
  - NOT BASED IN RESEARCH
- Resident choice and promoting good sleep
- F Tag 314 refers to: Resident choice, Advance Directive, and Individualized care plan which may include repositioning every 2 hours depending upon the condition and tolerance of the pressure
- State Tag: 19CSR 30-85.042 (70) Residents who are physically or mentally incapable or both of changing their own positions shall have their positions changed at least every two hours and shall be provided supportive devices to maintain good body alignment (due to be changed)

**RESEARCH BEHIND THE CHANGES**

- TURN Study: Turning for Ulcer ReductioN by Bergstrom et al - There was no difference in PrU incidence over 3 weeks of observations between those turned at 2, 3, or 4 hour intervals using high density foam mattresses
- Improvement in support surfaces
- Research on the benefits of sleep and the rejuvenation of the body during REM sleep
- Individualized care plan based on the individual’s body assessment

**REPOSITIONING FREQUENCY**

- Determined by:
  - Tissue tolerance
  - Level of activity and mobility
  - General medical condition
  - Overall treatment objectives
  - Skin condition
  - Comfort
  - Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline, pg 92
**RISK FACTORS**

- Impaired/decreased mobility and decreased functional ability
- Co‐morbid conditions such as end stage renal disease, thyroid disease or diabetes mellitus
- Drugs such as steroids that may affect wound healing
- Impaired diffuse or localized blood flow, for example generalized atherosclerosis or lower extremity arterial insufficiency
- Resident refusal of some aspects of care and treatment
- Cognitive impairment
- Exposure of skin to urinary and fecal incontinence
- Under nutrition, malnutrition and hydration deficits
- A healed ulcer

**AGE-RELATED CHANGES THAT CONTRIBUTE TO PRESSURE ULCER RISK**

- *Thinning of the dermal epidermal junction.* Leads to wrinkling, tearing, loss of elasticity, increased skin permeability, and alterations in barrier function of the skin.
- *An altered immune response and decreased dermal vascularity.* Causes a greater potential for infection.

**ASSESSMENT TOOLS**

- No specific tool is mandated other than the RAI instrument
- Recommended to use a standardized pressure ulcer risk assessment tool upon admission and then weekly for 4 weeks; then quarterly or with a significant change
**Prevention**

- Pressure Points and Tissue Tolerance
  
  Assessment helps define prevention strategies and includes:
  
  - Evaluation of the skin integrity and tissue tolerance
  
  - Under-nutrition and hydration deficits
  
  - Moisture and its impact

**Interventions**

- Resident Choice
- Advance Directive
- Repositioning
- Support Surfaces and Pressure Redistribution
- Monitoring: at least weekly recommended

**Confusion**

- Confused
- Lost
- Unclear
- Perplexed
- Disoriented
- Bewildered
CONFUSION

ASSESSMENT AND TREATMENT

F314 states: At the time of the assessment, clinicians (physicians, advance practice nurses, physician assistants, and certified wound care specialists, etc.) should document the clinical basis for any determination that an ulcer is not pressure related, especially if the injury/ulcer has characteristics consistent with a pressure ulcer, but is determined not to be one.

ASSESSMENT AND TREATMENT

• NPUAP Guidelines: Differentiating pressure ulcers from other wound etiologies is within the domain of registered nurses. As per the Scope and Standards of Nursing Practice detailed in the statement from ANA president, Rebecca M. Patton, MSN, RN, CNOR, RNs are expected to assess the patient’s skin, stage the wound and implement an individualized plan of care based on the patient needs. Due to licensed practical/vocational nurse state practice act restrictions, wounds that have the appearance of a pressure ulcer should be inspected and described by these nurses.
**Assessment and Treatment**

- Per the RAI Manual: The assessment includes
  - Reviewing the medical record, including skin care flow sheets or other skin tracking forms
  - Speak with direct care staff and the treatment nurse to confirm conclusions from the medical record review
  - Examine the resident and determine whether any skin ulcers are present
    - Page M-4 Steps in the Assessment

