Skin Integrity

Guideline: Individualized programs to promote good skin integrity should be developed and implemented for people determined to be at risk for pressure injuries and skin tears.

DEFINITIONS:
Individual's record: A permanent legal document that provides a comprehensive account of information about the individual's health care status.
Nursing staff: Registered nurses and licensed practical nurses.
Pressure Injury: A pressure injury is localized damage to the skin and/or underlying soft tissue. It usually occurs over bony prominences such as heels, ankles, hips, and coccyx. It also can occur anywhere on the body as a result of intense and/or prolonged pressure or pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue. The injury can present as intact skin or an open ulcer and may be painful.[1]
Primary care providers: Physicians, nurse practitioners, and physician assistants who provide primary care services and are authorized to prescribe medications and treatments for people on their assigned caseloads.
Skin Tear: A wound caused by shear, friction, and/or blunt force resulting in separation of skin layers. A skin tear can be partial-thickness (separation of the epidermis from the dermis) or full-thickness (separation of both the epidermis and dermis from underlying structures)[2]

RATIONALE:
1. People who have difficulty moving and are unable to easily change position while seated or in bed are at risk for developing pressure injuries.[3]
2. People with impaired activity, mobility, sensation, or cognition have increased risk of shear, friction, and/or blunt force injury that may result in skin tears.[2]
3. People with intellectual and related disabilities may lack the ability to communicate discomfort or the need for movement in a manner that is meaningful to their caregivers.
4. Preventive health measures, close observation for signs and symptoms of pressure injuries or skin tears, appropriate documentation, communication of findings, and appropriate interventions are essential in maintaining the health status of people at risk.

EXPECTED OUTCOMES:

Facility Policy

Each Regional Center/residential facility should have a policy on prevention, assessment, and treatment of pressure injuries and skin tears. The Agency for Healthcare Research and Quality (AHRQ) provides guidance about what should be included in policies and a self-assessment tool for policy evaluation.[4,5]

The intent of the policy is to:
1. To eliminate the incidence of pressure injury development
2. To accurately identify patients at risk of developing a pressure injuries
3. To improve the frequency of skin inspections of individuals with identified pressure injuries
4. To increase the use and implementation of pressure injury prevention plans
5. To improve the completion of a comprehensive patient assessment, including wound evaluation, in patients with an identified pressure injuries

Expected Outcomes – Facility Policy cont'd

6. To increase the use and implementation of pressure injury treatment plans
7. To improve education in the prevention and progression of pressure injuries to individuals, families, and caregivers
8. To improve the coordination and communication between care providers/care institutions regarding the transfer/discharge plan for individuals with identified pressure injuries

Assessment

***Skin Integrity Review*: For individuals considered to be at high risk for pressure injuries, a standardized scale should be used to assess skin integrity at time of admission, as part of the annual comprehensive physical assessment, and more frequently as needed based risk factors. (See Appendices 1 and 2)**

Risk Factors: What/who needs to be assessed:

1. Mobility status – the most significant risk factor for pressure injury development.
   a. Non-ambulatory individuals
   b. People confined to a bed, wheelchair, or recliner
   c. People who are paralyzed or have contractures
   d. People who use orthopedic devices that limit range of motion and independent function
   e. Those who are dependent on others for ambulation and repositioning
2. Friction and shearing (i.e., involuntary muscle movements that cause rubbing against sheets, sliding down in bed, turning, or pulling people up in bed.)
3. Nutrition and hydration status
4. Excessive exposure to moisture
   a. Incontinence – Pressure injuries are much more likely to develop in people who are incontinent. Fecal incontinence greatly increases the risk.
   b. Excessive perspiration
   c. Wound drainage
5. Decreased sensory perception
6. People with diagnoses of diabetes, peripheral vascular disease, and/or history of pressure injuries.

Intervention

For those determined to be at risk for or who have developed a pressure injury, the appropriate intervention strategies should be followed.

1. For those AT RISK for developing pressure injuries: The status of the skin for individuals at risk for developing pressure ulcers should be documented on the appropriate form or in the electronic medical record (Therap) and an intervention plan developed that may include:
   a. Frequent turning (consider every 2 hour schedule using a written schedule)
   b. Maximizing the person's mobility
   c. Protecting the person's heels
   d. Using a pressure-reducing support surface if person is restricted to bed or a chair.
   e. Providing foam wedges for optimum positioning
   f. Managing moisture, nutrition, and friction/shear

2. For those who have developed a pressure injury: In the event that a pressure injury develops, the registered nurse should assess the pressure injury, document the following information in the nursing notes, and report the findings to the primary care provider:
   a. Location and stage of pressure injury (See New Classification of Pressure Ulcers – below)
   b. Size of injury (i.e., length, width, and depth)
   c. Injury/ulcer appearance
      - Granulation tissue
      - Yellow slough
      - Eschar
      - Drainage
      - Presence of rolled wound edges
   e. Odor
   f. Peri-wound skin condition
3. The results of the primary care provider's clinical analysis and treatment plan should be documented in the individual's record. A referral to a wound care specialist may be considered as part of the plan of care.
4. Adequate dietary intake is needed to ensure healing. A nutritional assessment and plan should be requested and results documented in the individuals record.
5. Wounds should be monitored for infection, and if diagnosed, treated promptly.

