Bureau of Community and Health Systems 2016 Joint Provider Surveyor Training

- **Faculty**
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The Braden and Beyond Pressure Ulcer Prevention

Why Prevention?

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- National priority
- Decrease incidence
- Survey Process
- Reimbursement may be affected in future
- Framework for identifying unavoidable PrUs
- Facility reputation
- Staff satisfaction – doing a good job
- **IMPROVED QUALITY OF LIFE**

State Operations Manual Appendix PP - Guidance to Surveyors for Long-Term Care Facilities

Minimum Data Set (MDS) 3.0

Framing Your Wound Prevention and Care Program

Resident Assessment Instrument (RAI)

NPUAP Prevention & Treatment of Pressure Ulcers: Clinical Practice Guidelines

Important Pressure Ulcer Resources

- **NPUAP/EPUAP Pressure Ulcer Prevention and Treatment: Clinical Practice Guideline**
- **2014**
- **NPUAP.org**

- **AMDA Clinical Practice Guidelines for Pressure Ulcers-2011**
- **ww.amda.com or 800.876.2632 to order**

CMS-Surveyors

6

- Often times the surveyor sees a facility acquired pressure ulcer as a **failure of your systems and care** for pressure ulcer prevention
- The **ONLY** way to show the surveyor differently is in the **quality of your documentation**

CMS SOM

State Operations Manual

- CMS State Operations Manual (SOM) - a guide for what you do in clinical practice
- SOM reflects current evidence based practice in most cases…evolving practice with updates as research gives us a better understanding re: PrUs
  - Taken from current wound care research and best practices
- **Prevention of PrUs gets lots of attention from CMS**
- Can find and download at: http://www.cms.gov/CFCsAndCoPs/Downloads/som107ap_pp_guidelines_ltcf.pdf

CMS SOM

CMS: Unavoidable Pressure Ulcers F314

8

- 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 SOM

CMS: Avoidable Pressure Ulcers F314

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- 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 SOM

Intent of F314

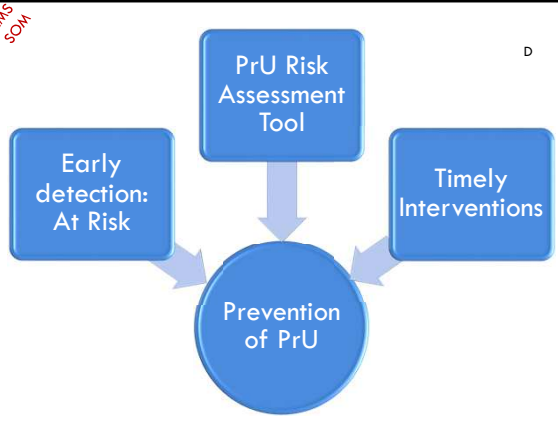
D

10

- Well organized and executed PrU prevention program reduces facility acquired PrU…**only unavoidable PrU occur**
- Caregivers competent - (need wound training)
- Limited exclusively to PrUs
- Other wounds (arterial, venous, diabetic, etc.) grouped under F309, regulation for Quality of Care
  - Critical for physicians/NP to accurately perform differential diagnosis of chronic wounds
- Recommend review of accepted definitions to prevent confusion between surveyors and clinical staff in terms of documentation

CMS SOM

D



MDS 3.0

P

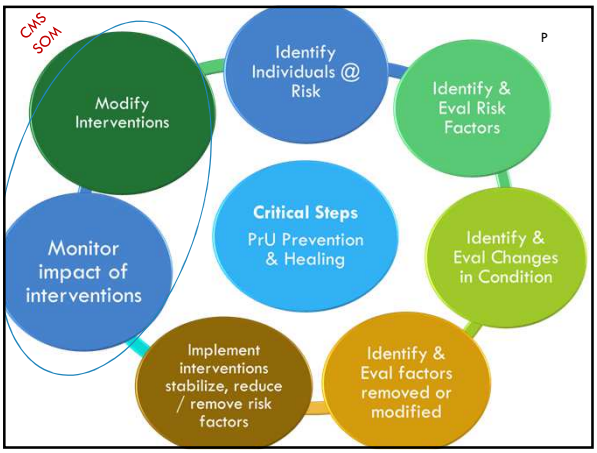
M0100. Determination of Pressure Ulcer Risk

12

- A well-organized pressure ulcer prevention plan **reduces** facility-acquired pressure ulcers and as a result **only unavoidable pressure ulcers** occur
- Pressure ulcer risk assessment tool most often used in LTC setting - **Braden Scale for Predicting Pressure Sore Risk©**

M0100. Determination of Pressure Ulcer Risk	
↓ Check all that apply	
☐	A. Resident has a stage 1 or greater, a scar over bony prominence, or a non-removable dressing/device
☐	B. Formal assessment instrument/tool (e.g., Braden, Norton, or other)
☐	C. Clinical assessment
☐	Z. None of the above

CMS SOM



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CMS SOM

Risk Assessment Key for Prevention

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- Identify and document risk factors
- Identify pre-existing signs (skin trauma, DTI)
- Assess and document pain
- Include Resident Assessment Instrument (RAI)
- Identify resident with:
  - multi-system organ failure
  - end-of-life condition
  - refusal of care and treatment

- Address **factors** that have been identified as having an impact on the **development, treatment and/or healing of pressure ulcers…(ex. steroids)**
- **Document ALL**

NPUAP

Skin Assessment

P

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- Part of PrU risk assessment screening policy
- **Educate professionals** - ***comprehensive*** skin assessment includes identifying:
  - blanching response
  - localized heat
  - edema
  - induration (hardness)
- **Inspect skin regularly** for signs of redness in persons at risk of pressure ulceration-CNAs
  - The frequency of inspection may need to be increased if any deterioration in overall condition

Do Blanch Test of EVERY Heel (Capillary Refill)