**So What Do We Do???

- RNs can assess per the NPUAP and we assess per our Nurse Practice Act
- LPNs can gather the data but should not be putting the staging unless they have had wound certification
- MD, NP, PA etc. gives the diagnosis for Section I on the MDS

**Assessment and Treatment of Pressure Ulcers**

- Assessing the ulcer
  - Differentiate the type of ulcer (pressure related versus not pressure related)
  - Determine the ulcer’s stage
  - Describe and monitor the ulcer’s characteristics
  - Monitor the progress toward healing and for potential complications
  - Determine if infection in present
  - Assess, treat and monitor pain, if present, and
  - Monitor dressing and treatments
DOCUMENTATION

• Initial Findings
• Daily monitoring: dressing present, possible complications, pain, etc.
• Weekly: Location and staging, size (perpendicular measurements of the greatest extent of length and width, depth) and presence, location and extent of any undermining or tunneling, Exudate, Pain, Wound bed, and wound edges and surrounding tissue
Stage 1

Blanchable vs Non-Blanchable

Stage 1

Image: Tissue blanching

Image: Lesion with blanching area

Image: Close-up of lesion with blanching area
Stage I Pressure Ulcers - walk away for 30 min

- Make it your policy
- Write it on your bath sheets

### DEEP TISSUE INJURY

Purple or maroon

- Localized area of discolored intact skin
- Stain or bruise that does not blanch due to damage of underlying soft tissue from pressure and/or shear

- The area may be preceded by tissue that is painful, firm, boggy, warm or cooler as compared to adjacent tissue.

### DEFINITION

**STAGE 2 PRESSURE ULCER**

Partial thickness loss of dermis presenting as a shallow open ulcer with a red-pink wound bed, without slough.

May also present as an intact or open/ruptured blister.
**Stage 2 Pressure Injury**

**Stage 2**

**Category/Stage 2 Pressure Ulcer**

- Partial thickness loss of dermis presenting as:
  - Shallow open ulcer
  - Red or pink wound bed
  - Without slough
• If a pressure ulcer fails to show some evidence toward healing within 14 days, the pressure ulcer (including potential complications) and the patient’s overall clinical condition should be re-evaluated.
• Stage 2 pressure ulcers are often related to friction and/or shearing force, and the care plan should incorporate efforts to limit these forces on the skin and tissues.
• Stage 2 pressure ulcers may be more likely to heal with treatment than higher stage pressure ulcers.

Category/Stage 3 Pressure Ulcer

• Full thickness tissue loss.
• Subcutaneous fat may be visible but bone, tendon or muscle are not exposed.
• Slough may be present but does not obscure the depth of tissue loss.
• May include undermining and tunneling.
Further description

- The depth of a Stage 4 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and these ulcers can be shallow. Stage 4 ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon or joint capsule making osteomyelitis possible. Exposed bone, tendon is visible or directly palpable.
C ATEGORY /S TAGE 4 P RESSURE U LCER

• Full thickness tissue loss with exposed bone, tendon or muscle.
• Slough or eschar may be present on some parts of the wound bed.
• Often includes undermining and tunneling.
• Depth varies by anatomical location (bridge of nose, ear, occiput, and malleous ulcers can be shallow).

STAGE 4

Extensive destruction tissue necrosis or damage to muscle, bone, or supporting structures with or without full thickness skin loss.

The ulcer has eroded deeply, causing damage to body tissue, bone, muscle, tendons and joints. The risk of infection is much higher at this stage.
STAGES OF PRESSURE ULCER

• Unstageable
  – Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and or eschar (tan, brown or black) in the ulcer bed.

UNSTAGEABLE

• Further description
  – Until enough slough and or eschar is removed to expose the base of the ulcer, the true depth, and therefore stage, cannot be determined. Stable (dry, adherent, intact without erythema, or fluctuance) eschar on the heels serves as “the body’s natural (biological) cover” and should not be removed.