New Classification of Pressure Ulcers[6]

A new staging system for pressure ulcers was developed and approved in 2016. The terminology has changed from pressure ulcer to pressure injury. The numbering of the stages has changed from roman numerals to arabic numerals. Illustrations of the various stages can be viewed at http://www.npuap.org/resources/educational-and-clinical-resources/pressure-injury-staging-illustrations/ courtesy of the National Pressure Ulcer Advisory Panel (NPUAP).

1. **Stage 1 Pressure Injury: Non-blanchable erythema of intact skin**
   a. Intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin.
   b. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes.
   c. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.
2. **Stage 2 Pressure Injury: Partial-thickness skin loss with exposed dermis**
   a. Partial-thickness loss of skin with exposed dermis.
   b. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister.
   c. Adipose (fat) is not visible and deeper tissues are not visible.
   d. Granulation tissue, slough and eschar are not present.
   e. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel.
   f. This stage should not be used to describe moisture associated skin damage (MASD) including incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARSI), or traumatic wounds (skin tears, burns, abrasions).

3. **Stage 3 Pressure Injury: Full-thickness skin loss**
   a. Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present.
   b. Slough and/or eschar may be visible.
   c. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds.
   d. Undermining and tunneling may occur.
   e. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed.
   f. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.
4. **Stage 4 Pressure Injury: Full-thickness skin and tissue loss**
   a. Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer.
   b. Slough and/or eschar may be visible.
   c. Epibole (rolled edges), undermining and/or tunneling often occur.
   d. Depth varies by anatomical location.
   e. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.
5. **Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss**
   a. Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar.
   b. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed.
   c. Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on the heel or ischemic limb should not be softened or removed.
6. **Deep Tissue Pressure Injury (DTPI): Persistent non-blanchable deep red, maroon or purple discoloration**
   a. Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister.
   b. Pain and temperature change often precede skin color changes.
   c. Discoloration may appear differently in darkly pigmented skin.
   d. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface.
   e. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss.
   f. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures are visible, this indicates a full thickness pressure injury (Unstageable, Stage 3 or Stage 4).
   g. Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.

Note: Pressure Injuries do not progress from stage 3 to stage 1; rather, a stage 3 injury demonstrating signs of healing is described as a healing stage 3 injury.

Skin Tears:

Assessment

For individuals with a history of skin tears, the *Skin Integrity Risk Assessment Tool* or the Skin and Wound assessment tool in Therap may be considered. (See Appendices 1 and 2) [2,7]

Intervention Strategy

For those determined to be at high risk for skin tears, a plan should be developed that includes components related to:

1. Providing a safe environment
2. Maintaining proper nutrition and hydration, and
3. Protection from self-inflicted injury or injury incurred during routine care

GENERAL GUIDELINES

Prevention Strategies for Pressure Injuries

1. Reposition persons unable to independently reposition themselves every 2 hours. A written positioning plan and turning schedule should be used and actions documented.
2. Keep the head of the bed at or below a 30 degree angle. This will reduce friction and shear.
3. Place a pressure-reducing surface on the person's bed and/or chair. These surfaces can include: foam, air, gel, or water cushions and/or mattresses. Do NOT use rings, foam cut-outs, or donut-type devices which may decrease circulation and cause venous congestion and edema.
4. Support the person's extremities and bony prominences on pillows or foam wedges. Bony areas should be kept from coming in contact with one another. Use elbow pads and heel-lift devices.
5. Minimize skin injury due to friction and shearing. Do not drag skin across linens when positioning or lifting the person up in bed. Use lifting devices such as a trapeze, lifting sheet or patient lift.
6. Clean skin with mild soap and warm water or a no-rinse cleanser. Gently pat dry.
7. Use talcum powder or cornstarch to protect skin vulnerable to excess moisture.
8. Apply moisturizing creams or ointments to dry skin. Do NOT rub bony prominences.
9. Change bedding and clothing frequently. Watch for buttons on the clothing and wrinkles in the bedding that irritate the skin.
10. Inspect the skin daily to identify vulnerable areas or early signs of pressure injuries.
11. Maintain nutritional and hydration status. For nutritionally compromised persons, a plan for nutritional support and/or supplementation should be implemented. Teeth should be kept in good condition and dentures should fit properly.
12. Educational programs for prevention of pressure ulcers should be comprehensive and directed at health care workers, the individual (when appropriate) and family caregivers.
13. Educational programs should include information about the following:
    a. Etiology and risk factors for pressure injuries
    b. The risk assessment tools and their application
    c. Skin assessment
    d. Selection and/or use of support surfaces
    e. Development and implementation of individualized programs of skin care
    f. Demonstration of positioning techniques to decrease risk of tissue breakdown
    g. Instruction on accurate documentation.