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CMS SOM

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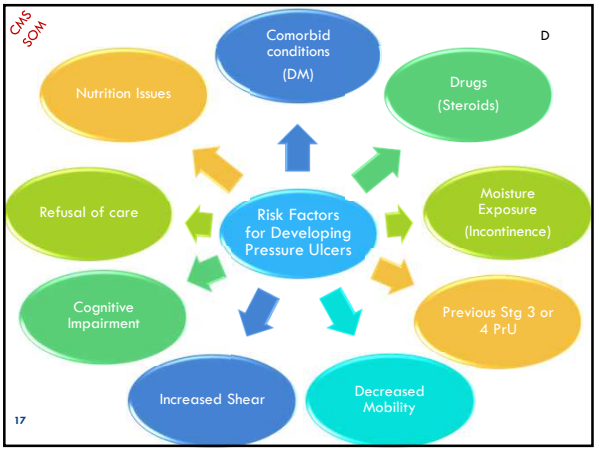

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18

Tips to:
1. Accurately Score
2. Assigning Risk Using the Braden

Braden Parameters

Sensory Perception	Moisture	Activity
1. Completely Limited 2. Very Limited 3. Slightly Limited 4. No Impairment	1. Constantly Moist 2. Very Moist 3. Occasionally Moist 4. Rarely Moist	1. Bedfast 2. Chairfast 3. Walks Occasionally 4. Walks Freq.
Mobility	**Nutrition**	**Friction & Shear**
1. Completely Immobile 2. Very Limited 3. Slightly Limited 4. No Limitations	1. Very Poor 2. Probably Inadequate 3. Adequate 4. Excellent	1. Problem 2. Potential Problem 3. No Apparent Problem

Mobility

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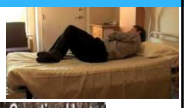
- **Accurately** assessing for mobility impairments & implementing a POC that addresses these impairments is probably the most important component of a PrU prevention program



- Bed mobility
  - Roll side to side
  - Hold side lying positi
  - Scooting up in bed
  - Lying to sitting
  - Sit to stand

Number 1 Reason for Acquiring Pressure Ulcers

Immobility

Everything else is a contributing factor

Braden Scale Scores

22

- 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**.

Low Blood Pressure

- **Systolic BP below 100 mmHg –** associated with PrU development
- **Hypotension may shunt blood flow away from the skin to more vital organs**
- Decreasing the skin tolerance for pressure by allowing capillaries to close at lower levels of interface pressure
- Water hose

BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK

Patient's Name _____ Evaluator's Name _____ Date of Assessment

SENSORY PERCEPTION ability to respond meaningfully to pressure-related discomfort	**1. Completely Limited** Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation OR limited ability to feel pain over most of body.	**2. Very Limited** Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness OR has a sensory impairment which limits the ability to feel pain or discomfort over ½ of body.	**3. Slightly Limited** Responds to verbal commands, but cannot always communicate discomfort or the need to be turned OR has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	**4. No Impairment** Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.	**Predispose to intense pressure**
MOISTURE degree to which skin is exposed to moisture	**1. Constantly Moist** Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.	**2. Very Moist** Skin is often, but not always moist. Linen must be changed at least once a shift.	**3. Occasionally Moist** Skin is occasionally moist, requiring an extra linen change approximately once a day.	**4. Rarely Moist** Skin is usually dry, linen only requires changing at routine intervals.	**Affect tissue tolerance**
ACTIVITY degree of physical activity	**1. Bedfast** Confined to bed.	**2. Chairfast** Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	**3. Walks Occasionally** Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.	**4. Walks Frequently** Walks outside room at least twice a day and inside room at least once every two hours during waking hours.	**Predispose to intense pressure**
MOBILITY ability to change and control body position	**1. Completely Immobile** Does not make even slight changes in body or extremity position without assistance.	**2. Very Limited** Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.	**3. Slightly Limited** Makes frequent though slight changes in body or extremity position independently.	**4. No Limitation** Makes major and frequent changes in position without assistance.	**Predispose to intense pressure**
NUTRITION usual food intake pattern	**1. Very Poor** Never eats a complete meal. Rarely eats more than ⅓ of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement OR is NPO, and/or maintained on clear liquids or IVs for more than 5 days.	**2. Probably Inadequate** Rarely eats a complete meal and generally eats only about ½ of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement OR receives less than optimum amount of liquid diet or tube feeding.	**3. Adequate** Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) per day. Occasionally will refuse a meal, but will usually take a supplement when offered OR is on a tube feeding or TPN regimen which probably meets most of nutritional needs.	**4. Excellent** Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.	**Affect tissue tolerance**
FRICTION & SHEAR	**1. Problem** Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures or agitation leads to almost constant friction.	**2. Potential Problem** Moves feebly or requires minimum assistance. During a move skin probably slides to some extent against sheets, chair, restraints or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.	**3. No Apparent Problem** Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair.		**Affect tissue tolerance**