UNSTAGEABLE NON-REMOVABLE DEVICE

• Ulcer covered with eschar under plaster cast
• Known but not stageable because of the non-removable device
**Unstageable Slough and/or Eschar**

- Known but not stageable related to coverage of wound bed by slough and/or eschar
- Full thickness tissue loss
- Base of ulcer covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed
Unstageable Suspected Deep Tissue Injury

Purple or maroon area of discolored intact skin due to damage of underlying soft tissue. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

• Localized area of discolored (darker than surrounding tissue) intact skin.
• Related to damage of underlying soft tissue from pressure and/or shear.
• Area of discoloration may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.
• Deep tissue injury may be difficult to detect in individuals with dark skin tones.
**Eschar vs Scab**

- Lengthy discussion on the differences between scabs and eschar is now on page M-5
  - Eschar: collection of dead tissue within the wound that is flush with the surface of the wound
  - Scab: dried blood cells and serum, sits on top of the skin, and forms over exposed wounds, such as wounds with granulating surfaces (like pressure ulcers, lacerations, evulsions)
- A PU that was staged as a 2 and now has a scab indicates it is a healing stage 2 and therefore, staging should NOT change
Wound care flags: sample checklist

Green Flag = Good signs

- No fever
- The wound edges
- No change in pain or less pain in wound and surrounding area
- No change in wound drainage or color
- No drainage from healthy wound
- No odor
- No redness
- No change in wound color or size of wound

What should I continue to do?

- Continue with your wound care plan
- Continue with your wound care
- If you have diabetes, continue to
- Continue to ask your healthcare provider how to manage your wounds

Red flag = Get help!

- Fever, chills, or fevers
- Change in wound that is not new
- Change in wound size or shape
- Your wound changes from its usual color to black
- Black spots around the wound or swelling
- No change in temperature, whether you are hotter or colder
- You notice that your dressing is leaking, spillage
- You notice that you are leaking, spillage
- You notice that you are leaking, spillage
- You notice that you are leaking, spillage
- You notice that you are leaking, spillage
- You notice that you are leaking, spillage
- You notice that you are leaking, spillage
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- You notice that you are leaking, spillage
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- You notice that you are leaking, spillage
- You notice that you are leaking, spillage

What should I do right away?

- Call your wound care provider
- If you are diabetic, call your doctor
- If you notice that you are leaking, spillage
- If you notice that you are leaking, spillage
- If you notice that you are leaking, spillage
- If you notice that you are leaking, spillage
- If you notice that you are leaking, spillage
- If you notice that you are leaking, spillage
- If you notice that you are leaking, spillage

Contact Information

- Wound care provider name and phone number
- Home address and phone number
- Primary care provider name and phone number

DOCUMENTATION

- Initial and ongoing risk assessments
- Weekly wound record to include assessment of wound bed and periwound skin
- Record of changes to treatment plan as wound changes (heals or regresses)
**DOCUMENTATION**

- Care Plan to address
  - Problem statement including resident specific risks and any actual wounds
  - Appropriate, realistic goals determined with interdisciplinary input
  - Interventions for prevention and/or treatment as appropriate
  - Interventions for management of the resident (nutrition, hydration, mobility, etc.)

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**SYSTEMS BREAKDOWN / SUPERMAN SYNDROME**

Christopher Reeve (Superman) struggled with pressure injuries after his horse-riding accident. He had the best care money could buy, but ultimately lost his life as a result of an infection from a decubitus ulcer. It’s not just about needing “more” (money, staff, time, etc.) It’s due diligence, prevention, proactive (before they are in the building) have things started - mattress, chair cushions, etc. The unavoidable has to have the documentation to support everything we did.

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**REFERENCES:**

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• http://www.globalwoundacademy.com