2013 KAHCF Spring Education Conference

Session #12

Making "Cents" for a Wound Care Program

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Thank you for your cooperation.

1

Making "Cents" for a Wound and Ulcer Care Program

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2

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3

Overview and Objectives

- Discuss reimbursement challenges, and risks associated with chronic wounds
- Identify regulatory mandates and current wound prevention and treatment guidelines
- Identify components of a wound management program meeting the regulatory and current standards of care guidelines and contributes to business goals

Issues

Public Awareness and Perception

- Facility acquired ulcers
  - -Sign of poor care
- Concern over inappropriate therapies or treatments
  - -Not Standards of Care
- Use of specialty equipment
  - -Prevent ulcers development
- All Ulcers
  - -Begin in the nursing home
  - -Are preventable
  - -Caused by pressure only

Issues

Guilt, Fear, Anger

- Family members responsible for placement
- Fear of medical emergency or death of a loved one
- Ability to rationalize and lay blame at someone or something else

Defensiveness, Anger, Confrontation

- Threat
- Fear - subpoena for deposition
- Named as a defendant

Issues

Difficult Family

- Internet
- "Watch out for the family"
  - -Highly emotional
  - -Overprotective
  - -Overly involved
  - -Unrealistic expectations
  - -Insistence on aggressive care
  - -Coalition (take sides)
- Cultural, social groups, ages, economic positions
- Do not understand or misinterpret information

Issues

Legal Impact

- ≥17 million lawsuits related to PrUs/year
- 17,000 PrU lawsuits related to long term care
- Second most common claim after wrongful death
  - -Greater than falls or emotional distress
- Individual settlement range
  - -$50,000 - $5,000,000*
- 28 out of 30 plaintiff verdicts and settlements in PrU lawsuits
  - -The average compensation ~ $1,000,000**

*Pressure Ulcer facts, Briggs Corporation, (www.Guideone.com)
**http://www.medicalnewstoday.com, March 11, 2006

Skilled Nursing Facility

Reimbursement

Special Care Low

- 2+ skin care treatments and one of the following:
  - -Two or more Stage II PrUs
  - -One or more Stage III/IV PrUs
  - -Two or more venous/arterial ulcers
  - -One Stage II PrU and venous/arterial ulcers
- 1+ skin care treatments and one of the following
  - -Foot infections
  - -Diabetic foot ulcer
  - -Open lesion of foot

Clinically Complex

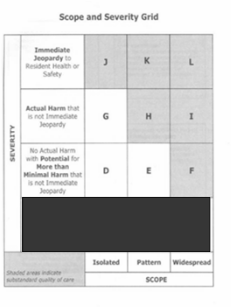
- Surgical wounds

≥1treatment

- Burns

Survey Impact

- **Level 2 - no actual harm with potential for more than minimal harm - not Immediate Jeopardy**
  - **-Development of an single avoidable Stage I PrU receiving appropriate care**
- **Level 3 - actual harm not Immediate Jeopardy**
  - **-Failure to implement the comprehensive resident care plan having a PrU resulting in increase in size or failure to progress**
- **Level 4 - Immediate Jeopardy to resident's health or safety**
  - **-Development of avoidable Stage IV PrU increasing potential for serious complications**
  - **-sDTI**



42 CFR 483.25 quality of care F309-354

Survey Impact

Civil Money Penalties

- **Survey says**
  - **-Multiple instances can be identified in the same survey as long as the $10,000 limit is not exceeded**
  - **-CMS strongly urges State Survey Agency to recommend the imposition of CMP for past noncompliance cited at the level of immediate jeopardy**
- **Total penalties may not exceed $10,000/day or $10,000/instance**
  - **-Per day CMP non-IJ $50 - $3000**
  - **-Per day CMP IJ $3050 - $10,000**
  - **-Per instance $1000 - $10,000**

Wound Care Program

Reality

- **Facilities will have wounds**
- **Even with the best precautions not all wounds are unavoidable**
- **Facilities will have to endure the survey process**

You will

- **Have better clinical outcomes**
- **Have more satisfied clinicians**
- **Build a positive reputation in the community**
- **Have defensible documentation**
- **Enhance your business opportunities**
- **Decrease risks across the board**

