



### **Proudly Presented through a Partnership between:**

- Louisiana Department of Health
- Louisiana Nursing Home Association
- LSU Health Sciences Center-Shreveport



### **Learning Objectives**

- Understand the importance of determining wound etiology
- ▶ Differentiate between wound etiologies based on assessment
- ► Familiarization of new pressure injury terminology
- ► Define pressure injury/ulcer criteria
- ► Classify pressure injuries/ulcers appropriately



# Determining Wound Etiology: Critical First Step in Assessment

- ► Determines the treatment plan
- ► Affects MDS reporting
- ► Impacts resource utilization
- ► Guides clinical decision making





### **Wound Classifications**

- **Pressure**
- ► Arterial
- **▶** Venous
- **►**Surgical
- **▶**Diabetic
- **▶**Traumatic
- **▶** Atypical





# **Pressure (M0100-M0900)**

Localized damage from pressure and/or shear - usually over bony prominence



# Arterial (M1030)

Based on factors such as vascular assessment, medical history, wound location and onset



## **Venous (M1030)**

Skin failure related to venous hypertension, calf muscle pump insufficiency and/or venous obstruction - found in distal lower extremity.



# Surgical (M1040E)

Examples: post surgical incisions/flaps/grafts and/or areas of dehiscence (separation/disruption of original surgical site due to edema/infection/etc.)





# Diabetic/Neuropathic (M1040B)

Special classification based on location, neuropathy, and pathophysiology





### **Traumatic**

Includes skin tears, burns, traumatic injuries (MVA/GSW/etc)



# Atypical (M1040D)

Wounds related to diagnoses that are less prevalent in clinical setting: bullous pemphigoid, pyoderma gangrenosum, etc.



## **Pressure Injury/Ulcer Staging**

**Guide to Proper Staging of Pressure Injuries/Ulcers** 





### Pressure Injury/Ulcer - definition

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 occurs as a result of intense and/or prolonged pressure or pressure in combination with shear.

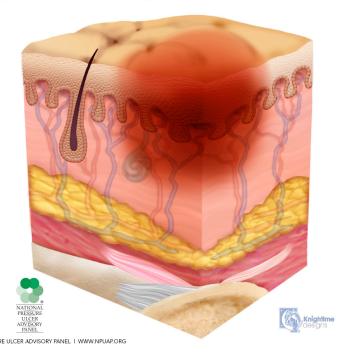
Pressure Injury is the new term adopted by NPUAP in April 2016. Synonymous with "Pressure Ulcer"



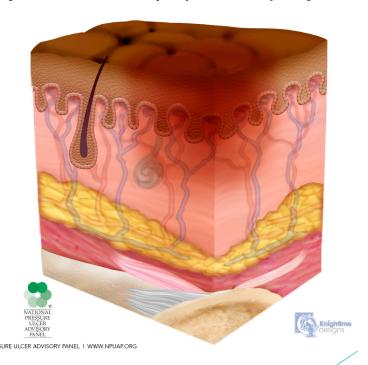
### Stage 1 Pressure Injury/Ulcer

Intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin

Stage 1 Pressure Injury - Lightly Pigmented



Stage 1 Pressure Injury – Darkly Pigmented







### Stage 1

Non-blanchable erythema (Redness that does not blanch with palpation) is the heralding sign of skin ulceration if pressure is not relieved

In individuals with darker skin, discoloration of the skin, warmth, edema, induration, or hardness may also be indicators.

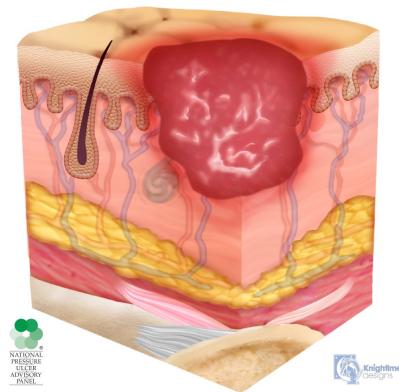




### Stage 2 Pressure Injury/Ulcer

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

Stage 2 Pressure Injury





# Serum filled blister with no periwound tissue Note: darker pigmented skin needs to be assessed closely

# Stage 2

Partial Thickness tissue loss

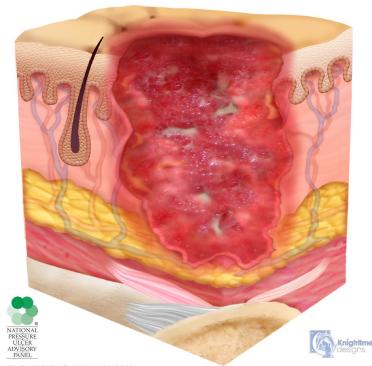




### Stage 3 Pressure Injury/Ulcer

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.