References

1. NPUAP (2016, April 16). National Pressure Ulcer Advisory Panel (NPUAP) announces a change in terminology from pressure ulcer to pressure injury and updates the stages of pressure injury. Retrieved from http://www.npuap.org/national-pressure-ulcer-advisory-panel-npuap-announces-a-change-in-terminology-from-pressure-ulcer-to-pressure-injury-and-updates-the-stages-of-pressure-injury/

2. LeBlanc, K. & Baranoski, S. (2011). Skin tears: State of the Science: Consensus Statement for the Prevention. Prediction, Assessment, and Treatment of Skin Tears. *Advances in Skin and Wound Care*, 24(9), 2-15.

3. Mayo clinic (2014, December). Diseases and Conditions – Bedsores (pressure ulcers) Risk Factors. Retrieved from http://www.mayoclinic.org/diseases-conditions/bedsores/basics/risk-factors/CON-20030848

4. AHRQ's Safety Program for Nursing Homes: On-Time Pressure Ulcer Prevention. May 2016. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from http://www.ahrq.gov/professionals/systems/long-term-care/resources/ontime/pruprev/index.html

5. Institute for Clinical Systems Improvement (ICSI) (2012). Pressure ulcer prevention and treatment protocol. Bloomington (MN). Retrieved from http://www.guideline.gov/content.aspx?id=36059

6. National Pressure Ulcer Advisory Panel (NPUAP) (2016). Retrieved from http://www.npuap.org/resources/educational-and-clinical-resources/npuap-pressure-injury-stages/

7. White, M.W., Karam, S., & Cowell, B. (1994). Skin tears in frail elders: A practical approach to prevention, *Geriatric Nursing, 15*(95), 95-99.

Appendix 1: Skin Integrity Risk Assessment Tool

Adapted from White, M.W., Karam, S., & Cowell, B. (1994). Skin tears in frail elders: A practical approach to prevention, Geriatric Nursing, 15 (95), pp. 95-99. Referenced in LeBlanc & Baranoski (2011).

Patient Name: _____

		Enter 'YES' if present	Totals
Group I **Positive response indicates need for risk reduction program**			
History of Skin Tears in last 90 days			
		Subtotal – Group I	
Group II (Highest possible score = 8) **Positive responses to 4 or more items indicates need for risk reduction program**			
a.	Decision-making skills impaired		
b.	Sight impaired		
c.	Extensive assistance needed or total dependence in ADLs		
d.	Wheelchair assistance needed		
e.	Loss of balance		
f.	Confined to bed or chair		
g.	Unsteady gait		
h.	Bruises		
		Subtotal – Group II	
Group III (Highest possible score = 15) **Positive response to 5 or more items indicates a need for risk reduction program**			
a.	Physically self abusive		
b.	Resists ADL care		
c.	Agitation		
d.	Hearing impaired		
e.	Decreased tactile stimulation		
f.	Wheels self in chair		
g.	Needs to be lifted manually or with mechanical device		
h.	Contractures of arms, legs, shoulders, hands		
i.	Hemiplegia or hemiparesis		
j.	Trunk – partial or total inability to balance or turn body		
k.	Pitting edema of legs		
l.	Open lesions on extremities		
m.	3-4 senile purpura on extremities		
n.	Dry, scaly skin		
		Subtotal – Group III	
Positive response to 3 items in Group II and 3 or more items in Group III indicates a need for risk reduction program			
Person completing assessment: Date:			

Appendix 2: Skin and Wound Assessment Tool - Therap

Skin/Wound Assessment
Form ID: HTS-SALCTSC-EAY4W8RZH767V
Status: New
Entered By: Jack Einstein, QA/TSA

Section 1 - General Information

Jump to section: 1 | 2 |

Individual Name:*

Program Name:* - Please Select -

Time Zone: US/Eastern

Entered By: Jack Einstein, QA/TSA

Reported By:* McLean, Amy/NSA

If Other:

Date:* 08/30/2016

Notification Level: Low

Section 2 - Skin/Wound Information

Jump to section: 1 | 2 |

Event Time: 10 59 am pm

Body Part(s): (Add)

Photo: (Add)

Photo Date:

Wound Type: - Please Select - **If Other:**

Wound Stage: - Please Select - **If Other:**

Wound Size

Length (cm):

Width (cm):

Depth (cm):

Wound Base Color: - Please Select - **If Other:**

Surrounding Skin: - Please Select -

Skin Color: - Please Select - **Skin Tone:** - Please Select -

Wound Infection

Wound Infected?: Yes No

Link to Infection Tracking:

Drainage

Color: - Please Select -

Amount: - Please Select -

Odor: - Please Select -

Treatment/ Dressing: - Please Select - **If Other:**

About 3000 characters left

Comments: