Pressure Ulcer Prevention & Management

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Pressure Ulcer Prevention & Management

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Faculty Disclosures

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• No disclosures

Objectives

At the end of this Webinar the learner will be able to:
1. Identify the “at-risk” patient
2. Identify accurate pressure ulcer terminology
3. Describe the pressure ulcer stages
4. Document appropriate pressure ulcer findings
5. Provide appropriate orders for pressure ulcer prevention and management

Definition of Pressure Ulcer

A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear.

International NPUSPUPF Pressure Ulcer Definition
Epidemiology

- Pressure ulcers in vulnerable populations (elderly and those with limited mobility) are common
- Acute care – incidence ranges from 0.4% to 38% with 2.5 million treated annually at cost of $11 billion/year.


Pressure Ulcers

Used to be:
- "Nursing issue only"
- "Physicians "passive participants"

Currently:
- Multidisciplinary:
  - Dietitians
  - Physical therapists
  - Occupational therapists
  - Physicians
  - Physician Assistants/Nurse Practitioners
  - Patients
  - Family members

Wake: What clinicians need to know. The Permanente Journal 2010

Pressure Ulcers –What Changed?

- Cost
  - 1996 - $64 billion (1.2% of health care costs)
  - 2006 - $11 billion - hospital stays - PU as 1 or 2 dx,
  - $3500 - >$60,000/person (depending on stage)
  - CMS
  - Oct 2008 – withhold reimbursement for HAC

1. HCUP 2008 data
CMS: Present on Admission for Acute Care

- Pressure ulcers in acute care are "reasonably preventable"
- One of eight original conditions selected as a present on admission/hospital-acquired condition (POA/HAC)
- October 1, 2008 – CMS denied payment for HAPU
- Hospitals took notice

CMS Regulations

- Documentation requirements for care settings
- Influences
  - Reimbursement
  - Citations and fines
  - Public reporting

Present on Admission

- Stage III or IV pressure ulcers
- Location documented on admission by CMS—defined professional legally responsible for making a medical diagnosis – are eligible for reimbursement
  - Physician
  - MLP (nurse practitioner, clinical nurse specialist, physician assistant)
CMS: Unavoidable Pressure Ulcers

- CMS revised guidance for health care surveyors for LTC
- F Tag 314-pressure ulcers
- Identified pressure ulcers as most cited condition in health quality checks (1)
- Variances in survey findings between state and federal surveyors
- CMS Goal – to provide more detailed and consistent guidance to surveyors
- Added section on prevention and the definition of unavoidable pressure ulcer for long term care

“Unavoidable” for LTC

- Pressure ulcer develops despite evaluation of clinical condition and pressure ulcer risk factors
- There needs to be definition and implementation of interventions consistent with needs, goals, and recognized standards of practice
- Must be monitoring and evaluation of the impact of the interventions
- Must be revision of the approaches to prevention and treatment as appropriate

Pressure Ulcer Staging

- CMS requires Staging on their designated assessment forms in LTC and home care
CMS Mandated Assessment Instruments

- **Home Care – OASIS C (January 2010)** requires documentation POA
- **Long Term Care - Resident Assessment Instrument (RAI)** MDS 3.0 Section M – (October 2010) requires documentation if Stage II, III, or IV or unstageable were POA
- **Inpatient Rehabilitation Facilities and Long Term Care Facilities – IRF-PAI (June 2012)**

Responsibility and Accountability

- Physicians and Mid-level practitioners must accurately stage pressure ulcers
- Indicate if they are present on admission (POA)

Implementing Best Practices

- Best practice research
- Identifying best practices
- Education
  - Assessment
  - Plan/Orders
  - Documentation
  - Develop routine
Barriers to PU Best Practice

- “It’s not my job.”
- Competing priorities
- Limited education
- Lack of safety awareness
- Requires unique plan of care

Pressure Ulcer Risk Assessment

- On Admission
  - Complete skin assessment - POA conditions
  - Document
  - Responsibility of admitting physician or delegate
  - Identify “at risk” patients
  - Initiate prevention interventions

Braden Risk Assessment Scale
Assessing Pressure Ulcer Stage

- Management starts with assessment of comorbidities, risk factors, and staging
- Stage depends on ulcer depth
- No back-staging – original tissue does not regenerate
- Cannot stage if base of wound obscured by slough or eschar

Assessing Pressure Ulcer Stage

- History of pressure ulcer development
- Location on body
- Size
- Stage
- Only pressure ulcers are staged
- Arterial, venous, diabetic, and other ulcers have their own classification systems