Wound Care Program

Barriers to Success

- **Facility staff**
  - -Education level of care provider
  - -Training program
- **Errors in documentation**
  - -Notes written after the fact
  - -Altered notes
  - -Breakdown in communication results in errors
- **BAD DOCUMENTATION MAKES GOOD CARE LOOK BAD AND BAD CARE LOOK EVEN WORSE**
- **Resident population**
  - -Adherence
  - -Advance Directives
  - -HIPAA
  - -Family
- **Acute and subacute programs**
  - -Outside entities (writing orders)
- **Prescribing clinicians**
  - -Uses other than current standards of care
  - -Not versed on LTC regulations regarding prevention and care of W/U

13

Wound Care Program

Electronic Health Records

- **May not accommodate the documentation needs of PrU residents**
- **"Rigidity" of the software program is problematic**
- **"Checklist" approach**
  - -Does not monitor continuum of care
  - -Limited "typed" text
- **Force specific documentation as specific intervals**
  - -Paper compliance rather than resident-centered care
  - -Select from limited standard "menu"
- **Use "Wound Electronic Medical Record"**
  - -Designed for ulcer documentation

14

15

Facility Responsibility

Transdisciplinary Team

- **Nursing Home Administration, Medical Director, DON/ADON**
  - -CNA, RD, Medical Staff, Nursing Staff, PT, OT, MDS Coordinator, Case Manager, Social Worker, Hospice
  - -Knowledgeable in current wound care practices and regulatory guidelines
  - -Assertive for resident's needs in face of less knowledgeable prescribers
- **Ensure that the resident is receiving objective, formulated coordinated care**
  - -Input from the resident and family members

16

Medical Director's Responsibility

Current Direction

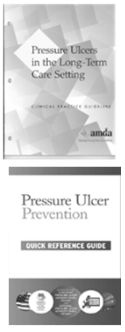
- **F-501**
- **Coordination of medical care in the facility**
- **Assess policy, procedures or guidelines**
  - -Best care practices
- **Survey process**
  - --Be aware of the elements of care involved in the survey
  - -Responsive, respectful exchange of the information with surveyors
  - -Provide explanation of clinical issues
- **Assist with Informal Dispute Resolution (IDR)**
  - -Evidence based on medical literature

17

Wound Care Program

AMDA/NPUAP

- **Evidence based clinical guidelines**
  - -Standards of care
  - -Recognition
  - -Assessment
  - -Treatment
  - -Prevention
  - -Monitoring
- **Supports a cooperative transdisciplinary approach to preventing and managing wounds**
- **Information assists practitioners balance treatment efficacy and cost**



18

Wound Care Program

Standards of Care

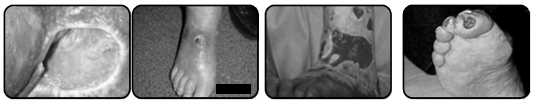
- Risk assessment
- Preventive measures
- Pressure redistribution
- Tissue offloading
- Debridement
- Treatment of signs and symptoms of infection
- Nutritional assessment and/or intervention
- Specialist consult

Standards of Care

- Documentation of treatment and its effectiveness
- Provide a moist thermal microenvironment
- Proper use of topical therapies or treatments
- Documentation of pain assessment
- Evidence of competencies and credentials

19

Staff Proficiency



Pressure Ulcer	Peripheral Arterial Disease	Venous Insufficiency	Diabetic Neuropathic Foot Ulcer

20

Assessment

Examples of surveyor observations during recent surveys that supported the issuance of this deficiency include:

Failure to complete a re-assessment of residents' risk for developing pressure ulcers which included the overall skin condition and skin integrity after pressure was relieved (tissue tolerance).

Skin assessment failed to identify a resident was at risk for development of a pressure ulcer.

Failure to comprehensively assess residents' clinical condition and pressure ulcer risk factor, and then not implementing procedures that are based on individualized assessments. Failure to complete comprehensive assessments of residents' risks for developing pressure ulcers…including: overall skin condition, history or pressure ulcers, nutritional/hydration status, medical diagnoses, medications, treatments, degree of mobility, positioning, incontinence status, potential for scaring over bony prominences, contracture status, and bed-fast or chair-bound status. (this is a compilation of a number of deficiency examples)

Failure to reposition per the care plan (care plan stated every 2 hours – observation was 2 hours 45 minutes). Many of these examples.

Failure to release from restraints and off-load for one minute.

