

Skilled Nursing Policy and Procedure

Subject/Title: **Wound Management Program**

References:

Agency for Healthcare Research and Quality (AHRQ), National Guideline Clearing House, *Pressure Ulcers: Prevention and Management of Pressure Ulcers, August 5, 2014; Pressure Ulcers in the Long-term Care Setting, 2013*, Safety Program for Nursing Homes: On-Time Pressure Ulcer Healing, www.ahrq.gov and <https://www.guideline.gov/>

National Pressure Ulcer Advisory Panel (NPUAP), *Summary of Clinical Practice Guidelines, The Pressure Ulcer Scale for Healing (PUSH) Tool, Pressure Injury Stages* <http://www.npuap.org/>, NPUAP Position Statement on Staging – 2017 Clarifications, January 24, 2017

Skin Management Program Manual, Kare N’ Consulting, Karen S. Clay, RN, BSN, CWCN
State Operation Manual Appendix PP – Guidance to Surveyors for Long Term Care Facilities, Centers for Medicare and Medicaid Services (CMS), March 8, 2017

Wound, Ostomy and Continence Nurses Society, *Guidelines for Prevention and Management of Pressure Ulcer (Injuries)*, 2016

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I. POLICY GUIDELINES

The organization is committed to providing a comprehensive wound management program to promote the resident’s highest level of functioning and well-being and to minimize the development of facility-acquired pressure injuries, unless the individual’s clinical condition demonstrates they are unavoidable.

Any resident with a wound receives treatment and services consistent with the resident’s goals of treatment. The goal is one of promoting healing and minimizing infection unless a resident’s preferences and medical condition necessitate palliative care as the primary focus.

A commitment to the Wound Management Program is demonstrated by implementation of processes founded on accepted standards of practice, research-driven clinical guidelines, and interdisciplinary involvement.

Clinical policies and procedures (guidelines) are written with the understanding that “professional nursing judgment” remains at the center of the delivery of good resident care

II. DEFINITIONS

Debridement is the removal of devitalized/necrotic tissue and foreign matter from a wound to improve or facilitate the healing process. There are various types of debridement methods.

Eschar is described as thick, leathery, frequently black or brown in color, necrotic (dead) or devitalized tissue that has lost its usual physical properties and biological activity. Eschar may be loose or firmly adhered to the wound.

Exudate is any fluid that has been forced out of the tissue or its capillaries because of inflammation or injury. It may contain serum, cellular debris, bacteria, and leukocytes.

Friction is the mechanical force exerted on the skin that is dragged across any surface.

Intertriginous Dermatitis (ITD) is an inflammatory dermatosis of opposing skin folds from non-caustic body fluid (sweat) versus caustic fluids (urine and stool).

Shearing is the interaction of both gravity and friction against the surface of the skin. Friction is always present when shear force is present. Shear occurs when layers of skin rub against each other or when the skin remains stationary and the underlying tissue moves and stretches and angulates or tears the underlying capillaries and blood vessels causing tissue damage.

Slough is necrotic/avascular tissue in the process of separating from the viable portions of the body and is usually light colored, soft, lumpy and stringy (at times).

Tunneling is a passage way of tissue destruction under the skin surface that has an opening at the skin level from the edge of the wound

Undermining is the destruction of tissue or ulceration extending under the skin edges (margins) so that the pressure ulcer is larger at its base than at the skin surface

A. Types of Skin Impairments/Ulcers/Wounds

Arterial Ulcer is an ulceration that occurs as the result of arterial occlusive disease when non-pressure-related disruption or blockage of the arterial blood flow to an area causes tissue necrosis. Arterial/ischemic ulcers may be present in individuals with moderate-to-severe peripheral vascular disease, generalized arteriosclerosis, inflammatory autoimmune disorders (such as arteritis), or significant vascular disease elsewhere (e.g., stroke or heart attack). The arterial ulcer is characteristically painful, usually occurs in the distal portion of the lower extremity, and may be over the ankle or bony areas of the foot (Centers for Medicare and Medicaid Services [CMS], F309, Definitions §483.25).