Normal Tissue Layers

- Epidermis
- Dermis
- Adipose Tissue
- Fascia
- Bone
Stage I

• Intact skin with non-blanchable erythema
• May be discolored, painful, soft or firm, and warmer or cooler than adjacent skin

*Often confused with a deep tissue injury

Stage II

• Partial thickness
• No slough is present
• Shallow

• Often confused with moisture associated dermatitis

Photo courtesy of Dr. Foy White-Chu
Stage III

- Full thickness
- Can go down to the fascia, but not through the fascia
- Can be very shallow or deep depending on the anatomy (bridge of nose vs. buttocks)
- Necrotic tissue can be present
Stage IV

- Full thickness necrosis involving muscle, bone or tendon
- Can be associated with tunneling or undermining

Unstageable

- Full thickness skin or tissue loss of unknown depth
- The wound base is obscured by slough or eschar
Suspected Deep Tissue Injury (sDTI)

- Localized area of discolored intact skin (purple or maroon) or blood filled blister due to damage of underlying tissue from pressure or shear
- Often confused with a bruise
Pressure Ulcer Rates

- Incidence – proportion of at-risk persons who develop a pressure ulcer over a specific period of time
- Prevalence – the proportion of persons who have a pressure ulcer at a specific moment in time


Prevention and Treatment Interventions

- Skin Care
- Sleep and Sitting Surfaces
- Wound Care
- Nutrition
- Mobility
- Activity

Skin Care

1. Perform a head to toe skin assessment at least daily.
   - Check pressure points: sacrum, ischium, trochanters, heels, elbows, occiput
2. Individualize bathing frequency.
   - Use mild cleansing agent. Avoid hot water and excessive rubbing, use lotion after bathing.
   - Use absorbent under pads or briefs
   - For neonates and infants follow evidence-based institutional protocols
3. Establish a bowel and bladder program for incontinent patients.
   - Cleanse skin at time of soiling
   - Use absorptive pads or briefs
   - Consider pouching/collection device
4. Use moisturizers for dry skin.
   - Minimize environmental factors - low humidity and cold air
   - For neonates and infants follow evidence-based institutional protocols
5. Avoid massage over bony prominences
Support Surfaces

1. Place at-risk persons on pressure-reducing mattress and chair cushion surfaces.
2. Avoid using donut-type devices and artificial sheepskin for pressure redistribution.
3. Use pressure-reducing devices in the operating room for individuals assessed to be at high risk.
4. Use lifting devices (e.g., trapeze or bed linen) to move persons rather than drag them during transfers and position changes.
5. Use pillows or foam wedges to keep bony prominences, such as knees and ankles, from direct contact with each other. Pad skin subjected to device-related pressure and inspect regularly.
6. Use devices that eliminate pressure on the heels. For short-term use with cooperative patients, place pillows under the calf to raise the heels off the bed. Place heel suspension boots for long-term use.
7. Avoid positioning directly on the trochanter when using the side-lying position; use the 30° lateral inclined position.
8. Maintain the head of the bed at or below 30° or at the lowest degree of elevation consistent with the patient/residents medical condition.
9. Institute a rehabilitation program to maintain or improve mobility/activity status.

Differentiating Pressure Ulcers from other wounds: Common Confusion

- PU vs Diabetic Foot Ulcers
- PU vs Arterial Ulcers
- PU vs Moisture Associated Dermatitis
- PU vs Skin Tears

What is not a pressure ulcer?

- Moisture associated dermatitis
- Abscess
- Infection
- Nonhealing wound
- Ulcer
- Wound

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Tissue

- Impairment of keratinocyte migration
- Epibole
- Aggressive debridement
  - Necrotic tissue prolongs the inflammatory phase and delays wound healing
  - Necrotic tissue is a medium for bacterial growth
  - Facilitates visualization of wound base
  - Transforms the chronic wound by creating an “acute” wound

Inflammation/Infection

- Manage the bacterial load
- Treat at the site of infection
- Manage the inflammatory cytokines
Moisture Balance

- Excess
  - Tissue maceration
  - Edema of the tissue
- Dessication
  - Hyperkeratotic rim
  - Slowing of the healing process

Wound Edge

- Impairment of keratinocyte migration
- Epibole
- Aggressive debridement

Debridement Points

- Necrotic tissue prolongs the inflammatory phase and delays healing
- Necrotic tissue is a medium for bacterial growth
- Debridement facilitates visualization of wound base
- Debridement transforms the chronic wound into an acute wound
Tissue Definitions