Total Score

25

Protocols by Level of Risk

AT RISK (15-18)*	MANAGE MOISTURE
FREQUENT TURNING MAXIMAL REMOBILIZATION PROTECT HEELS MANAGE MOISTURE, NUTRITION AND FRICTION AND SHEAR PRESSURE-REDUCTION SUPPORT SURFACE IF BED- OR CHAIR-BOUND * If other major risk factors are present *(advanced age, fever, poor dietary intake of protein, diastolic pressure below 60, hemodynamic instability)* advance to next level of risk	USE COMMERCIAL MOISTURE BARRIER USE ABSORBANT PADS OR DIAPERS THAT WICK & HOLD MOISTURE ADDRESS CAUSE IF POSSIBLE OFFER BEDPAN/URINAL AND GLASS OF WATER IN CONJUNCTION WITH TURNING SCHEDULES
MODERATE RISK (13-14)*	MANAGE NUTRITION
TURNING SCHEDULE USE FOAM WEDGES FOR 30° LATERAL POSITIONING PRESSURE-REDUCTION SUPPORT SURFACE MAXIMAL REMOBILIZATION PROTECT HEELS MANAGE MOISTURE, NUTRITION AND FRICTION AND SHEAR * If other major risk factors present, advance to next level of risk	INCREASE PROTEIN INTAKE INCREASE CALORIE INTAKE TO SPARE PROTEINS. SUPPLEMENT WITH MULTI-VITAMIN (SHOULD HAVE VIT A, C & E) ACT QUICKLY TO ALLEVIATE DEFICITS CONSULT DIETITIAN
HIGH RISK (10-12)	MANAGE FRICTION & SHEAR
INCREASE FREQUENCY OF TURNING SUPPLEMENT WITH SMALL SHIFTS PRESSURE REDUCTION SUPPORT SURFACE USE FOAM WEDGES FOR 30° LATERAL POSITIONING MAXIMAL REMOBILIZATION PROTECT HEELS MANAGE MOISTURE, NUTRITION AND FRICTION AND SHEAR	ELEVATE HOB NO MORE THAN 30° USE TRAPEZE WHEN INDICATED USE LIFT SHEET TO MOVE PATIENT PROTECT ELBOWS & HEELS IF BEING EXPOSED TO FRICTION
VERY HIGH RISK (9 or below)	OTHER GENERAL CARE ISSUES
ALL OF THE ABOVE + USE PRESSURE RELIEVING SURFACE IF PATIENT HAS INTRACTABLE PAIN OR SEVERE PAIN EXACERBATED BY TURNING OR ADDITIONAL RISK FACTORS *low air loss beds do not substitute for turning schedules	NO MASSAGE OF REDDENED BONY PROMINENCES NO DONUT TYPE DEVICES MAINTAIN GOOD HYDRATION AVOID DRYING THE SKIN

Rehab Can Help

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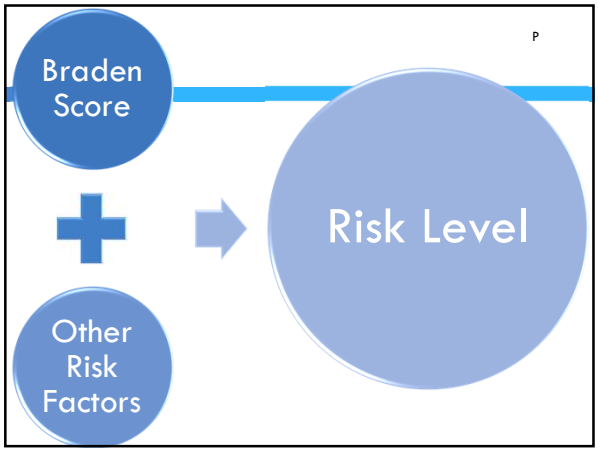
- Ensure your rehab team involved with residents who have mobility & activity issues
- OT & PT can assist in evaluating & treating residents with mobility issues by improving:
  - Strength
  - Body movement strategies in bed & chair
  - Sitting & standing balance
  - Teaching residents, staff, & family members how to use adaptive equipment (i.e., transfer/gait belts, walkers, canes)
  - Restorative program

- Therapists also provide assessments & make suggestions or create proper seating interventions when sitting mobility issues



Training in the Braden

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- Clinicians should review the methods for scoring correctly
- Surveyors may check medical records for use and accuracy of the risk assessment with corresponding subscales
- In-services on how to perform and use the risk assessment scale are **important components of the pressure ulcer prevention program** and should be required for all nurse managers and other individuals delegated the task of completing the risk assessment
- Quality assurance (QA) review recommended to ensure accurate determination of subscales of the risk assessment tool being used

Case Study

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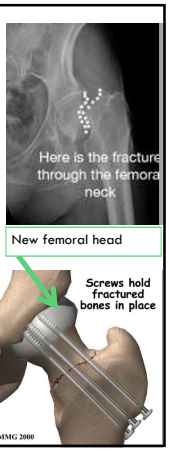
- Previously active independent 68 y/o female with L-partial hip replacement 5 days ago due to femoral neck fracture after fall in home
- Admitted to skilled services for nursing and rehab with goal of returning to daughter's home for continued recovery rehab with home health.
- Vitals: T=99.6, R=17, BP=92/58, P=100bpm
- Goal: return to highest level of functionality a an independent community ambulator and return to her personal home to live alone
- Let's do the Braden together



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Braden Parameters

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Sensory Perception	Moisture	Activity
1. Completely Limited	1. Constantly Moist	1. Bedfast
2. Very Limited	2. Very Moist	2. Chairfast
3. Slightly Limited	3. Occasionally Moist	(3) Walks Occasionally
(4) No Impairment	(4) Rarely Moist	4. Walks Freq.
Mobility	**Nutrition**	**Friction & Shear**
1. Completely Immobile	1. Very Poor	1. Problem
(2) Very Limited	2. Probably Inadequate	(2) Potential Problem
3. Slightly Limited	(3) Adequate	(3) No Apparent Problem???
4. No Limitations	4. Excellent	

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Braden Scale Scores

31

- 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**.

NPUAP

Nutrition for PrU Prevention

- Screen/ assess the nutritional status of **everyone at risk for pressure ulcers** in each health care setting.
  - Use a valid, reliable and practical tool
  - Have a **nutritional screening policy** in place along with **recommended frequency of screening** for implementation
- **Refer** each person with nutritional and pressure ulcer risk to a **registered dietitian**
- Refer to a multidisciplinary nutritional team
  - registered dietitian, a nurse specializing in nutrition, physician, speech/language therapist, occupational therapist, when necessary a dentist

CMS SOM

Nutrition
F314 Triggers F327 Nutrition Tag

- Adequate nutrition and hydration assessment and evaluation provided
- Food intake and Weight loss monitoring
- Nutritional goals for prevention and healing of PrU
- Protein - 1.2-1.5 gm/kg body weight daily
- Adequate energy needed to spare protein
- How do you implement your nutrition interventions?