21

Assessment

Risk Factors

- Age
- Mobility status (impaired bed or chair mobility)
- Wound history
- Pressure relief/reduction
- Diabetes
- PVD or neuropathy
- Nutritional status-feeding assistance
- Dehydration
- Recent weight change
- Pain
- Fracture
- Full body cast
- Paraplegia
- Quadriplegia
- Chronic bowel incontinence
- Chronic urinary incontinence or chronic voiding dysfunction
- Cognitive impairment
- Disease or drug related immunosuppression
- Chronic or end stage renal, liver and or heart disease
- Respiratory HX (COPD)
- Immune deficiency
- Malignancy
- Resident refusal

Assessment Tool

- Standardized assessment tools

-Braden, Norton or other - PrU (resident at-risk)

-Bates Wound Assessment Tool (BWAT - existing PrU)

-Pressure Ulcer Scale for Healing Tool (PUSH - existing PrU)

- Risk stratification in long term care
- Complement the clinical judgment in resident management
- Weigh the severity of risk into categories

DRIP

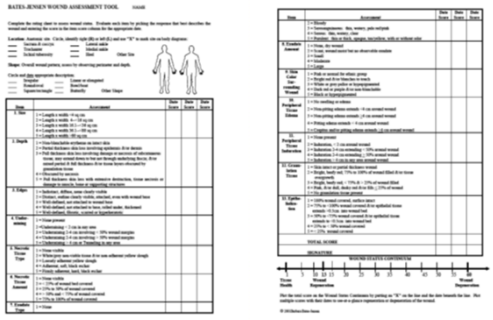
BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK

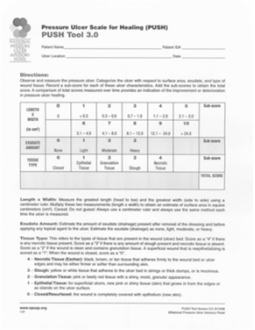
Patient's Name _____ Evaluator's Name _____ Date of Assessment

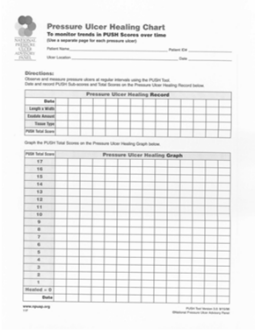
Intensity/Duration	**SENSORY PERCEPTION** ability to respond meaningfully to pressure-related discomfort	**1. Completely Limited** Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation OR limited ability to feel pain over most of body.	**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.
Tissue Tolerance	**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.
Intensity/Duration	**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.
Intensity/Duration	**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.
Tissue Tolerance	**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 if 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.
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.	

Total Score

- At risk: 15 to 18
- Moderate risk: 13 to 14
- High risk: 10 to 12
- Very high risk: 9 or below







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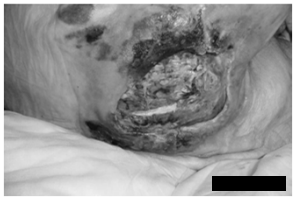


Wound Imaging

➧Powerful impact

-Legal forum

➧Visual confirmation

-Written record

➧Demonstration of an ulcer imported to the facility

-Mitigates liability concerns

➧Helps establish a pattern of change in the resident's record

➧Preserve details

-Can prove a fact beyond reasonable doubt

Avoidable/Unavoidable

- **If all of the following steps are in place and a resident develops a wound, it is safe to say that the resident's decline may be determined to be *unavoidable***
  - **-Resident *assessment* for clinical conditions was competed**
  - **-Assessment identify *risk factors* for the PrU development**
  - **-*Care plan* addressing the risk factors was implemented consistent with resident's needs/goals and recognized standards of care across all shift**
  - **-*Outcomes* were evaluated as to the impact of intervention**
  - **-*Revision of the care plan* required and instituted**
- **If the facility did not do one or more of the above, the ulcer was *avoidable***

CMS "Investigative Protocol Pressure Ulcer"

- **Document**

28

Critical Element Pathway

Comprehensive Assessment

- **Residents having no signs of progression toward healing within 2 to 4 weeks:**
  - **-Review documentation**
  - **-Ulcer characteristics**
  - **-Resident's condition**
  - **-Complications**
  - **-Time needed to determine the effectiveness of a treatment**
  - **-Facility's efforts to remove, modify or stabilize the risk factors and underlying causal factors**
- **Document**
  - **-Continuing current approach meets the resident's needs in the event the resident experiences recurring wounds or lack of progression toward healing**