Avoidable Pressure Ulcer means that the resident developed a pressure ulcer and that 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 the resident needs, resident goals, and recognized standards of practice; monitor and evaluate the impact of the interventions; or revise the interventions as appropriate (CMS, F314, Definitions §483.25).

Diabetic Neuropathic Ulcer requires that the resident be diagnosed with diabetes mellitus and have peripheral neuropathy. The diabetic ulcer characteristically occurs on the foot (CMS, F309, Definitions §483.25).

Non-pressure related skin impairment (includes skin tears) are classified as either partial thickness or full thickness

- Partial Thickness Skin Impairment involves loss of epidermis and possible partial loss of dermis. The tissue loss of a partial-thickness wound is similar to that of a Stage 2 pressure injury
- Full Thickness Skin Impairment involves tissue destruction extending through the dermis to involve the subcutaneous layer and possibly muscle and bone. The tissue loss of a full thickness wound is similar to that of a Stage 3/4 pressure injury

Pressure Ulcer (referred to as "Pressure Injury" by the National Pressure Ulcer Advisory Panel [NPUAP]) is any lesion caused by unrelieved pressure that results in damage to the underlying tissue. Although friction and shear are not primary causes of pressure ulcers, friction and shear are important contributing factors to the development of pressure ulcers (CMS, F314, Definitions §483.25).

Skin Tears, Lacerations, Cuts, and Abrasions are wounds that usually result from impact (or related incidents) to extremely fragile skin.

Venous Ulcer (previously known as a stasis ulcer) is an open lesion of the skin and subcutaneous tissue of the lower leg, often occurring in the lower leg around the medial ankle. Venous ulcers are reported to be the most common vascular ulceration and may be difficult to heal, may occur off and on for several years, and may occur after relatively minor trauma. Venous ulcers may be caused by one (or a combination of) factor(s) including: loss of (or compromised) valve function in the vein, partial or complete obstruction of the vein, and/or failure of the calf muscle to pump the blood (CMS, F309, Definitions §483.25).

Unavoidable Pressure Ulcer means that the resident developed a pressure ulcer even though the facility had evaluated the resident’s clinical condition and pressure ulcer risk factors; defined and implemented interventions that are consistent with the resident needs, resident goals, and recognized standards of practice; monitored and evaluated the impact of the interventions; and revised the approaches as appropriate (CMS, F314, Definitions §483.25).

B. Stages of Pressure Injuries (from NPUAP 2016)

The diagnosis of a “pressure injury” does not mean that the health care provider(s) “caused the injury.” Pressure injury simply means the tissue is injured by pressure (and/or shear). It does not assign blame or in any way imply that the injury was “caused” by anything that the health care providers “did” or “failed to do.”

—NPUAP Position Statement on Staging – 2017 Clarifications, January 24, 2017

A **pressure injury** is localized damage to the skin and/or underlying soft tissue usually over a bony prominence or related to a medical or other device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs 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.

A **Stage 1 Pressure Injury** is an area of intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.

A **Stage 2 Pressure Injury** is partial-thickness skin loss with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. 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 (MARS), or traumatic wounds (skin tears, burns, abrasions).

A **Stage 3 Pressure Injury** is full-thickness skin loss in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunneling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

A **Stage 4 Pressure Injury** is full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

In September 2012, NPUAP released the following position statement regarding exposed cartilage, “Although the presence of visible or palpable cartilage at the base of a pressure injury was not included in the Stage 4 terminology, it is the opinion of the NPUAP that cartilage serves the same anatomical function as bone. Therefore, pressure injuries that have exposed cartilage should be classified as a Stage 4.”

An **Unstageable Pressure Injury** is obscured 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. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar

(i.e., dry, adherent, and intact without erythema or fluctuance) on the heel or ischemic limb should not be softened or removed.

A **Deep Tissue Pressure Injury (DTPI)** involves 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. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. 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). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.

C. **Additional Pressure Injury Definitions:**

A **Medical Device Related Pressure Injury (this describes an etiology)** is when pressure injuries result from the use of devices designed and applied for diagnostic or therapeutic purposes. The resultant pressure injury generally conforms to the pattern or shape of the device. The injury should be staged using the staging system.