Owner/Provider Perspective on Prevention

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Pressure Ulcer Assessment, Treatment, Monitoring and Documentation

Owner/Provider Perspective on Treatment

36

Top Five Deficiencies in 2015 in New MDS Targeted Survey Process Pilot

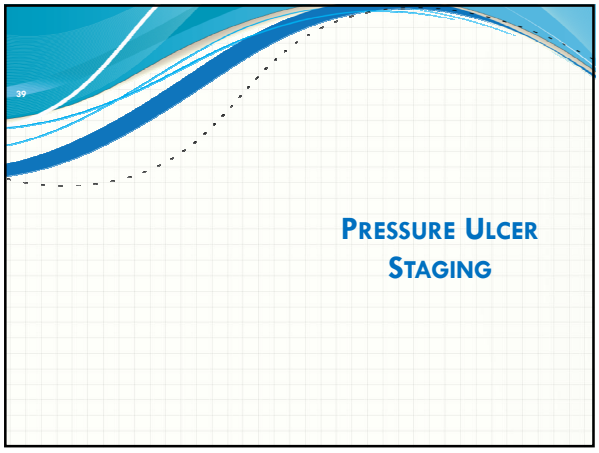
37

- Failure of facility staff to accurately reflect status of resident related to:
  - level of injury sustained during a fall as a major injury
  - **pressure ulcer stage**
  - restraint use other than side rails
  - diagnoses of neurogenic bladder and/or obstructive uropathy
  - late loss ADL status. Late loss ADLs include bed mobility, toileting, transfer, and eating

Survey Pressure Ulcer Staging Findings

38

- Presence, worsening & staging of ulcers evaluated
  - All three areas showed significant disagreement
- 18.3% staging was **not accurately** identified
- Statements from surveyors & consultants indicate **lack of accurate clinical assessment of ulcer** lead to error in staging in medical record
- Stage reporting follows RAI definitions; Section M, Page M-8 through M-20. October 2015 version
- Change from MDS 2.0 to 3.0 – **don't downgrade the stage** – Stage 4 is always a Stage 4 – it is a healing Stage 4



NPUAP Staging- Pressure Ulcers P

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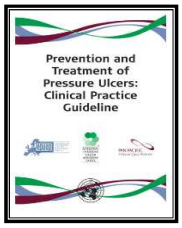
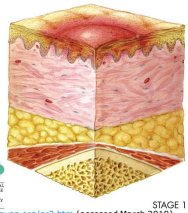
- Classification by Staging
  - Identify pressure ulcers by tissue layer involved
  - Anatomic description of wound depth
  - NPUAP – Revised Feb 2007
    - Suspected Deep Tissue Injury
    - Stage I
    - Stage II
    - Stage III
    - Stage IV
    - Unstageable
  - ***Should only be used on wounds caused by pressure!***
  - ***NPUAP.org***



NPUAP

Category/Stage I



STAGE I

http://npuap.org/pr2.htm (accessed March 2010)

- Intact skin with **non-blanchable** redness of a localized area usually over a bony prominence.
- Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area.

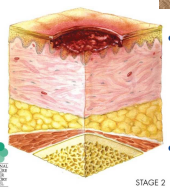
NPUAP

Category/Stage I

- This area may be painful, firm, soft, warmer, or cooler as compared to adjacent tissue.
- Category/Stage I may be difficult to detect in individuals with dark skin tones.
- May indicate "at risk" persons (a heralding sign of risk).

Category/Stage II



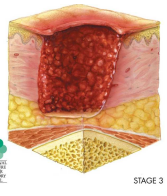



- Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, ***without slough***.
- May also present as an intact or open/ruptured *serum-filled blister*.

http://npuap.org/pr2.htm Accessed February 2016

Category/Stage II

- Presents as a shiny or dry shallow ulcer **without slough** or bruising.* This Category/ Stage should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.
- *Bruising indicates suspected deep tissue injury.



Category/Stage III


http://npuap.org/pr2.htm Accessed February 2016

- 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.

NPUAP

Category/Stage III

- Depth varies by anatomic location.
- The bridge of the nose, ear, occiput, and malleolus do not have subcutaneous tissue so Category/Stage III ulcers can be shallow.

- Areas of significant adiposity can have extremely deep Category/Stage III pressure ulcers.
- Bone/tendon is not visible or directly palpable.

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NPUAP

Category/Stage III PrU Anatomical Variations

Shallow appearance at ear

Deep appearance at hip

Both are Stage III

NPUAP

Category/Stage IV

STAGE 4

- Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed.
- Often include undermining and tunneling.

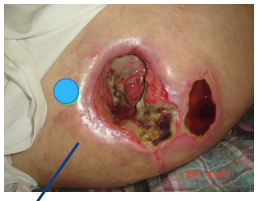
http://npuap.org/pr2.htm Accessed February 2016

Category/Stage IV

- Depth varies by anatomical location. The bridge of the nose, ear, occiput, and malleolus do not have subcutaneous tissue and these ulcers can be shallow.
- Category/Stage IV 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**.
- New from NPUAP 9/12
  - Cartilage position statement

Category/Stage IV PrU Anatomical Variations

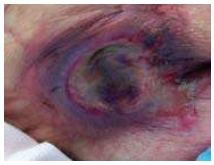
Shallow appearance at ankle (note nonviable tendon)



Deep appearance at hip

Both Stage IV

Unstageable : Depth Unknown



UNSTAGEABLE

http://npuap.org/pr2.htm Accessed February 2016

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 wound bed.

NPUAP

Unstageable

Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and therefore Category/Stage, cannot be determined.

MDS 3.0

Unstageable Pressure Ulcers

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- Three types to differentiate
- sent upon

E. Unstageable - Non-removable dressing:

E. Unstageable - Non-removable dressing: Known but not stageable due to non-removable dressing/device

1. Number of unstageable pressure ulcers due to non-removable dressing/device - If 0 → Skip to M0300F, Unstageable: Slough and/or eschar
2. Number of th… were noted at the time of admis…

F. Unstageable - Slough and/or eschar:

F. Unstageable - Slough and/or eschar: Known but not stageable due to coverage of wound bed by slough and/or eschar

1. Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar - If 0 → Skip to M0300G, Unstageable: Deep tissue
2. Number of these uns… how many were noted at the time of admission

G. Unstageable - Deep tissue:

G. Unstageable - Deep tissue: Suspected deep tissue injury in evolution

1. Number of unstageable pressure ulcers with suspected deep tissue injury in evolution - If 0 → Skip to M0610, Dimension of Unhealed Stage 3 or 4 Pressure Ulcers or Eschar
2. Number of those unstageable pressure ulcers that were present upon admission/reentry - enter how many were noted at the time of admission

NPUAP

Unstageable Heels

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.