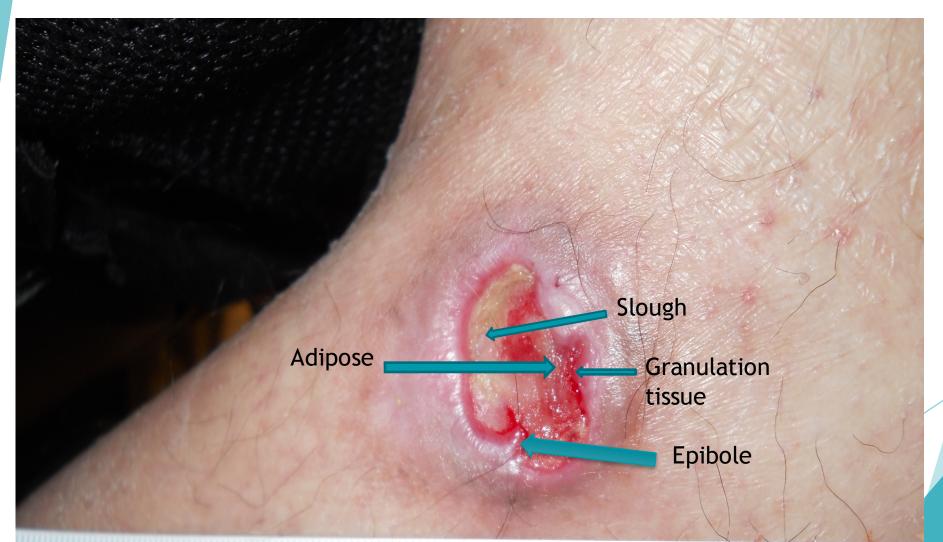
Stage 3 Pressure Injury





### Stage 3

# Full thickness loss with intact fascial layer

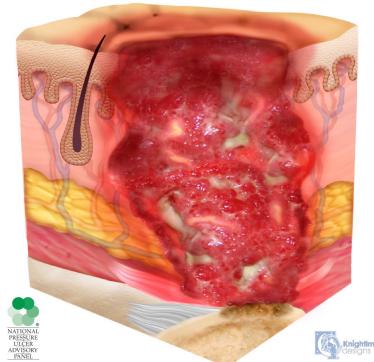




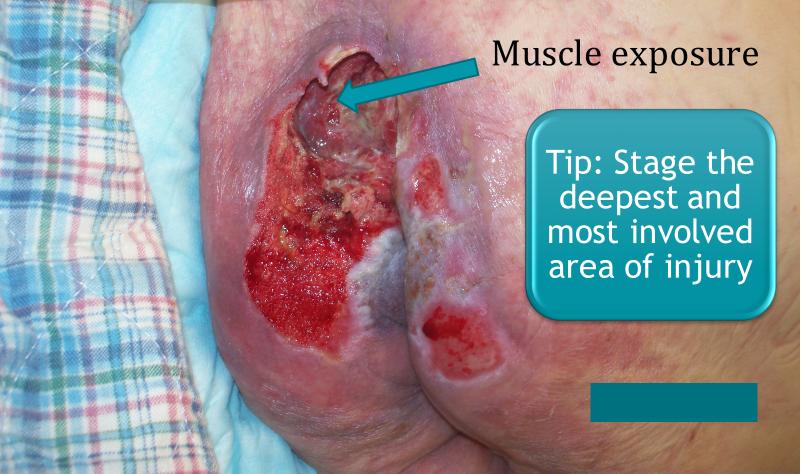
### Stage 4 Pressure Injury/Ulcer

Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer.

Stage 4 Pressure Injury







Stage 4

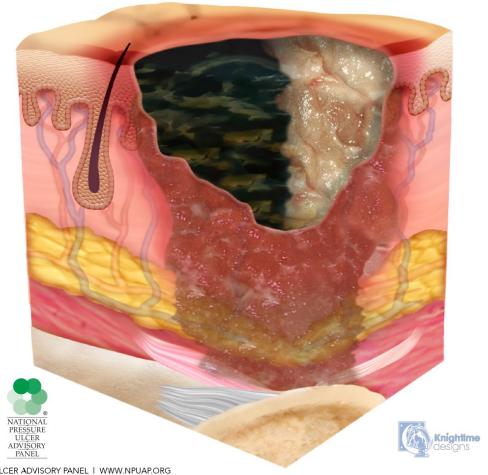
Exposure of fascia/muscle/tendon/bone



### Unstageable Pressure Injury/Ulcer

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.