A **Mucosal Membrane Pressure Injury** is a pressure injury found on mucous membranes (tongue, gastrointestinal tract, nasal passages, urinary tract, and vaginal tract) with a history of a medical device in use at the location of the injury. Mucosal tissues are especially vulnerable to pressure from medical devices, such as oxygen tubing, endotracheal tubes, orogastric and nasogastric tubes, urinary catheters, and fecal containment devices. Due to the anatomy of the tissue these injuries cannot be staged.

III. PROCEDURAL COMPONENTS

A. **Accountability**

1. The Wound Management Program identifies staff participation and accountability to include:
 - a. Individual(s) responsible for program oversight and coordination
 - b. Staff involved in prevention and treatment (and their roles)
 - c. Expectation of all caregivers to observe resident skin integrity during the daily provision of the resident's personal care

B. **Admission Wound Assessment and Management**

1. At the time of admission, the discharge records from the prior facility are reviewed for information relating to wounds or alteration in skin integrity. Staging from another facility is not adopted for use in the facility
2. Wounds are assessed at the time of admission (same shift) and if not possible, within 24 hours
3. The admission skin assessment includes at a minimum:
 - a. Interview of resident or family about history of skin alterations
 - b. Physical evaluation to include identification of:
 - i. Skin integrity and tissue intolerance, skin alterations present on admission, skin discolorations, and any evidence of scarring on pressure points
 - ii. Signs/symptoms/diagnosis of peripheral vascular disease
 - iii. Bed mobility
 - iv. Continence
 - v. Recent surgical procedure
 - vi. Head-to-toe skin assessment
 - vii. Nutritional status and issues
 - c. Completion of a Skin Risk Assessment Tool

- d. Comprehensive assessment of any wound consisting of:
 - i. Location and staging of wound
 - ii. Length, width, and depth measurements recorded in centimeters
 - iii. Direction and length of tunneling and undermining
 - iv. Appearance of the wound base
 - v. Type and percentage of tissue in wound
 - vi. Drainage amount and characteristics including color, consistency, and odor
 - vii. Appearance of wound edges
 - viii. Description of the peri-wound condition or evaluation of the skin adjacent to the wound
 - ix. Presence or absence of new epithelium at wound rim
- 4. Risk reduction measures such as use of heel protectors (designed for friction/shear reduction versus pressure reduction), elevation of lower extremities, participation in bowel and bladder program, etc. are initiated if determined appropriate
- 5. Discussion with the attending physician, resident, resident representative (individual chosen by the resident to act on their behalf, state or federal law authorized individual, legal representative, court-appointed guardian, or conservator), and family includes notification of any skin impairment identified on admission
- 6. Orders are verified or obtained as needed
- 7. An admission/interim care plan is developed
- 8. Assessments and interventions implemented are documented in the resident record

C. Ongoing Wound Assessment

- 1. A system for pressure injury assessment and documentation with each dressing change or at least weekly is established
- 2. A tool is used for assessment and documentation (Braden Skin Risk Assessment or Norton Risk Assessment Tool)
- 3. Comprehensive wound assessment includes at least the following parameters:
 - a. Location and staging of wound which may provide information related to the etiology of the wound as described in the definitions section of this policy
 - b. Length, width, and depth measurements recorded in centimeters
 - c. Direction and length of tunneling and undermining
 - d. Appearance of the wound base
 - e. Type and percentage of tissue in wound (eschar, slough, granulation, epithelial)
 - f. Drainage amount and characteristics including color, consistency, and odor
 - i. Drainage may be described as
 - (a) Serous: clear to straw colored
 - (b) Serosanguinous: slightly bloody, pink colored
 - (c) Sanguineous: bloody drainage; bloody drainage in a chronic wound may represent a sign of increased microbial load in the wound, which indicates an assessment for signs of infection is needed
 - (d) Fibrinous: composed of cells and fibrin
 - (e) Purulent: thicker, colorful, opaque
 - g. Appearance of wound edges (irregular, “punched out,” calloused, macerated, desiccated, crater-like, intact)
 - h. Description of the peri-wound condition or evaluation of the skin adjacent to the wound (discoloration, hematoma formation, presence of papules, pustules, denudement, erosion, edema, maceration, desiccation, induration)
- 4. Wound complications including infection, fistula development, etc. are assessed for:
 - a. Localized signs of infection including:
 - i. Erythema
 - ii. Induration
 - iii. Increased drainage