MDS 3.0

M0300E Unstageable Non-Removable Dressing

- **Known** but not stageable because of the non-removable dressing


55

MDS 3.0

M0300F Unstageable Slough and/ or Eschar

56

- **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

MDS 3.0

MO300G Unstageable Suspected Deep Tissue Injury (sDTI)

Purple/Maroon
discolored
intact skin

M0300B
Coding of Intact Serum Filled Blisters

58

- Examine area adjacent to or surrounding an intact blister for evidence of tissue damage.
- If other conditions are ruled out and the tissue adjacent to, or surrounding the blister demonstrates signs of tissue damage, (e.g., color change, tenderness, bogginess or firmness, warmth or coolness) these characteristics suggest a suspected deep tissue injury (sDTI) rather than a Stage 2 Pressure Ulcer.
- Stage 2 pressure ulcers will generally lack the surrounding characteristics found with a deep tissue injury.

NPUAP

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- DTI may present as a pale, waxy white area in light-skinned people
- Or a lighter patch of skin surrounded by abnormally darker areas in dark-skinned people that shows no change in color when the capillary refill is tested
- (From Farid K. Applying observations from forensic science to understanding the development of pressure ulcers. Ostomy Wound Management 2007;53(4):26-44.)

IAD / MASD

60

Skin **C**hanges at **L**ife's **E**nd
(SCALE)
AKA
Kennedy Terminal Ulcer
AKA
Unavoidable Pressure Ulcer

End-Stage Organ Decompensation & Failure

- Large and unusual presentations of skin failure
- Body shunts blood to vital organs
- Widespread and deep tissue destruction over stressed areas can appear in a matter of hours or less
  - Sacrum
  - Heels
  - Posterior calf muscles
  - Arms
  - Elbows

Kennedy Terminal Ulcer

- An UN-avoidable ulcer
- Residents with these ulcers at end stage of life
- Usually appears about 2 to 6 weeks before death
  - Rapid onset
  - Large ulcers in a butterfly or pear shape
  - Progresses to full-thickness
  - Often a precursor to multi-organ failure
  - Exact cause unknown

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PUSH Tool
Pressure Ulcer Scale for Healing

PUSH Tool

Comprised of 3 variables:

1. Surface area (L x W)
2. Exudate amount
3. Tissue appearance

Add the three values together to get a PUSH Score. The score should then be plotted on the PUSH graph. Trends for healing or deterioration can be noted over time, and this visually supports your written documentation.

- Score of 0 indicates PrU has resolved; highest score of 17 indicates wound degeneration
- Score is plotted on a PrU healing record and graph

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How to Calculate the PUSH Score

Length: Head to toe; Width: Side to side; Multiply: L x W (cm2)
(use centimeters)

Always use a centimeter ruler and use the same method each time the ulcer is measured.

PUSH Tool

LENGTH X WIDTH (in cm²)	0 0	1 < 0.3	2 0.3 – 0.6	3 0.7 – 1.0	4 1.1 – 2.0	5 2.1 – 3.0
		6 3.1 – 4.0	7 4.1 – 8.0	8 8.1 – 12.0	9 12.1 – 24.0	10 > 24.0
EXUDATE AMOUNT	0 None	1 Light	2 Moderate	3 Heavy		
TISSUE TYPE	0 Closed	1 Epithelial Tissue	2 Granulation Tissue	3 Slough	4 Necrotic Tissue	

Exudate Amount: Estimate the amount of exudate (drainage) present after removal of the dressing and **before** applying any topical agent to the ulcer. Estimate the exudate (drainage) as: none, light, moderate, or heavy.

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How to Calculate the PUSH Score

Tissue Type: This refers to the types of tissue that are present in the wound (ulcer) bed. Score as a "4" if there is *any* necrotic tissue present. Score as a "3" if there is *any* amount of slough present and necrotic tissue is absent. Score as a "2" if the wound is clean and contains granulation tissue. A superficial wound that is reepithelializing is scored as a "1". When the wound is closed, score as a "0".

4 – Necrotic Tissue (Eschar): black, brown, or tan tissue that adheres firmly to the wound bed or ulcer
edges and may be either firmer or softer than surrounding skin.
3 – Slough: yellow or white tissue that adheres to the ulcer bed in strings or thick clumps, or is mucinous.
2 – Granulation Tissue: pink or beefy red tissue with a shiny, moist, granular appearance.
1 – Epithelial Tissue: for superficial ulcers, new pink or shiny tissue (skin) that grows in from the edges or
as islands on the ulcer surface.
0 – Closed/Resurfaced: the wound is completely covered with epithelium (new skin).

Applying Your Knowledge

- For each case, read the info provided and determine the wound surface are (l x w), amount of exudate and predominant tissue type
- Take that information and calculate the PUSH score

Case 1

Dimensions: 4.0cm x 6.5cm

Exudate: – wound tissue is moist, no measurable drainage

Predominant tissue type: ?

PUSH Score: ?

Stage: ?

Case 2

Dimensions: 7.0cm x 2.5cm

Exudate: – wound tissue is moist, no measurable drainage

Predominant tissue type: ?

PUSH Score: ?

Stage: ?

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Summary

- Only stage pressure ulcers and use the NPUAP staging system
- Describe wound characteristics including tissue types at the wound base, edge/margin, and periwound area
- Use clinical judgment to quantify wound exudate
- Measure wounds properly using l x w x d in cm using the clock method for describing location
- Use validated tools like the PUSH Tool to monitor healing

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Pressure Ulcer Treatment Interventions

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F314 Interpretative Guidelines
483.25(c)

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Based upon the assessment and the resident's clinical condition, choices & identified needs, basic or routine care should include interventions to:

a) Redistribute pressure (such as repositioning, protecting heels, etc)

b) Minimize exposure to moisture & keep skin clean, especially of fecal contamination;

c) Provide appropriate pressure redistributing, support surfaces;

d) Provide non-irritating surfaces;

e) Maintain or improve (where feasible) nutrition and hydration status, monitor and evaluate interventions.