29

Critical Element Pathway

Care Plan

- **Resident at-risk or who has a wound**
  - **-Individualized care plan that addresses underlying etiologies (pressure, neuropathy, venous or arterial insufficiency**
  - **-Include specific interventions, measurable objectives, appropriate time frames**
  - **-If the resident care plan refers to a treatment protocol that contains details of the treatment regimen, the care plan should reference that protocol**
  - **-Residents refusing or resisting staff interventions to reduce or treat existing PrUs should have alternatives to address the needs identified in the assessment**

30

Critical Element Pathway

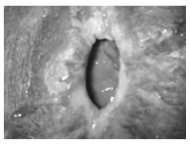
Care Plan Revision

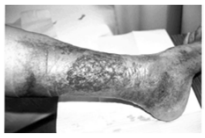
- **Based on the resident's responses, outcomes and needs**
- **Revise care plan**
  - **Modify prevention strategies**
  - **Address the presence and treatment of a newly developed ulcer**
- **Documentation**
  - **Continuing current approach meets the residents needs in the event the resident experiences recurring wound or lack of progression toward healing**

31

Wound Care Program

- **Pain**
- **Staging/classification**
- **Wound assessment**
- **Wound progress**
- **Infection**
- **Interventions**
  - **Nutrition and hydration**
  - **Cleansing**
  - **Debridement**
  - **Dressing type**
  - **Support surface**
  - **Wheel chair**





32

Pain

Sleep (increased or decreased)
Mood (change)
Appetite (malnutrition)

Mobility (gait or falls)
Behavior (change)
Relationships (socialization decreased)

Activities (socialization decreased)
Cognitive functions (confusion, depression, anxiety)
Quality of life (decreased)

33

Pain

Barriers to Effective Pain Management

- **Cultural challenges**
  - -Racial, ethnic, gender bias
- **Clinicians**
  - -Inexperience assessing pain
  - -Reluctance to prescribe certain medications (opiods)
  - -Lack of knowledge of how to treat pain and use of non-pharmacological methods
  - "Pain may be the only thing keeping the resident alive"
- **Resident**
  - -Language
  - -Wants and needs
- **Family**
  - -Different response
  - -Fear of addiction
  - -Death
- **Facility**
  - -Miscommunication among providers regarding their role in resident care
  - -Medicare Part D formulary
  - -Skill level in using assessment tool

34

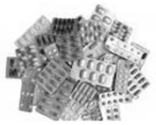
Pain

Pain Assessment

- **Recognize when a resident is experiencing pain**
- **Evaluate for pain and its causes**

WILDA

- **Words used by resident to describe pain**
- **Intensity of pain using valid assessment tool**
- **Location of pain**
- **Duration and frequency of pain**
- **Aggravating and alleviating factor**



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Pain

Cognitively Impaired (Observation)

- **Non verbalization of pain**
  - -Constant muttering
  - -Moaning or gbroaning
- **Breathing**
  - -Strenuous
  - -Labored
  - -Negative noise on inhalation or expiration
- **Pained facial expression**
  - -Clenched jaw
  - -Troubled or distorted face
  - -Crying
- **Body language**
  - -Clenched fist
  - -Wringing of the hands
  - -Strained and inflexible position
  - -Rocking
- **Movement**
  - -Restless
  - -Shifting of positions
  - -Altered gait
  - -Forceful touching
  - -Rubbing of body parts

36

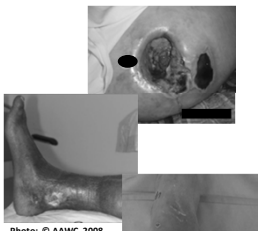
Pain

- Develop quantifiable objectives for the highest level of function the resident may be expected to attain, based on the comprehensive assessment
  - -Type, intensity, duration
  - -Pattern (constant or intermittent)
  - -Consequences of unrelieved pain
  - -Pharmaceuticals (non opiods, opiods)
  - -Dosing (based on pain intensity)
  - -Understanding addiction and tolerance
- Control measures
  - -Effective medication
  - -Therapeutic positioning
  - -Support surfaces
  - -Non pharmacological interventions (comfort touch/active listening/distraction/relaxation/ imagery/music)

37

Tissue Destruction

- Pressure Ulcers
  - -Proper Staging I – IV
  - -Depth of tissue destruction
- Venous insufficiency ulcer
  - -Clinical signs
  - -Etiology classification
  - -Anatomic distribution
  - -Pathophysiologic dysfunction
- Diabetic Foot Ulcer
  - -Wagner Classification
  - -Depth/ischemia
  - -University of Texas San Antonio
  - -Depth/ischemia/infection