### Unstageable Pressure Injury - Slough and Eschar

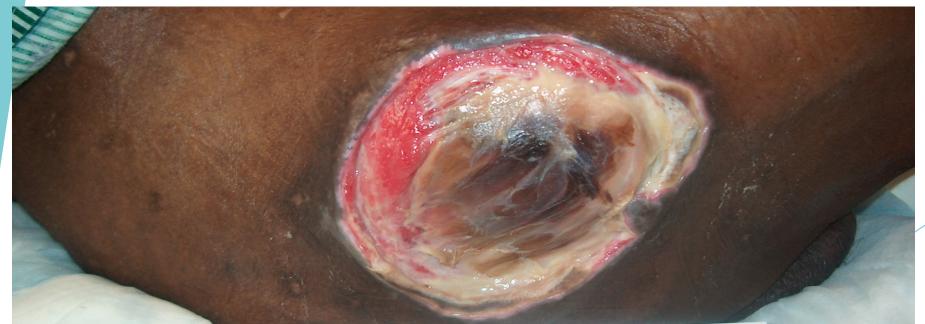




### Unstageable

Extent of damage cannot be determined due to necrotic tissue. If in doubt, start with unstageable classification





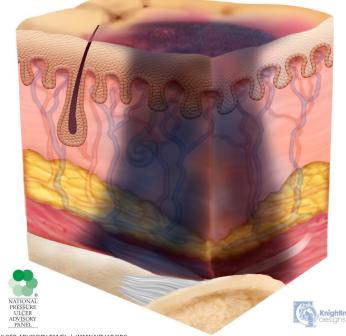


### **Deep Tissue Injury**

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\*.

\*MDS 3.0 does not recognize content of the blister as a factor in staging. Instead clinician should assess periwound tissue integrity.

Deep Tissue Pressure Injury





### **Deep Tissue Injury**

Bruising may be the first sign of deep injury. May take days or weeks to fully reveal the extent of the tissue necrosis. Education of resident/family/caregivers is critically important.





### **Staging Rules**

- ►Only stage pressure ulcers
- ►Don't reverse stage
- If a pressure ulcer re-opens in the same anatomical site, the ulcer remains the previous staging diagnosis
  - Once a stage IV, always a stage IV



### Medical Device Related injury



When evaluating the skin, remove all clothing and assess areas for signs of pressure from medical devices such as foley catheters/O<sub>2</sub> cannulas/rectal tubes



Moisture Associated Skin Damage

(MASD) - M1040H

Erythema and edema

Bullae with serous exudate

Moisture lesion, moisture ulcer, perineal dermatitis, diaper dermatitis, incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD)







### MASD vs. PrU Differentiation

### **Moisture Damage**

- ► Moisture must be present
- ► May be over bony prominence
- Wet appearance (shiny skin)
- ➤ Diffuse, multiple lesions
- ► Irregular edges
- ► Kissing ulcer
- ► Anal cleft/linear orientation
- ► Partial thickness skin loss
- ▶ No necrosis
- ➤ Non-uniform redness, pink/white macerated periwound

### **Pressure Injury/Ulcer**

- Pressure and/or shear must be present
- Most often over bony prominence; equipment related; skin folds
- ► Regular, raised edges
- Depth dependent on stage
- ▶ Necrotic tissue dependent on stage
- ► Erythema, slough, necrosis, granulation, epithelial, infection
- ► Isolated, individual lesions



### **Case questions**

1. A black necrotic wound located on the elbow of a chair bound resident would be described as a Stage 2 ulcer.

False

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2. A superficial wound located on the medial leg of a patient with lower extremity edema and history of DVT could be classified as a \_\_\_\_\_ ulcer.

Venous

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3. Diffuse wet lesions located in the anal cleft of an incontinent resident are most likely related to moisture associated skin damage.

True

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### FAQ's

Q: How does the new pressure injury staging language affect nursing home documentation?

A: The new criteria were released in April 2016 and have not been incorporated into the MDS tool as yet. For now, follow the MDS definitions for pressure ulcers found in Section M.

Q: How does MDS deal with blisters of the skin related to pressure?

A: Unlike the NPUAP, the MDS does not deal with the content of the blister but rather emphasizes assessment of the periwound tissue. For example, an intact blister of pressure origin would be classified as Stage 2 or Suspected Deep Tissue Injury (sDTI) based on the periwound assessment. One of more of the following periwound tissue changes may indicate sDTI: color change/tenderness/bogginess/firmness/warmth/coolness

Q: What is the best way to distinguish between a Stage 2 and Stage 3?

A: Evaluate the tissue that is present in the wound bed. If granulation tissue, necrotic tissue, undermining/tunneling or epibole are present - the wound should be classified as Stage 3.



### References

National Pressure Ulcer Advisory Panel - <a href="www.npuap.org">www.npuap.org</a> - multidisciplinary panel focused on improved patient outcomes in pressure ulcer prevention and treatment through public policy, education and research.

Wound Healing: Evidence Based Management, Fourth Edition. McCulloch/Kloth, eds. Philadelphia PA: FA Davis Company, 2010

Wound Care Essentials: Practice Principles, Fourth Edition. Baranowski/Ayello, eds. Philadelphia PA: Wolters Klower, 2015

MDS 3.0 - <a href="https://www.cms.gov/Medicare/Quality-">https://www.cms.gov/Medicare/Quality-</a> Initiatives-Patient-Assessment-Instruments/NursinghomeQualityInits/MDS30RAIManual.html