Nutrition and Pressure Ulcer Care

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- Caloric needs: 30-35 kcal/kg body weight
- Protein needs: 1.25-1.5 g/kg body weight
- Fluid needs: 1 ml/kcal or 1500 ml/day minimum
- Monitor and evaluate intake
- Monitor tolerance of supplements
- Modify interventions as needed
- Document!

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F314 & Repositioning

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- Repositioning:
  - Common, effective intervention
    - person with PrU
    - person at risk for developing PrU
  - Critical for immobile residents (or those dependent upon staff for repositioning)
- Resident care plan for those at risk of friction/shearing with repositioning **may require the use of lifting devices**
- Positioning the resident on an existing pressure ulcer should be avoided
  - Adds pressure to compromised tissue
  - May impede healing

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Pressure Relieving vs. Pressure Redistribution check on this

D

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Pressure Relieving	Pressure Redistribution
Defined as complete removal of all pressure	Reduces but does not relieve the pressure
Ex. Floating heels	Ex. Low air loss
High risk individuals	Give examples
Those with PrUs	
Ex. Clinitron, Dolphin	
Alternating pressure matresses	

PRESSURE REDISTRIBUTION

- Ability of support surface to distribute load over contact areas of body
- Pressure reducing interventions should be individualized to the residents impairments

HOW SUPPORT SURFACES WORK

- **Immersion and envelopment** reduce tissue stress
- Increasing the contact area between the support surface and individual's body
- Allowing for **pressure redistribution**

Reducing Relieving

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Group 1 Group 2 Group 3

CMS SUPPORT SURFACE GROUPS

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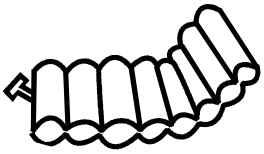
F314 & Support Surfaces; Pressure Redistribution

- Match a device's potential therapeutic benefit with the resident's specific situation
  - Multiple ulcers
  - Limited turning surfaces
  - Ability to maintain position
- Effectiveness is based on their potential to address
  - Individual resident's risk
  - Resident's response to the product
  - The characteristics and condition of the product
- Examples of these surfaces or devices include:
  - 4-inch convoluted foam pads
  - Gel pads
  - Air fluidized beds
  - Low loss air mattresses



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Foundation for Wound Closure and Subsequent Healing

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Wound Bed Preparation

Wound Bed Preparation

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- WBP model **dependent on effective and accurate patient and wound assessment**
- Important to **integrate** WBP components into an overall program of care that addresses all other aspects of the patient's treatment
- For example:
  - Pressure ulcers will not heal without:
    - Absence of dead (necrotic) tissue
    - Absence of infection
    - Adequate nutrition and hydration
    - Blood glucose control in residents with diabetes
    - Offloading of ulcers

Overall Goal of Wound Bed Preparation

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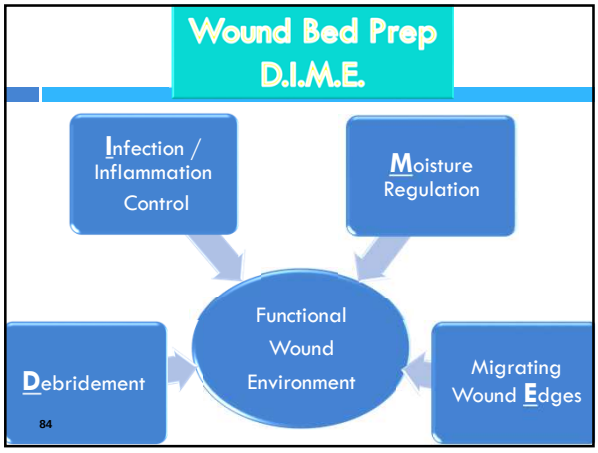
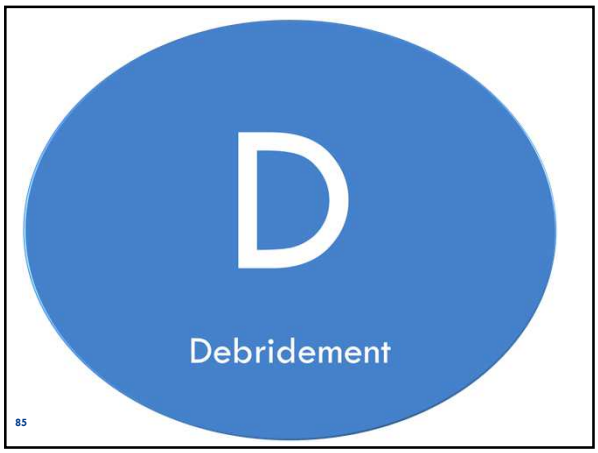
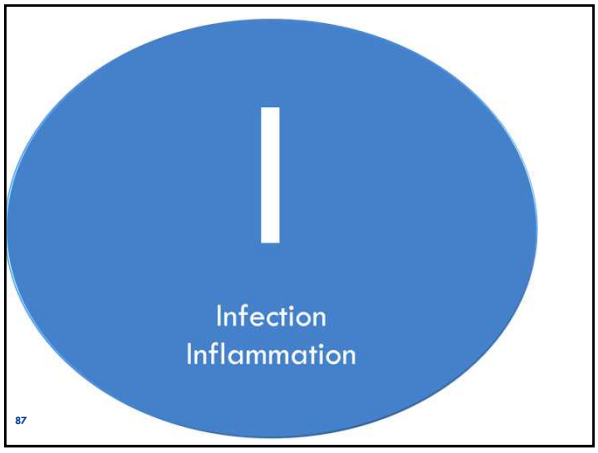
- Create an optimal wound healing environment by producing a well-vascularized, stable, moist wound bed