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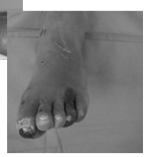

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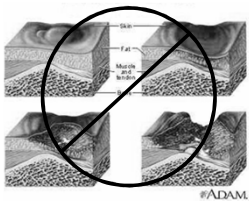
38

Reverse Staging

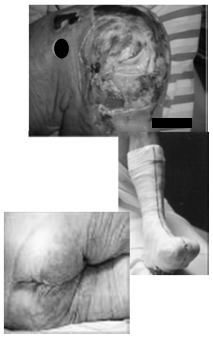
- Healing Process
  - -A dynamic continuum of tissue repair
  - -Repair process not clearly differentiated by layer type
  - -Poor method of assessing the healing process
  - -Staging systems are not designed to capture changes that occur during ulcer repair
- Wounds may not progress from one stage to another during the healing process (scar tissue)
- Healing wounds
  - -Assessed using objective parameters such as area, tissue characteristics



39

Unstageable

- Slough or Eschar tissue
- Device or dressing
- Suspected Deep Tissue Injury (sDTI)

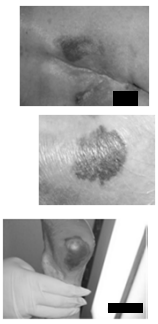


40

"Suspected" Deep Tissue Injury

sDTI

- Pressure-related injury to the subcutaneous tissues under intact skin
- Deep bruise
- Demarcation
  - -Red - ischemia
  - -Purple - infarction
  - -Black – necrotic
- sDTI is generally "unstageable"
  - "Deep tissue injury under intact skin"
  - "Deep tissue injury in evolution"

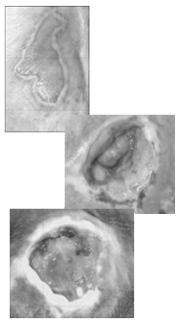


41

Assessment

Wound and Periwound Characteristics

- Location
- Area
- Odor
- Sinus Tract
- Tunneling
- Undermining
- Exudate
- Necrotic Tissue
- Granulation Tissue
- Epithelialization
- Ulcer Edge
- Edema
- Erythema
- Induration
- Maceration
- Desiccation
- Callous Formation
- Hair Distribution



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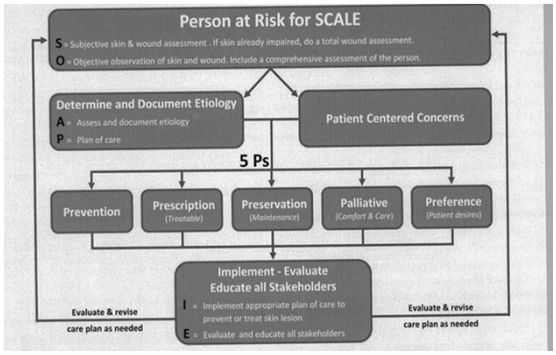
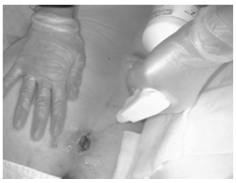


- SCALE: Skin Changes at life's End, Wounds 2009; 21 (12):329-336

Wound Bed Preparation

Cleansing

- Completed at each dressing change
- Non-cytotoxic/non-irritating wound cleanser
- Do not use skin cleansers or antiseptics
- Use appropriate irrigation pressure between 4 - 15 psi



Wound Bed Preparation

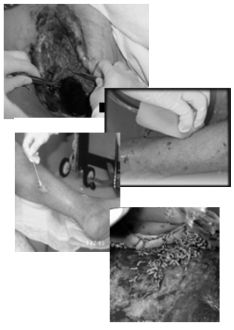
Debridement

- Removal of dead or devitalized tissue
- Predisposes to infection

-Surgical or sharp
-Mechanical (wet-to-dry)
-Enzymatic
-Autolytic
-Biodebridement (maggot therapy)

- Excessive debridement

-Can result in a reinstitution of the inflammatory process with an influx of inflammatory cytokines



Wound Bed Preparation

Ulcer Dressing

- **Analyze costs and alternatives**
  - **-Cheaper products are not always cost effective**
- **Evaluate usage, and outcomes by product category**
  - **-Expensive product - nursing time is decreased**
  - **-Cheaper product - results in more frequent nursing treatments**
- **Develop critical paths to decrease time and achieve positive outcomes quickly**
- **Develop a formulary and product use chart**
  - **-Clinical guidance - dressings are suitable for specific wound characteristics**
- **Staff education**