- iv. Change in character of tissue
 - v. Foul odor (determined after cleaning wound)
 - vi. Increased pain at wound site
 - vii. Delayed wound healing
 - viii. Classic signs of infection are not always evident in a granulating chronic wound or in elderly residents
- b. Systemic signs of infection including:
- i. General malaise
 - ii. Mental confusion
 - iii. Loss of appetite
 - iv. Leukocytosis
 - v. Fever (often not present in elderly adults)
 - vi. Hypothermia (occasionally seen indicating a poor central nervous system response)
 - vii. Blood sugar changes in diabetic residents
 - viii. Change in vital signs (increased heart rate, increased respirations)
 - ix. Difficulty breathing
5. Types of wound (pressure related versus non-pressure related) are differentiated
6. Pressure injury stages are defined
7. Wounds are identified as avoidable or unavoidable
- a. If unavoidable, documentation in the medical record includes assessments, interventions, re-assessments and additional interventions, as well as the identification of the resident's medical diagnosis and complication factors that lead to the conclusion that the wound is unavoidable
8. Progress toward healing is monitored
- a. If the wound shows no sign of healing within two to four weeks, the plan of care is re-evaluated, and it is determined whether to continue or modify the plan of care
 - i. If the facility opts to continue the plan of care without modifications the rationale for doing so is documented in the medical record
 - ii. The complexity of a resident's condition may affect responsiveness or tolerance to treatments and this is considered in the review of the plan of care
 - iii. A chronic wound (one greater than 30 days old) may make very slow progress and in some cases, may only show a decrease in measurements of 0.5cm a month. In these cases, monitor wound progress through other parameters, including tissue type, appearance, and drainage. Use of the "PUSH" tool for monitoring wound progress is recommended
9. "Other" Skin Impairments that are non-pressure related (partial thickness skin impairment and full thickness skin impairment) are classified

D. Wound Management Principles

1. Wound management principles provide the basis for effective wound care and are considered in development of the plan of care
2. Wound management principles include, and are not limited to:
 - a. Control or elimination of causative factors such as:
 - i. Pressure
 - ii. Shear
 - iii. Friction
 - iv. Moisture
 - v. Circulatory impairment
 - b. Provision of systemic support to reduce existing and potential co-factors such as:
 - i. Nutritional and fluid support per assessed need
 - ii. Control of systemic conditions affecting wound healing per medical plan of care

- c. Maintenance of a physiologic local wound environment including, and not limited to:
 - i. Preventing and managing infection
 - ii. Cleansing wound
 - iii. Removing non-viable tissue (debridement)
 - iv. Managing exudates
 - v. Eliminating dead space
 - vi. Controlling odors
 - vii. Protecting the wound
 - viii. Managing pain

E. Wound Care/Dressings

1. General infection control practices are maintained during wound care and dressing changes
2. With the assistance of Medical Director, wound management protocols are established and consistent with clinical practice guidelines for various stages of pressure injuries
3. “Clean” versus sterile technique for standard wound management is identified
 - a. Accepted standards are “clean” dressings and/or technique except immediately post-sharp and/or surgical debridement
4. A protocol for cleansing and irrigation of wounds has been established
 - a. Use an irrigation pressure of approximately 8 psi (may be achieved by 35-ml syringe with angiocath)
5. The wound of devitalized tissue is debrided
 - a. Debridement “exceptions” include: stable necrotic heel ulcers and stable ischemic wounds
6. Dressing options are identified to maintain a moist wound environment including:
 - a. Use of a dressing that controls exudate but does not dry out the wound base
 - b. Protection of the peri-wound skin and keeping the area dry
7. A dressing algorithm/protocol to facilitate selection of appropriate dressings has been developed
 - a. A dressing formulary is determined as “closed” (only specific dressings/products may be used) or “open” (dressing algorithm is generally used but other treatment options are permitted)
8. If the wound has depth, it is filled loosely with strip gauze or fluffed 2x2s or 4x4s. If tunneling or undermining is noted, the tunnel and/or undermined areas are loosely filled with gauze (typically strip gauze)
9. A protocol is established for physician evaluation of suspected wound infection including:
 - a. Types of wound cultures performed in the facility
 - b. Consideration of systemic antibiotics in presence of bacteremia, cellulitis, sepsis, or osteomyelitis
10. Adjunctive therapies available may be ordered (e-stim, vacuum assisted wound closure, growth factors)
11. The treatment plan is re-evaluated if a clean pressure injury shows no evidence of healing within two to four weeks