Debridement Options

Type	Description	Examples
Autolytic	Body's immune responses dissolves necrotic tissue; requires have intact immune system	Moist gauze, polymeric membranes, hydrogel dressings
Mechanical	Removal of necrotic tissue by mechanical means	Wet-to-dry, wound scrubbing, hydrotherapy, LFU
Surgical/Sharp	Removal by instruments/cutting equipment	Scalpel, scissors, curettes
Hydrosurgical	High-energy saline beam cutting instrument	Hydrosurgery system
Biosurgical	Sterile larvae selectively digest necrotic tissue and bacteria	Blowfly larvae
Enzymatic	Topical application of enzymes to liquefy necrotic tissue	Collagenase



Bacteria in Wound Bed and Chronic Inflammation

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- Bacteria in chronic wound often at greater levels than host's ability to control
- Interfere with host cells and the cascade of chemical reactions that should lead to wound closure
- Produce chemicals (eg MMPs) - destructive to tissue
- Stimulate host cells to produce more and more inflammatory mediators
- Stimulus for persistently high levels of MMPs being released from inflammatory cells that digest normal collagen scaffold in wound bed

What to Do?

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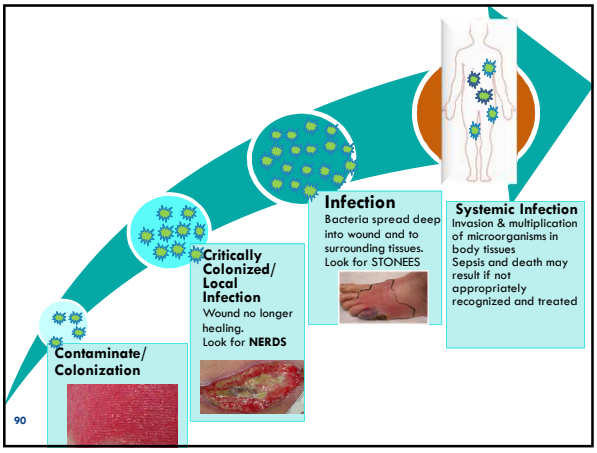
1. Stalled wound with excessive MMPs - treat persistent inflammation
2. Local wound infection-treat superficial wound infection
3. Systemic infection-treat deep wound infection
4. NERDS and STONEES acronym may be helpful



Antibiotic Use

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- General **overuse of antibiotics** has created super bugs which have mutated causing common antibiotics to become ineffective
- Growth of resistant strains (MRSA, VRE)
- Morbidity associated with overuse of antibiotics

Topical Antimicrobials

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- Include both antiseptics and antibiotics
  - Antibiotics should still be used with caution and possibly specificity
- In the absence of advancing cellulitis, bacteremia fever or pain, topical treatment may provide best first-line therapy

Dressings to Treat Locally Infected Wounds

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Bacterial Burden

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- Silver (all dressing categories come with silver option!

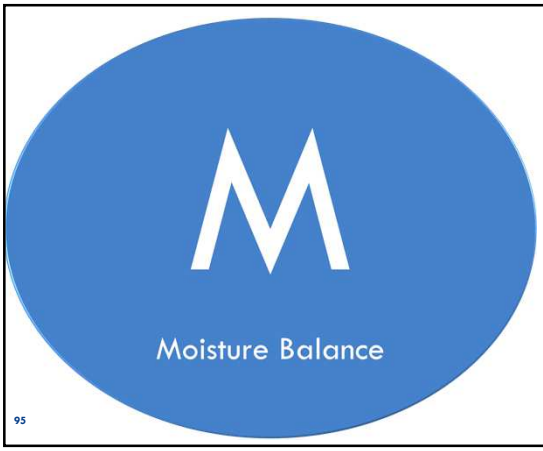
- Cadexomer Iodine

- Pigmented Foam

- PHMB (Polyhexamine Biguanide)

- Honey

- DACC



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Addressing Moisture Balance

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- Goal: Creation and maintenance of a warm, moist wound bed
- Outcome: Positive impact on wound healing
  - Delicate process of maintaining moist healing
  - Needed for optimal healing
- Moisture balance needed for:
  - Support of growth factors and cytokines
  - Growth and movement of proliferating cells (keratinocytes, fibroblast)

Dressings to Facilitate Moist Wound Healing

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Dressings Overall Properties

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- Occlusive
- Semiocclusive
- Absorptive
- Hydrating
- Insulate
- Address bacterial load

Primary Categories and Functions

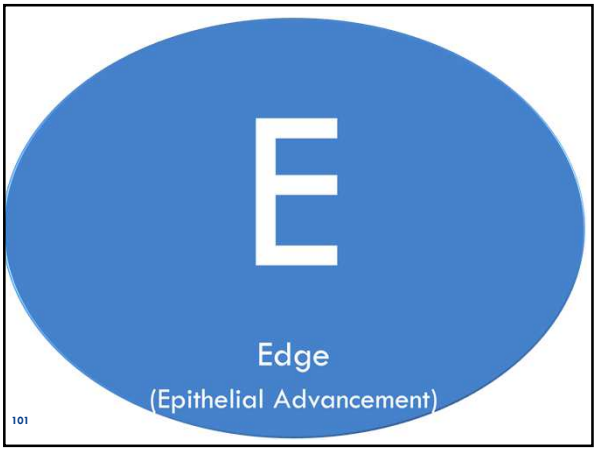
99	Films	Hydrogels	Alginates/ Hydrofibers	Foams	Hydrocolloids
Cover Protect	☒	Sheet ☒		☒	☒
Hydrate		☒			
Maintains Moisture/ Autolytic Support	☒	☒	☒	☒	☒
Adds moisture		☒			
Absorb			☒	☒	
Fill Space		Impregnated Gauze ☒	☒		

DRESSING CHANGE GUIDELINES THAT MEETS INFECTION CONTROL PRACTICES

Frequently Cited by Surveyor

- F441(Infection Control)
- F281(Standards of Practice)