- **-Gauze**
- **-Transparent films**
- **-Hydrocolloid**
- **-Hydrogel**
- **-Alginates**
- **-Foam**
- **-Composite**
- **-Collagen**
- **-Debriding agents**
- **-Hydrofibers**
- **-Ionic silver**
- **-NPWT**
- **-Biologicals**

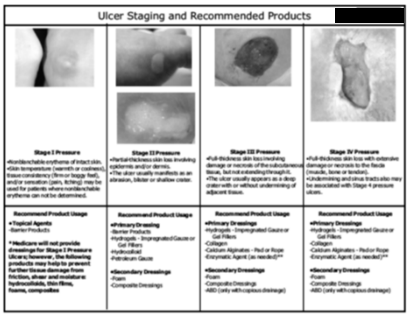
46

Wound Bed Preparation

- **Do not confuse the cost of a ulcer dressing with the cost of care**
- **Consider the labor cost of changing the dressing**
  - **-Daily vs. several times/day vs. several times/wk**
  - **-Ancillary supplies and services used in changing the dressing**
- **Cost of the duration of care due to ineffective product availability and use**
- **Moisture-retentive dressings**
  - **-Decrease the costs of care relative to gauze**
  - **- Decreased costs related to a lower incidence of infections and pain**
  - **-Impact on clinician labor consequence of improved healing**

47

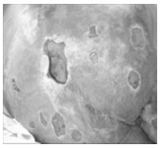
Wound Bed Preparation



48

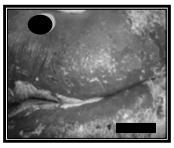
Wound Bed Preparation

Moisture-Associated Skin Damage (MASD)



- **Incontinence-associated dermatitis**
  - -Intertriginous dermatitis
  - -Periwound dermatitis
  - -Peristomal dermatitis

Treatment



- **Use non-alcohol based moisturizers**
- **Establish continence training**
- **Avoid skin contact with plastic surface to reduce sweating**
  - -Maceration, friction, shear

49

Wound Bed Preparation

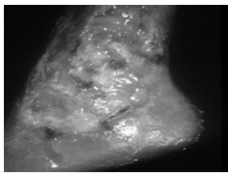
Maintain Skin Integrity

- **Daily skin inspections**
  - -Assess for compromised peripheral circulation
- **Promote skin hygiene**
  - -Cleanse skin with saline and skin cleanser
  - -Cleanse skin after soiling
  - -Avoid alkaline agents which increase skin irritation
  - -Maintain skin pH 4 - 6.8 to avoid bioburden build up/risk of infection
  - -Use skin protectants or barriers
  - -Do not massage or rub over bony prominences

50

Bioburden/Infection

- **Infection = Dose X Virulence / Host resistance**

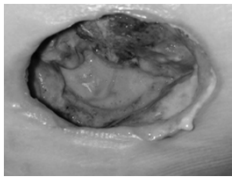


- **Host resistance**
  - -Important determinant of ulcer infection
- **Factors influencing host resistance**
  - -Age
  - -Vascular disease
  - -Diabetes mellitus
  - -Poor nutritional status
  - -Smoking
  - -Immunosuppression/use of steroid medications

51

Bioburden/Infection

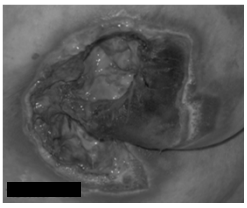
- **Contamination**
  - -Presence of bacteria at an ulcer site without multiplication
- **Colonization**
  - -Presence and multiplication of bacteria at an ulcer site without signs or symptoms of infection
- **Critical Colonization**
  - -Bacteria multiplies to cause a delay in ulcer healing
  - -Increased pain but not an acute host reaction
- **Infection**
  - -Deposition and multiplication of bacteria in the tissue causing a host reaction



52

Bioburden/Infection

- **Local Signs and Symptoms of Infection**
  - -Erythema
  - -Warmth
  - -Edema
  - -Induration
  - -Pain
  - -Purulent drainage
  - -Crepitation
  - -Foul odor
  - -Pocketing at the base of the wound
  - -Discolored/friable granulation tissue
  - -Ulcer breakdown
- **Each sign alone is not indicative of infection**