F. Documentation and Care Planning

1. Additional documentation requirements of the wound management program include:
 - a. Completion of an “in-house” weekly report (submitted to the Director of Nursing) by the Charge nurse
 - b. Individualized care plans including:
 - i. Completion on admission and updated on an ongoing basis
 - ii. Realistic, measurable goals collaboratively determined with the resident, family, and interdisciplinary team
 - iii. Risk factors such as:
 - (a) Impaired mobility
 - (b) Incontinence

- (c) Nutritional deficiency
- (d) Skin condition
- (e) Complications (infections, pain, etc.)
- iv. Offsetting interventions that comply with wound policy and procedure and physician orders
- 2. The resident medical record may contain different descriptions of the same skin ulcer at the same or similar points in time. This may lead to the appearance of conflicting medical record documentation as the facility attempts to balance regulatory required practices and current standards of practice
 - a. In an effort to adhere to current standards of wound assessment, a wound is not to be “backstaged.” As a wound improves it is described as a “healing stage”
 - b. In the event of eschar or necrotic tissue the facility typically regards this wound as “unstageable.” A fundamental requirement of staging is the ability to visualize the base of the wound, which is not possible when eschar or necrotic tissue is present
- 3. Wound photography is not recommended as a component of the facility wound assessment protocol
 - a. If wound photography is determined to be necessary, methods for assuring consistency in wound imaging are established as well as protocols to preserve image quality and storage

G. Notification

1. A written protocol is established for:
 - a. Physician notification of pressure injury presence and responses to treatment
 - b. Resident representative and family notification of pressure injury presence, treatment plan, response to treatment, and changes in treatment due to wound deterioration
 - c. “In-house” notification of interdisciplinary team members of the presence of a pressure injury and/or deterioration in wound status
 - d. Minimum Data Set (MDS) Coordinator notification of the number of pressure injuries and stages

H. Education/competency

1. Education resources available in-house and through external sources are identified
2. Education to interdisciplinary team members is provided upon orientation and annually on:
 - a. Skin injury definitions per NPUAP Staging Guidelines
 - b. Prevention and treatment of pressure injuries
 - c. Staging of pressure injuries
 - d. Monitoring wound progress/outcomes
 - e. Facility protocols for documentation and notification
3. Education to certified nursing assistant staff members is provided on inspection, prevention, and management strategies upon orientation and annually
4. Education to residents and family members is provided during care planning meetings and annually to family council/group on:
 - a. Etiology of pressure injuries and risk factors
 - b. Prevention and treatment strategies
5. Competency of staff upon orientation and annually is identified through use of competency skills checklists

I. Quality Assurance and Performance Improvement (QAPI)

1. Oversight of the wound management program is provided by the QAPI Committee and includes:
 - a. Review of observation and documentation audits
 - b. Analyzing pressure injury collected data and monthly reports
 - c. Review of incidences and/or prevalence
2. Action plans and goals to improve reported statistics and processes are developed

3. Statistics, analysis of data, and performance improvement strategies are documented in the QAPI minutes
4. Confidentiality language is noted on all quality documents
5. A wound team is established as a sub-committee of the QAPI Committee with:
 - a. Defined frequency of wound team meetings
 - b. Delineated activities to be accomplished