See Dressing Change Checklist



Goals for Wound Edges

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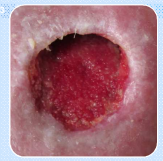
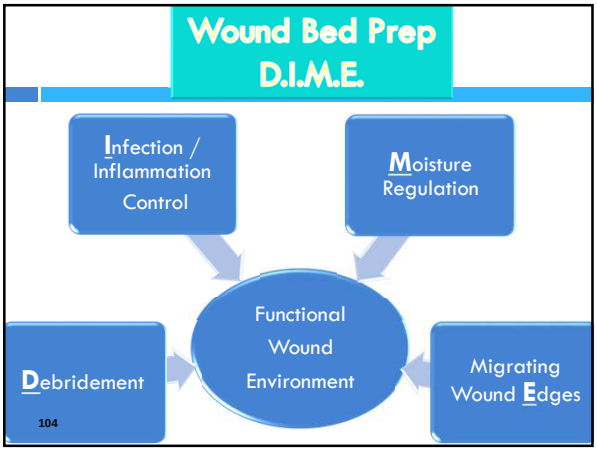
- Edge of wound facilitates keratinocyte migration for facilitation of re-epithelialization
- Attached to wound bed
- Not macerated
- No callus

Impaired Wound Edges

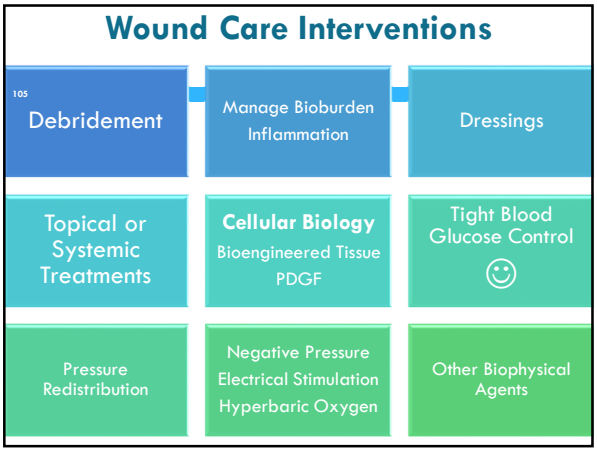


Epiboly | Callous | Maceration

Wound Bed Prep D.I.M.E.



Wound Care Interventions



F314- DRESSINGS & TREATMENTS

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- A facility should be able to show that its document treatment protocols are based upon **current standards of practice**
- Are in accord with the **facility's policies and procedures**
- And these policies and procedures are developed with the **medical director's** review and approval (F501)

Do treatments with these products meet the "**current standards of practice**"?

Documenting a Non-Healing Pressure Ulcer…Per CMS

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- If pressure ulcer not healing, **the reason for continuing the current treatment must be documented**.
- **Example-hospice/palliative care**
- **Wound healing not the goal**
  - **Odor control**
  - **Preventing infections**
  - **Pain control**

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When to Change the Treatment Interventions

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A Few Words About Gauze

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- Permeable to bacteria
  - 64 layers
  - Airborne release
  - Will NOT prevent bacterial contamination
  - 3x Higher infection rate
- Frequency of change
  - Fibers
- Pain

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NPUAP

CMS-F314:

"Some facilities may use "wet to dry gauze dressings" or irrigation with chemical solutions to remove slough. The use of wet-to-dry dressings or irrigations may be appropriate **in limited circumstances**, but repeated use may damage healthy granulation tissue in healing ulcers and may lead to excessive bleeding and increased resident pain."

NPUAP:

Avoid use of gauze dressings for clean, open pressure ulcers because they are labor-intensive to use, cause pain when removed if dry, and lead to desiccation of viable tissue if they dry.

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Other Interventions:

☐ NPWT; ☐ E-stim; ☐ Other modalities/interventions:_____


Negative Pressure Wound Therapy


Electrical Stimulation

Low-frequency Ultrasound

Pulsatile Lavage w/ Suction

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Documentation

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CMS Instructions to Surveyors: Ulcer Documentation Requirements

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- Differentiate the type of ulcer (pressure-related versus non-pressure-related) because interventions may vary depending on the specific type of ulcer;
- Determine the ulcer's stage;
- Describe and monitor the ulcer's characteristics;
- Monitor the progress toward healing and for potential complications;
- Determine if infection is present;
- Assess, treat and monitor pain, if present; and
- Monitor dressings and treatments

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Surveyor Documentation Expectations at Dressing Change or at Least Weekly

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- Location and staging
- Size L x W x D
- Presence, location, extent of undermining/tunneling/sinus tract
- Exudate, type (i.e. purulent/serous), color, odor, amount;
- Pain: nature/frequency (e.g., episodic or continuous)
- Wound bed: Color, type of tissue/character, evidence of healing (e.g., granulation tissue), or necrosis (slough or eschar)
- Describe wound edges
- Periwound-surrounding tissue (e.g., rolled edges, redness, hardness/induration, maceration)

Care Planning

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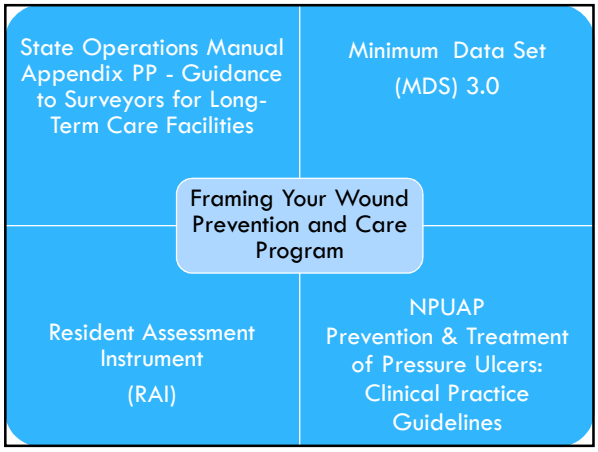
- Do what you document!!!
- Document what you do!!!



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Thank You!!!