Pressure Injuries Overview

A) Purpose

The purpose of this procedure is to provide information regarding definitions and clinical features of pressure injuries.

- General definitions are derived from the State Operation Manual, Appendix PP: §483.25(b)(1) Pressure ulcers (F686).
- Pressure injuries for purposes of staging reference the National Pressure Injury Advisory Panel Classification System.
- MDS assessments reference current definitions in the Resident Assessment Instrument User's Manual.

B) General Definitions (State Operations Manual, Appendix PP)

Pressure Ulcer/Injury (PU/PI) refers to localized damage to the skin and/or underlying soft tissue usually over a bony prominence or related to a medical or other device.

- A pressure injury will present as intact skin and may be painful.
- A pressure ulcer will present as an open ulcer, the appearance of which will vary depending on the stage and may be painful.
- Pressure ulcers/injuries occur 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 skin temperature and moisture, nutrition, perfusion, co-morbidities and condition of the soft tissue.

Avoidable/Unavoidable

- "Avoidable" means that the resident developed a pressure ulcer/injury and that one or more of the following was not completed:
 - Evaluation of the resident's clinical condition and risk factors;
 - Definition or implementation of interventions that are consistent with resident needs, resident goals, and professional standards of practice;
 - Monitoring or evaluation of the impact of the interventions; or
 - Revision of the interventions as appropriate.
- "Unavoidable" means that the resident developed a pressure ulcer/injury even though the following were completed:
 - Evaluation of the resident's clinical condition and risk factors;
 - Definition or implementation of interventions that are consistent with resident needs, resident goals, and professional standards of practice;
 - Monitoring or evaluation of the impact of the interventions; and
 - Revision of the interventions as appropriate.

Colonized/Infected

- "Colonized" refers to the presence of micro-organisms on the surface or in the tissue of a wound without the signs and symptoms of an infection.
- "Infected" refers to the presence of micro-organisms in sufficient quantity to overwhelm the defenses of viable tissues and produce the signs and symptoms of infection.

Debridement is the removal of devitalized/necrotic tissue and foreign matter from a wound to improve or facilitate the healing process. Debridement methods may include a range of treatments such as the use of enzymatic dressings to surgical debridement in order to remove tissue or matter from a wound to promote healing.

Eschar/Slough

- "Eschar" is dead or devitalized tissue that is hard or soft in texture; usually black, brown, or tan in color; and may appear scab-like. Necrotic tissue and eschar are usually firmly adherent to the base of the wound and often the sides/edges of the wound.
- "Slough" is non-viable yellow, tan, gray, green or brown tissue; usually moist; can be soft, stringy and mucinous in texture. Slough may be adherent to the base of the wound or present in clumps throughout the wound bed.

Exudate		
• "Exudate" is any fluid that has been forced out of the tissues or its capillaries because of inflammation or injury. It may contain serum, cellular debris, bacteria and leukocytes.		
• "Purulent exudate/drainage/discharge" is any product of inflammation that contains pus (e.g., leukocytes, bacteria, and liquefied necrotic debris).		
 "Serous drainage or exudate" is watery, clear, or slightly yellow/tan/pink fluid that has separated from the blood and presents as drainage. 		
Friction/Shearing		
• "Friction" is the mechanical force exerted on skin that is dragged across any surface.		
• "Shearing" 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.		
Granulation Tissue is the pink-red moist tissue that fills an open wound when it starts to heal. It contains new blood vessels, collagen, fibroblasts, and inflammatory cells.		
Kennedy Terminal Ulcer is an unavoidable pressure ulcer that develops at the end of life. KTUs have certain characteristics which differentiate them from pressure ulcers such as the following:		
• Appear suddenly and within hours;		
• Usually appear on the sacrum and coccyx but can appear on the heels, posterior calf muscles, arms and elbows;		
• Edges usually irregular and are red, yellow, and black as the ulcer progresses, often described as pear, butterfly or horseshoe shaped; and		
• Often appear as an abrasion, blister, or darkened area and may develop rapidly to a Stage 2, Stage 3, or Stage 4 injury.		
Tissue tolerance is the ability of the skin and its supporting structures to endure the effects of pressure, without adverse effects. Tissue tolerance affects the length of time a resident can maintain a position without suffering a pressure ulcer/injury.		
Tunnel/Sinus Tract/Undermining – The terms tunnel and sinus tract are often used interchangeably.		
• A "tunnel" is a passageway of tissue destruction under the skin surface that has an opening at the skin level from the edge of the wound.		
• A "sinus tract" is a cavity or channel underlying a wound that involves an area larger than the visible surface 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. Undermining often develops from shearing forces and is differentiated from tunneling by the larger extent of the wound edge involved and the absence of a channel or tract extending from the pressure ulcer under the adjacent intact skin.		
C) Staging (National Pressure Injury Advisory Panel Classification System)		
Stage 1 Pressure Injury: Non-blanchable erythema of intact skin		
• Intact skin with a localized area of non-blanchable erythema (redness), 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.		
Stage 2 Pressure Injury: Partial-thickness skin loss with exposed dermis		
Partial-thickness loss of skin with exposed dermis.		
• The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-intact blister.		
Adipose (fat) is not visible and deeper tissues are not visible.		
Granulation tissue, slough and eschar are not present.		
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 including continence-associated dermatitis, intertriginous dermatitis, medical adhesive-related skin injury, or traumatic wounds (skin tears, burns, abrasions).		

Stage 3	Pressure Injury: Full-thickness skin loss
•	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.
•	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 wound bed, this is an Unstageable PI.
Stage 4	Pressure Injury: Full-thickness skin and tissue loss
•	Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone i 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 PI.
Unstag	eable Pressure Ulcer: Obscured full-thickness skin and tissue loss
•	Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it obscured by slough or eschar.
•	If the slough or eschar is removed, a Stage 3 or Stage 4 pressure ulcer will be revealed.
•	Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on the heel or ischemic limb should not be softened or removed.
Deep T	issue Pressure Injury (DTPI): Persistent non-blanchable deep red, maroon or purple discoloration
•	Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation reveals 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 mat evolve rapidly to reveal the actual extent of tissue injury, or many 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.