PURPOSE:
To provide recommendations for assessing patient wounds.

CONSIDERATIONS:
1. Assessment is the starting point in preparing to treat or manage an individual with a wound.
2. Assessment involves the entire person, not just the wound, and is the basis for planning treatment and evaluating its effects.
3. Adequate assessment throughout the healing process is critical to proper management and healing.
4. Assess all patients on admission to homecare, resumption of care and recertification. Periodically reassess for risk factors related to pressure ulcers using the Braden Scale (See Appendix A- Braden Scale.)
5. A consultation with an enterostomal therapist (ET) or certified wound ostomy care nurse (CWOCN) is recommended for patients with full thickness wounds, complex wounds, stage III and IV pressure ulcers and deteriorating/non-healing wounds.
6. Consults by the dietician, physical therapist, occupational therapist and medical social worker may also be required.

EQUIPMENT:
Gloves
Disposable measuring guide
Sterile cotton-tipped applicator
Camera, specific for wound measurement (optional)

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain the procedure to the patient.
3. After completing the assessment, discard soiled supplies in appropriate containers.

Assessing the wound
1. Initial assessment:
   a. Position the patient exposing the wound site.
   b. Assess the wound(s) for:
      (1) Location.
      (2) Etiology: Identifying the type of tissue damage and underlying causes will help in planning the interventions (i.e., compression for venous ulcers, offloading for pressure ulcers, glucose management for diabetic ulcers, etc.)
      (3) Classification of Type of Wound Base Tissue
   c. Necrotic, nonviable, or devitalized: Tissue that has died and has therefore lost its physical properties and biologic activity.
   d. Eschar: Black or brown necrotic, devitalized tissue: tissue can be loose or firmly adherent; hard, soft, or boggy.
   e. Slough: Soft, moist, avascular (necrotic/devitalized) tissue: may be white, yellow, tan, or green; may be loose or firmly adherent.
   f. Granulation tissue: Pink/red moist tissue comprised of new blood vessels, connective tissue, fibroblasts, and inflammatory cells, fills an open wound when it starts to heal; typically appears deep pink or red; surface is granular, berry-like or cobblestone appearing.
   g. Clean, non-granulating: Absence of granulation wound surface appears smooth and red but not granular, and berry-like or cobblestone appearing.
   h. Epithelial: Regenerated epidermis across the wound surface; pink and dry in color.
   i. Newly epithelialized: The process of regeneration of the epidermis across a wound surface or regeneration of the epidermis across a wound surface
   j. Non-epithelialized: The absence of regenerated epidermis across a wound surface.
   k. Unhealed: The absence of the skin’s original integrity. (See also: WOCN OASIS C Guidance Document Glossary)
(1) Staging (Only pressure wounds can be staged).

Stages:
Suspected Deep Tissue Injury (DTI):
- A purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlined soft tissue from pressure and/or shear.
- The areas may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

Further Description:
- DTI maybe difficult to detect in individuals with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and become covered with thin eschar. Evolution may be rapid, exposing additional layers of tissue destruction, even with optimal treatment.

Stage I:
- Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area.

Further Description:
The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage 1 may be difficult to detect in individuals with dark skin tones (a herald of risk).

**Stage II:**
- Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister.

**Further Description:**
- Presents as a shiny or dry shallow ulcer without slough or bruising*. This stage should not be used to describe skin tears, tape, burns, perineal dermatitis, maceration or excoriation. Bruising indicates suspected deep tissue injury.

**Stage III:**
- Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.

**Further Description:**
- The depth of a Stage III pressure ulcer varies by anatomical location. The bridges of the nose, ear, occiput and malleolar do not have subcutaneous tissue and Stage III ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Stage III pressure ulcers. Bone/tendon is not visible or directly palpable.

**Stage IV:**
- Full thickness skin loss with exposed bone tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.

**Further Description:**
- The depth of a Stage IV pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolar do not have subcutaneous tissue and these ulcers can be shallow. Stage IV ulcers can extend into muscle and/or supporting structures (e.g., fascia tendon or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.

**Unstageable:**
- Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

**Further description:**
- Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and stage, cannot be determined.
- Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as the body’s natural (biological) cover and should not be removed.