53

Antimicrobial Therapy

Common Antiseptic and Antimicrobial Agents

- **Povidone - Iodine Agents**
  - -Drying agent
  - -Fibroblast toxicity
- **Sodium Hypochlorite Solution**
  - -Dakin's - 0.025% -0.054%
  - -Collagen degradation
  - -Fibroblast toxicity
- **Acetic Acid**
  - -Fibroblast toxicity
- **Hydrogen Peroxide (H_2O_2)**
  - -3% solution
  - -Poor antimicrobial affect
- **Nitrofurazone**
  - -Slows epithelialization
  - -Propylene glycol - renal failure
- **Silver Sulfadiazine**
  - -Antimicrobial affect
  - -Transient leukopenia (neutropenia with white cell depression)
- **Petrolatum**
  - -Slows epithelialization

54

Hydration/Dehydration

Resident dehydration

- **Reduction in total body water**
  - -Hyperosmolar (water loss)
  - -Hyponatremia (water and sodium loss)
- **Cognitive or functional impairment**
  - -Unable to communicate effectively (dementia/aphasia)
  - -Coma/decreased sensorium
- **Infection**
  - -UTI
- **Fluid loss or increased fluid need**
  - -Vomiting
  - -Diarrhea
  - -Fever
- **Fluid restriction**
  - -Renal dialysis

55

Hydration/Dehydration

- **Assisting Abnormal Lab Values to Identify Dehydration**
  - -Increased Blood Urea-Nitrogen (BUN) level
  - -Abnormal glucose, calcium, potassium
  - -Abnormal serum bicarbonate
  - -Abnormal creatinine
  - -Elevated hemoglobin and hematocrit
  - -Increased urine specific gravity
  - -Elevated serum sodium
  - -Elevated albumin
- **Screening for Dehydration**
  - -Pale skin
  - -Sunken eyes
  - -Red swollen lips
  - -Swollen and /or dry tongue with scarlet or magenta hue
  - -Dry mucous membrane
  - -Poor skin turgor
  - -Cachexia
  - -Bilateral edema
  - -Muscle wasting
  - -Calf tenderness
  - -Reduced urinary output
  - -Dark urine

56

Hydration

Prevention and Management

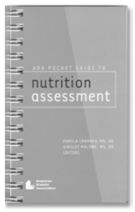
- **Early identification of fluid imbalance and acute illness**
- **Awareness of risk factors**
- **CNA's**
  - -What are barriers to getting water and ice
  - -What makes it hard to routinely fill water pitchers
  - -Use of sports bottles (ease-of-use)
- **"Sipper" takes a few sips at a time**
  - -May benefit from being offered frequent small amounts of fluid throughout the day
- **Dementia resident - able to drink but forgets**
  - -Use social cues
- **Fear of incontinence (risk factor)**

57

Nutrition

Weight

- **Balance between intake and utilization of energy (calorie/protein)**
- **Assessment**
  - **-Severity of nutritional compromise**
  - **-Probably causes**
  - **-Individual's prognosis**
  - **-Projected clinical course**
  - **-Resident's wishes and goals (offer relevant alternatives)**
- **Registered dietician (RD) assessment**
  - **-Diet/intake history**
  - **-Weight history**
  - **-Physical examination**
  - **-Estimation of nutrient requirements**
  - **-Nutritional diagnosis**
  - **-Nutritional plan**



58

Malnutrition

Severity of weight loss

- **Severe weight loss**
  - **>10% in 6 months**
  - **>7.5% in 3 months**
  - **>5% in one month**
  - **>2% in one week**

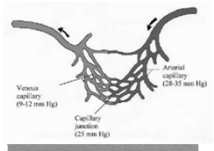
Walker G ed. Pocket Source for Nutritional Assessment, 6th ed. Waterloo IA

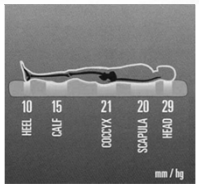
- **Marasmus**
- **Kwashiorkor**
- **Anorexia**
  - **-Physical - low body weight,**
  - **-Psychological - image distortion**
  - **-Emotional - depression**
  - **-Behavioral - obsessive fear of gaining weight**
- **Cachexia**
  - **-Loss of appetite in someone who is not actively trying to lose weight**
  - **-Insidious loss of weight, muscle atrophy, fatigue, weakness**

59

Support Surface

- **Pressure Redistribution**
  - **-Immersion and envelopment**
  - **-Shifting pressure from one area to another**
  - **-Requires attention to all affected areas**
- **Pressure Reduction (old)**
  - **-Decrease of pressure between the body and the support surface (interface pressure)**
  - **-Not necessarily below capillary closing pressure**
- **Pressure Relief (old)**
  - **-Reduction of interface pressure below capillary closure pressure**

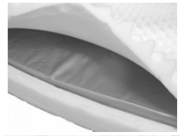


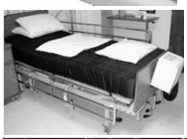


60

Support Surface

- **Group 1 (Non powered)**
  - -Resident at-risk for PrU development or delayed healing
  - -Residents with PrU who can assume a variety of positions without placing pressure on the ulcer or "bottoming out"
- **Air, gel, water, bfoams and combinations**
- **Group 2/Group 3 (Powered)**
  - -Reduce moisture retention/heat accumulation
  - -Moderate or high risk or resident with a PrU contributing to healing delay
  - -Resident unable to assume a variety of positions without bearing weight on the PrU
  - -Flexion contractures





61

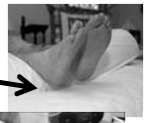
Support Surface

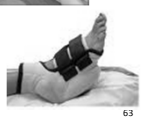
- **Residents restricted to bed**
  - -Use devices to enable independent positioning, lifting, and transfers (trapeze, transfer board, bed rails)
  - -Reduce shearing and friction forces
  - -Limit HOB - 30^0 elevation or lower is recommended
  - -Reposition at least every hour or sooner if at high risk for W/U development
  - -Use pillows or foam wedges to avoid contact between bony prominences
  - -Pressure redistribution on the heels and bony prominences of the feet
- **NO**
  - -Ring or donut type devices
  - -Synthetic sheepskins (natural sheepskins may assist in prevention of pressure ulcers)
  - -Heating devices directly on pressure ulcer(s)

62

Support Surface

- **Float heels/elbow**
  - -Heel suspensions
  - -Pillows extend the length of the calf
- **"Protectors"**
  - -Natural sheepskins are for comfort and reduce friction and shear
  - -Do not provide pressure redistribution
- **Constriction of the foot by tight or heavy linen**
- **Do not use ring (donut - type) cushions**





63

Positioning/Repositioning

- **Resident who can change position independently**
  - -Supportive devices to facilitate position change - monitor frequency of repositioning
  - -Avoid direct pressure over bony prominences, tissue previously damaged, sensitive areas
  - -Turning frequency based on characteristics of support surface and resident response
- **Resident is reclining or dependent on staff**
  - -Appropriate turning schedule based on assessment findings
  - -Tissue tolerance
  - -Risk assessment (level of activity and mobility)
  - -General medical condition
- **Maintain correct body alignment using pillows and foam wedges**
- **Lifting device for transfer or repositioning (reduce friction and shear)**

64

Positioning/Repositioning

Pressure Redistribution

- **Three Quarter Turn**
  - -Sacrum/scapulae
- **Quarter Turn**
  - -Tochanter, buttocks, elbows, heels
- **Back Position**
  - -Behind the knees and heels
- **Sitting Position**
  - -Knees, heels and elbows


3/4


1/4

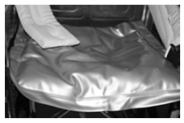

Back


Sitting

65

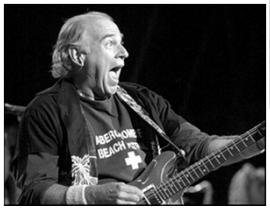
Seated Dependent

- **Pressure redistribution cushion**
- **Position to maintain full range of activities**
- **Modify sitting times schedule**
- **Re-evaluate seating surface and posture**
- **Limit resident time in chair**
- **Recommend position change**
  - -"Off-loading" hourly for dependent residents who are in sitting position or that have HOB ≤30^0
- **Document repositioning and evaluate regime for skin condition**



66

Fins to the left



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67

Thank You

Questions?

68

Clinical Resources

- **CMS "Investigative Protocol Pressure Ulcer"**
- **The Clinical Practice Guidelines from the Healthcare Research and Quality (AHRQ)-www.ahrg.gov**
- **The National Pressure Ulcer Advisory Panel (NPUAP)-www.npuap.org**
- **The American Medical Directors Association-www.amda.org**
- **The Quality Improvement Organization, Medicare Quality Improvement Community Initiatives-www.medgic.org**
- **The Wound Ostomy and Continence Nurse Society-www.wocn.org**
- **The American Geriatrics Society-www.healthinaging.org**

69

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73