- **Slough**
  - A mass of dead tissue or exudate in, or separating from, living tissue or an ulcer
  - Usually described as yellow or stringy, but can range in color from white to green

- **Eschar**
  - Can range in color from yellow to black
  - Thick, leathery covering of necrotic tissue that can be stable or unstable

Eschar

- **Stable eschar**
  - Thick, leathery and dry. No drainage, no odor, no surrounding erythema.
  - If present on heels, do not debride

- **Unstable eschar**
  - Tissue is boggy. There may be drainage, odor, and/or periwound erythema
  - Debridement is necessary
Wound Evaluation, Assessment and Documentation

Wound Assessment

- History and physical
  - Co-morbidities
  - How wound happened/appeared/developed
  - Previous interventions
  - Medications
  - Nutritional status
  - Pain
  - Psychosocial issues

- Location on the body
  - Be specific and consistent
  - Standard Assessment is based on the premise that the wound is rectangular

- Wound bed
  - Red, yellow, black
    - Red is % of granulation
    - Yellow is % of slough
    - Black is % of eschar

- Level and type of drainage
- Odor

Documentation

- Must take systematic approach
  - Ulcer measured from head-to-toe
  - Length x Width x Depth in centimeters
  - Evaluate undermining and tunneling
  - Cannot “back stage”
- New CMS reimbursement guidelines for hospitals
  - Implemented in October 2008

Wound Dimensions -Depth

- Use applicator gently to find deepest part of wound
- Grasp applicator at skin level, remove and measure depth

Wound Assessment

- Undermining
  - Clock measurement
  - Measure with cotton tipped applicator
  - e.g. 4.2 cm from 12 to 6 o’clock
Undermining

- Dead Space
- Appropriate dressing
- Risk of infection

Tunneling/Sinus Tracts

- Tissue loss into depths of the wound
Wound Documentation

• When should we assess?
  - Upon admission or first notation of any compromise in the skin
  - Skin should be assessed during routine care-bathing, perineal care, etc.
  - If a wound is present, assess at each dressing change

• When should we document?
  - Total skin exam should be documented on admission, and if there is any evidence of compromised skin, formal assessment once a week

Wound Documentation

• Why is it important?
  - Documentation serves as a tool for communication for members of the healthcare team
  - Reimbursement for hospital, new F-TAG
  - Litigation!!
    - The best way to prevent litigation is to have good documentation of vigilance and care

Treatment

• Relieve pressure
• Frequent turning
• Optimize wound environment
• Debridement
  - Mechanical
  - Autolytic
  - Sharp
  - Biologic
  - Enzymatic
• Address all reversible underlying conditions
Nutrition

- Identify and correct factors compromising protein/calorie intake consistent with overall goals of care.
- Consider nutritional supplementation/support for nutritionally compromised persons consistent with overall goals of care.
- If appropriate offer a glass of water when turning to keep patient/resident hydrated.
- Multivitamins with minerals per physician’s order.

Mechanical Loading

- Reposition bed-bound persons at least every two hours and chair-bound persons every hour consistent with overall goals of care.
- Consider postural alignment, distribution of weight, balance and stability, and pressure redistribution when positioning persons in chairs or wheelchairs.
- Teach chair-bound persons, who are able, to shift weight every 15 minutes.
- Use a written repositioning schedule.

Education

- Implement pressure ulcer prevention educational programs that are structured, organized, comprehensive, and directed at all levels of health care providers, patients, family, and caregivers.
- Include information on:
  - etiology and risk factors for pressure ulcers
  - risk assessment tools and their application
  - skin assessment
  - selection and use of support surfaces
  - nutritional support
  - program for bowel and bladder management
  - development and implementation of individualized programs of skin care
  - demonstration of positioning to decrease risk of tissue breakdown
  - accurate documentation of pertinent data
- Include mechanisms to evaluate program effectiveness in preventing pressure ulcers.
CMS Regulations

- Specific to Care Setting
- Professionals need to know regulations for own setting
- If there are any differences between professional organizations and CMS, the CMS directives must be followed

Misdiagnosis or Missed Diagnosis

Consequences

- Inappropriate or inadequate treatment
- Inaccurate public health statistics
- Insufficient payment
- Incur sentinel event

The National Pressure Ulcer Advisory Panel (NPUAP) serves as the authoritative voice for improved patient outcomes in pressure ulcer prevention and treatment through public policy, education and research.
Take Home Points

- Proper assessment of the pressure is an important part of patient care
- Documentation needs to be systematic and thorough
- Prevention and treatment strategies should be tailored to patient needs and patient environment