(2) Thickness: Wounds can be classified as either partial thickness or full thickness to describe the level of tissue damage:

**Partial Thickness:**
- Tissue damage extends through the first layer of skin (epidermis) and into, but not through, the second layer of skin (dermis); heal by epithelialization.

**Full Thickness:**
- Tissue damage extends through both the epidermis and dermis and may involve subcutaneous tissue, muscle and, possibly, bone.

(3) Size:

**Length and Width:**
- Length and width are measured as linear distances from wound edge to wound edge. Wound length and width can also be documented by making a tracing of the wound on transparent paper with a permanent marker, tracing on an acetate guide, or photographic documentation.  

[Note: For the OASIS Assessment, the length is measured by measuring the longest head-to-toe linear measurement of the wound bed. The width is obtained by measuring the greatest width, perpendicular to the length (i.e., at a 90 degree angle).]

**Depth:**
- Depth is the distance from the visible surface to the deepest point in the wound. To measure wound depth, gently insert a sterile, flexible, cotton-tipped applicator into the deepest part of the wound. Then measure the length of the sterile cotton-tipped applicator that was in the wound.

(4) Undermining: Tissue destruction to underlying intact skin along wound margin.

(5) Tunneling/Sinus Tracts: Course or pathway that can extend in any direction from the wound surface; results in dead space with potential for abscess (direction and depth of tunneling).
(6) Undermining and tunneling can be measured using a sterile cotton-tipped applicator. Measure dead space and note location using the face of the clock as a guide. Using the clock method, the top of the wound (12 o’clock) would point towards the patient’s head and the bottom of the wound (6 o’clock) would point towards the feet.

(7) Exudate/drainage (amount and type).

(8) Presence of odor.

(9) Tissue type (granulation, necrotic, slough, eschar, epithelialization).

(10) Round Margins (epithelial, macerated, irregular, attached).

(11) Periwound: Assess the surrounding skin for:
   - Erythema.
   - Maceration.
   - Induration.

(12) Signs and symptoms of infection.

(13) Assess for pain/tenderness.

2. Reassessment:
   a. Reassess the wound weekly, according to the initial assessment guidelines.
   b. It is not appropriate to reverse stage a pressure wound. A Stage III cannot become a Stage II or a Stage 1. Chart the progress by noting an improvement in the characteristics (size, depth, etc.) or identify the wound as a healing Stage III or a healed Stage III wound. The same applies for a Stage IV pressure ulcer.
   c. Reevaluate the treatment plan as soon as any evidence of deterioration is noted.

3. Monitoring progress:
   a. A clean wound with adequate innervation and blood supply should show evidence of some healing within two to four weeks.
   b. If progress is not demonstrated within two to four weeks, reevaluate the overall treatment plan, adherence to the treatment plan and make appropriate changes and referrals (ET/CWOCN).

Assessing the Individual

1. Physical health and complications.
   a. Complete history and physical examination.
   b. Complications (e.g., decreased mobility, incontinence).

2. Nutritional assessment and management.
   a. Evaluate for adequate dietary intake, including calories, protein, vitamins and minerals.
   b. Nutritional assessment for individuals at risk for malnutrition:
      (1) At least every 3 months for individuals at risk for malnutrition.
      (2) Laboratory tests, as ordered (e.g., albumin, total protein, hematocrit).
      (3) Height, weight, history of weight loss.
   c. Nutritional support requirements (e.g., tube feeding, nutritional supplements).
   d. Vitamin and mineral supplement requirements (e.g., vitamins A, C, Zinc).
   e. Hydration status.


4. Psychosocial assessment and management.
   a. Assessment of the individual to include:
      (1) Mental status.
      (2) Learning abilities.
      (3) Signs of depression.
      (4) Social support.
      (5) Polypharmacy or over medication.
      (6) Alcohol or drug abuse.
      (7) Lifestyle.
      (8) Culture and ethnicity.
      (9) Stressors.
   b. Assessment of resources (e.g., availability and skill of caregivers, finances, equipment).
   c. Assessment of mechanical and environmental factors.

AFTER CARE:

1. Document in patient’s record:
   a. Findings from the assessment.
   b. Instructions given to patient/caregiver for establishing plan of care.
   c. Patient/caregiver’s response.

2. Discuss assessment with patient’s physician and obtain orders for care.

REFERENCES:


