HP WoundCare is an additional service to our HP client partners. Wound care consultation and care planning is included in the per diem. Wound care products dispensed by HP are charged at the contracted fee-for-service rate.

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The HP WoundCare Guidelines

Quick Guide to Wound Care Services ................................................................. 2
Acknowledgements .......................................................................................... 4
Pressure Ulcer Prevention and Treatment for Hospice Patients .......................... 5
  Potential for Tissue Injury .............................................................................. 7
  Activity/Mobility ............................................................................................ 8
  Skin Care ........................................................................................................ 9
  Nutrition ......................................................................................................... 11
Pressure Ulcer Treatment for Hospice Patients .................................................. 12
  Dressing Tips for Wounds ............................................................................ 13
  Pressure Ulcer Stages .................................................................................. 14
  Stage I ........................................................................................................... 15
  Stage II .......................................................................................................... 16
  Stage III and Stage IV ................................................................................... 17
  Unstageable .................................................................................................. 18
Tumor Wound Guidelines .................................................................................... 19
Venous Ulcer Guidelines .................................................................................... 23
Arterial Ulcer Guidelines .................................................................................... 26
Skin Tear Guidelines .......................................................................................... 29
Glossary of Wound Care Terms ........................................................................ 30
Braden Scale for Predicting Pressure Sore Risk ................................................... 32
Differential Diagnosis of Leg Ulcers ................................................................. 33
Wound Care Product File ................................................................................... 34

HP WoundCare is a wound care management service for HP client partners to assist with hospice patients in need of pressure ulcer and skin tear prevention and/or treatment, venous and arterial ulcer management and tumor wound management.
Quick Guide to Wound Care Services

Patient Enrollment
Patients enrolled with Hospice Pharmacia (HP) are able to receive wound care consultations, included in the per diem, and to receive wound care products from the HP WoundCare Product File, per the nurses’ request, at fee-for-service. HP will ask for wound care assessment information during these requests to document outcomes associated with care provided.

The Wound Care Plan and Wound Care Plan Modification
Upon admission to the hospice, the hospice nurse will conduct a Wound Care Assessment. Collaborating with the HPWC Team, the hospice nurse will provide the Wound Care Assessment to develop a wound care plan with selection of wound care supplies. Evidence-based guidelines are used to develop criteria for use of wound care supplies as set forth in this document. Changes in a patient’s clinical status may result in modification to the wound care plan.

The HP WoundCare Team
The HP WoundCare Team (a Team of certified wound care nurses and pharmacy technicians) are available to assist with wound care needs as follows:

Telephone (toll-free):
1-800-790-4138, a direct and dedicated line for HP WoundCare
1-877-882-7822, follow menu prompts for Wound Care
   Press 1: To speak to a member of the wound care team for consultation or to request wound care supplies
   Press 2: To leave a voicemail for a return call during normal business hours from a member of the wound care team

E-Mail: HPWCPod@excellerx.com

Hours of Service:
Monday through Friday: 8:30 a.m. – 6:00 p.m. Eastern Standard Time
After Hours and Holidays: Via on-call voicemail through either of the above numbers
   Press 1: To leave a message for non-urgent wound care needs to be retrieved by a member of the wound care team during regular business hours
   Press 2: For an emergent wound care need and be transferred to the wound care specialist

HP Online Wound Care Assessment
The documentation will be performed in HP Online as a ‘Brief’ or ‘Detail’ Assessment.

Brief Initial:
   Braden Score (6-23)
   Karnofsky/Palliative Performance Scale Score (0-100)
   Does the patient have any wounds? (no, yes)
      If yes, what type? (diabetic, arterial, venous, surgical, tumor, pressure, skin tear, other)

Brief Follow-up:
   Braden Score (6-23)
   Does the patient have any wounds? (no, yes)
      If yes, what type? (diabetic, arterial, venous, surgical, tumor, pressure, skin tear, other)
**Quick Guide to Wound Care Services**

**Detail:**

How many pressure ulcers? 1 2 3 4 >5
Ulcer 1, Ulcer 2, Ulcer 3, Ulcer 4
Location
Stage (I, II, III, IV, Unable to Stage)
Size (smaller, larger, no change)
Pain (0-10)
Odor (yes, no)
Exudate (none, minimal, moderate, heavy)
When Acquired (Prehospice Admission, Posthospice Admission: Date)

**Wound Care Outcomes Tracking and Reporting**

Wound care data tracking and patient-specific reporting is available through the HP On Line Report Option under Administrative Reports. Reports available are:
- Wound Type Summary and by Patient
- Pressure Ulcer Summary and by Patient
- Pressure Ulcer Patient Detail

Additionally, a dispense report for wound care specific products by patient is available through the Billing Reports.

**Wound Care Supply Delivery**

- **Second-Business-Day Delivery** – This is the preferred delivery option for wound care supplies.
- **Next-Business-Day Delivery** – This will occur when specifically requested by the clinician for new admissions, patients with new wounds or when wound care supplies are requested along with medications needed for next-business-day delivery.
- **Same-Day Wound Care Supply Needs** – When supplies are needed immediately, access is via the on-site hospice inventory or hospice medical supply vendor. Wound care supplies are not available using the HP prescription card (HP RxCard).

**Patients Residing in Nursing Facilities**

HP will work with each individual hospice to assess the feasibility of providing services in nursing facilities. The hospice determines where the wound care supply shipments from HP are sent (i.e. hospice office or the facility).
Acknowledgements

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Pressure Ulcer Algorithm Development (First Edition, October 2003):
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Melissa K. Ivone
**Pressure Ulcer Prevention and Treatment for Hospice Patients**

**Overall Goals:**
Within limits imposed by the patient’s condition and consistent with patient/family goals for care:
- Maintain optimal skin integrity
- Prevent skin breakdown; or further skin breakdown
- Keep patient as comfortable as possible

**Assessment Criteria**

*Assess patient:*
- Clinical signs & symptoms of disease progression/declining health status.
- Level of pain utilizing the Numeric Analog Scale (NAS) 0-10.
- Karnofsky Performance Status score or Palliative Performance Status score.
  - A score of 50% or less may indicate significant diminished functional status and increased risk for skin breakdown.
- Braden Scale for Predicting Pressure Sore Risk assessment score.
  - Scores range from 6-23, with lower scores indicating higher risk.
    - 15-18 indicates at risk
    - 13-14 indicates moderate risk
    - 10-12 indicates high risk
    - 9 or below indicates very high risk
- Urinary and/or fecal incontinence.
- Care priorities: How does maintenance of skin integrity and/or treatment of existing pressure ulcers align with patient/family goals of care?

Performance Status and Braden Scale assessments are to be completed upon admission and at initial presentation of a pressure ulcer. The Braden Scale assessment is recommended to be completed every 14 days thereafter, and with a significant change in the patient’s condition.

*Assess caregiver status:*
- How often is a caregiver present in the home?
- To what degree is a caregiver able to assist with mobility and basic skin care?
- Does (do) the caregiver(s) agree with or support patient’s plan of care (POC)?
Therapeutic Measures

1. Provide comfortable and therapeutically appropriate support surfaces for the chair, bed, and wheelchair (if relevant).
   a) Select devices that provide pressure reduction and minimize shear and friction, such as
      1. Static overlays (Group I surfaces)
         Products that do not contain a motor: usually foam or gel. Foam must be 4” thick for adequate pressure reduction.
      2. Dynamic overlays (Group II surfaces)
         Products that are motor powered, may oscillate, pulsate or alternate such as low-air-loss and alternating pressure mattresses.
      3. Air-fluidized (Group III surfaces)
         High air-flow continuously moves beads to behave like liquid.
   *Use of support surface products DOES NOT replace the need for adequate turning and repositioning techniques for pressure reduction.
   b) Features to consider include:
      1. Cost-effectiveness
      2. Comfort
      3. Provision of environment for desired temperature
      4. Ease of use
   c) Evaluate device for ability to provide patient comfort and adequate support; change if necessary.
   d) Donut-type devices should never be used.

2. Reposition patient at routine intervals. The turning schedule should be consistent with the patient’s plan of care, goals for treatment, and stage of illness/imminence of death.
   a) Supine position: Heels should be elevated off the bed and the HOB elevation should be limited to 30 degrees (unless a higher position is needed due to cardiac/respiratory problems or patient comfort).
   b) Side-lying position: Maximum 30 degree lateral position, elevate ankles off of the bed surface, apply pillows or positioning devices between bony prominences.

3. Apply heel and elbow guards to prevent friction. Devices should neither be tight nor constrictive. Remove devices daily and inspect skin surfaces.
   a) Mobile patient – i.e. heel boot or protector
   b) Immobile patient – i.e. placement of pillows

4. Lower extremities should be supported so that heels are suspended without touching the bed surface.
5. Use lift sheets when repositioning to minimize shear and friction.
6. Keep sheets clean and wrinkle-free.
**Therapeutic Measures**

1. Develop a simple written plan and activity/turning schedule that is appropriate to the patient’s goals/plan of care and stage of illness. Instruct the patient and their caregivers on how to effectively implement this plan/schedule.

2. Encourage activity as tolerated by the patient. If pain is present, give pain medication at least 30 minutes before an increase in activity, such as when transferring in/out of bed or repositioning in bed. Coordinate activity/repositioning the patient when the patient is most comfortable.

3. Assist with active or passive range of motion activity to all extremities every 4 hours as tolerated.

4. While in bed, the patient may benefit from the use of an overhead trapeze to facilitate mobility.

5. If bed-bound, keep head of bed higher than 30 degrees during meals. Otherwise, head of bed should be no higher than the 30 degrees to reduce friction, shear and chances for aspiration.

6. Turn every 2 to 4 hours while in bed, as tolerated. Help patient to find a comfortable position and avoid positioning directly on a bony prominence.

7. Assist patient out of bed if appropriate. Avoid sitting in chair for more than 30 minutes in the same position. Instruct and encourage minor shifts in body position while sitting (e.g. shifting weight from one hip to the other).

8. Assess patient/caregiver self or assisted technique for transfer to evaluate risk of skin disruption during transfer. Assess position and use of equipment/furniture in the home that could cause tissue injury during transfer/mobility.

*Tip: Patients, families and some hospice clinicians may believe that turning or repositioning is too uncomfortable and is unnecessary because the patient is “on hospice.” The activity/mobility plan should reflect the patient’s goals, and should be realistic given the stage of the illness. However, the benefits of activity to prevent painful pressure ulcers should be weighed against the burdens of such activity. Hospice enrollment alone is not sufficient justification to abandon attempts to avoid skin breakdown.*
Skin Care

Therapeutic Measures
1. Inspect skin daily and look for any reddened or open areas, bruises, blisters or skin tears.
2. Bathe with an appropriate cleanser that provides no-rinse, pH balanced, one-step cleansing. Individualize bathing schedules according to patient needs. Use soft cloths, lukewarm water and gentle technique for bathing. Pat dry.
3. Apply moisturizing lotion to extremities and back/sacrum shortly after bathing to promote absorption. Do not aggressively massage over bony prominences or reddened areas. Do not apply moisturizing lotion between toes. For extremely dry skin, apply a moisture barrier cream to affected area.
4. If a superficial fungal infection is present, apply a thin layer of an antifungal cream to affected area twice daily for 10 days.
5. Keep patient’s nail length short to avoid scratching injuries.
6. Clothing should fit properly. Avoid tight fitting clothes and seams that could cause pressure.

Incontinence Care:
1. Gently cleanse perineal area from front to back with appropriate cleanser after each incontinent episode.
2. Pat skin dry - do not rub.
3. Apply a moisture barrier cream liberally after each episode to help prevent and treat irritation due to incontinence.
   a. If the skin is excoriated, wet, denuded or if the patient heavily perspires, apply a protectant paste liberally to the affected area instead.
   b. When area affected has healed, revert back to using a moisture barrier cream.
   c. When utilizing a zinc-based skin care product
      a. Apply a fair amount to the affected area(s)
      b. During daily changes or incontinent episodes
         i. Wipe off top layer and reapply a thin layer
         ii. Do not scrub off as this will cause tissue trauma
         iii. Removal must occur with skin cleanser or mineral oil, not with soap and water
4. If incontinent garment is necessary, use a product that wicks fluid away from body and if possible, leave the product open (unfastened) while the patient is in bed to optimize air circulation.
5. Discuss pros and cons of urinary catheterization.

Incontinence Associated Dermatitis (IAD) Guidelines
When treating perineal skin damage it is essential to differentiate between pressure ulcers and incontinence associated dermatitis (IAD). A pressure ulcer is an area of localized tissue damage while IAD may present over a more diffuse area. As moisture is only one factor in the development of a pressure ulcer, it is the single cause of IAD. Prolonged contact with irritants such as urine and feces alters the pH of the skin

Symptoms of IAD
- Red denuded skin
- Multiple superficial open areas
- Patient may complain of burning and itching
Frequent sites of IAD

- Buttocks
- Peri-area
- Groin
- Scrotum
- Penis
- Posterior thighs
- Coccyx
- Sacrum

Treatment - Therapeutic Interventions

- Gentle skin cleansing after each incontinent episode.
- Consistent use of moisture barriers.
- Allow skin to air dry if possible, otherwise gently pat dry.
- Avoid use of constrictive incontinent garments for bedbound incontinent patients, an absorptive underpad will do.
- Consider a urinary catheter if appropriate.
- Consider rectal containment devices for chronic liquid stool.
- Add bulking agents to diet or tube feeding to prevent diarrhea.
- Administer antidiarrheal agents when necessary.

References:
2. Donna Zimmaro Bliss, PhD, RN, FAAN; Cindy Zehrer, MS, RN, CCRA; Kay Savik, MS; Debra Thayer, MS, RN, CWOCN; and Graham Smith, BS. Incontinence-Associated Skin Damage in Nursing Home Residents: A Secondary Analysis of a Prospective, Multicenter Study. Ostomy/Wound Management - ISSN: 0889-5899 - Volume 52 - Issue 12 - December 2006 - Pages: 56 - 66
Nutrition

Therapeutic Measures (for patients who can tolerate oral intake)

1. Encourage favorite foods.
2. Offer small feedings frequently.
3. Vary food consistency. Puree foods if necessary and if acceptable to the patient.
4. Minimize food odors during meal times. Cold foods may be less offensive for some patients.
5. Experiment with nutritional supplements. “Instant Breakfast” type drinks may be more palatable than commercially available drinks for some patients. Opt for nutritional supplements that are higher in protein, noted as ‘plus or extra’ on the label.
6. Offer fluids every 2 hours. Popsicles and ice chips made from frozen fruit juices may be pleasing to the patient with a dry mouth.
7. Assist with oral care after meals and at bedtime (or 4 times a day for the patient who is not eating).
8. Encourage patient to leave the “sick room” for meals, if possible. If the patient must remain in bed or is confined to a single room, remove or clean bedpans, urinals, and commodes. Prepare an area that is as visually appealing as possible.
9. Maintain the head of the bed higher than 30 degrees during meals. Otherwise, head of bed should be no higher than the 30 degrees to reduce friction, shear and chances for aspiration.

Tip: The patient should be permitted to direct food choices and quantities, and should not be forced to eat. The decreased need for food and fluids is part of the dying process. Continued requests for the same foods may be honored - a “balanced” diet is often unrealistic and has lower priority than comfort and pleasure with meals.
Assessment Criteria

Assess Patient and Caregiver Status – Refer to page 7

Assess Wound:
Assess wound on admission, with each dressing change and/or weekly and as needed if condition significantly changes using wound characteristics in the acronym CLOSED:

- Color
- Location
- Odor
- Stage and Size
- Exudate
- Depth
- + Wound Pain

Once the characteristics of the wound have been assessed:
- Initiate/Continue preventative therapeutic measures
- Start/Continue with appropriate skin care products
- Assess and manage wound pain and/or pain associated with dressing changes
- Initiate wound care
  - Cleanse pressure ulcer with wound cleanser and pat dry
  - Apply skin protectant to peri-wound to prepare skin for dressing placement and to prevent maceration. Allow to air dry prior to dressing placement. Once dressing has been applied, reapply skin protectant, ‘picture-framing’ where the dressing meets the skin.
  - Follow appropriate wound care recommendations based upon the stage of the pressure ulcer

The success of your wound care efforts is dependent on many factors. It is imperative to match treatment options to the patient’s physical and mental status, patient’s level of pain, wound assessment (CLOSED) and caregiver availability and ability.

References

General Wound Care

Wound Pain

Morphine Intrasite Gel

Kennedy Terminal Ulcer
1. KL. Kennedy LLC. www.kennedyterminalulcer.com
Dressing Tips for Wounds

1. Primary dressings are in direct contact with the wound bed. Secondary dressings are dressings that cover the primary dressing.
2. When choosing dressings, consider location, ease of use, wear time, cost-effectiveness and caregiver ability. The goal is to leave the dressing in place and allow the wound to heal. Removing the dressing more frequently than once a day may cause tissue injury.
3. Dressing change is determined by the amount of exudate. The goal is to minimize frequency of dressing changes so that wear time is 3-7 days; dressings should not be changed more than once a day. Removing a dressing more frequently than once a day may cause tissue injury. Additionally, the more necrotic the tissue, the more the exudate, thus more odor. The objective is to control the exudate, and thus control odor.
4. Gauze dressings (fluffed) may be utilized to fill dead space between wound bed and skin surface. Nonsterile gauze may be utilized to clean the wound bed. Bandage roll gauze dressings are available as a secondary dressing for extremities.
5. Gauze dressings and tape are not recommended as a wound dressing. Gauze dressings allow moisture to escape thus preventing moist wound environment. Tape fosters skin-stripping. HP has selected adhesive dressings that maintain skin integrity, promote an optimal healing environment and extend wear time.
6. Do not use wet to dry dressings on pressure ulcers, as this non-selective debridement technique causes significant pain and involves multiple dressing changes per day.
<table>
<thead>
<tr>
<th>SUSPECTED DEEP TISSUE INJURY:</th>
<th>THERAPEUTIC MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.</td>
<td></td>
</tr>
<tr>
<td>Further description: Deep tissue injury may be 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 by thin eschar. Evolution may be rapid exposing additional layers of tissue even with optimal treatment.</td>
<td></td>
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<table>
<thead>
<tr>
<th>STAGE I</th>
<th>THERAPEUTIC MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darksly pigmented skin may not have visible blanching; its color may differ from the surrounding area.</td>
<td></td>
</tr>
<tr>
<td>Further description: The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage I may be difficult to detect in individuals with dark skin tones. May indicate “at risk” persons (a heralding sign of risk).</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>STAGE II</th>
<th>THERAPEUTIC MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STAGE III</th>
<th>THERAPEUTIC MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full thickness tissue 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.</td>
<td></td>
</tr>
<tr>
<td>Further description: The depth of a stage III pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus 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.</td>
<td></td>
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<table>
<thead>
<tr>
<th>STAGE IV</th>
<th>THERAPEUTIC MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full thickness tissue 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.</td>
<td></td>
</tr>
<tr>
<td>Further description: The depth of a stage IV pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus 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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNSTAGEABLE</th>
<th>THERAPEUTIC MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, grey green or brown) and/or eschar (tan, brown or black) in the wound bed.</td>
<td></td>
</tr>
<tr>
<td>Further description: Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and therefore 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.</td>
<td></td>
</tr>
</tbody>
</table>

The staging system was defined by Shea in 1975 and provides a name to the amount of anatomical tissue loss. The original definitions were confusing to many clinicians and lead to inaccurate staging of ulcers associated or due to perineal dermatitis and those due to deep tissue injury.

The proposed definitions were refined by the NPUAP with input from an on-line evaluation of their face validity, accuracy clarity, succinctness, utility, and discrimination. This process was completed online and provided input to the Panel for continued work. The proposed final definitions were reviewed by a consensus conference and their comments were used to create the final definitions. “NPUAP is pleased to have completed this important task and look forward to the inclusion of these definitions into practice, education and research”, said Joyce Black, NPUAP President and Chairperson of the Staging Task Force.

Source: National Pressure Ulcer Advisory Panel 2007
STAGE I

Protective Dressing Option

Transparent film dressing (able to observe area):
Change every 5 days and prn

OR

Hydrocellular foam dressing (good adherence; some degree of cushioning; good for hard to dress areas):
Change every 5 days and prn

Protective Barrier Option

Skin protectant:
Apply to affected area, allow to dry;
Reapply daily and prn to affected area

Wound care dressings may help to prevent further breakdown from friction and shear forces and provide protection to the area of pressure-related alteration.
Stage II ulcers are superficial in nature, but with the dermis damaged, nerve endings are exposed, causing pain and discomfort. The proper dressing covers the ulcer, promotes an optimal healing environment, and reduces/relieves pain.
If there are signs and symptoms of infection (redness, heat, swelling, increased and/or purulent exudate, new/increased pain) notify physician as further therapy may be required to resolve cellulitis.
Assess whether debridement would enhance wound healing or would provide an environment for potential infection and cause undue pain.

Do not institute debridement if:
- The patient is within days/week of death, and the wound is not infected
- The eschar is stable, clean, dry, non-draining, and odorless, and the wound is not infected (this is especially important with heel eschar).

**Assessable Eschar Conditions**

<table>
<thead>
<tr>
<th>Condition Description</th>
<th>Treatment Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eschar intact and no signs of infection</td>
<td>Continue to assess the area at least once a week</td>
</tr>
<tr>
<td>Only clean area if soiled using wound cleanser:</td>
<td>Pat dry; Reduce pressure to area</td>
</tr>
<tr>
<td>Eschar is mostly intact with minimal to moderate drainage</td>
<td>Transparent film dressing:</td>
</tr>
<tr>
<td>Change every 3 days and prn</td>
<td></td>
</tr>
<tr>
<td>Wound crater present with heavy drainage</td>
<td>Pack with calcium alginate dressing:</td>
</tr>
<tr>
<td>Hydrocellular foam dressing:</td>
<td>Change every 3 days and prn</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td>Composite border dressing:</td>
</tr>
<tr>
<td>Change every 1–2 days and prn</td>
<td></td>
</tr>
</tbody>
</table>

**Unstageable Eschar**

- Continue to assess the area at least once a week.
- Only clean area if soiled using wound cleanser:
  - Pat dry; Reduce pressure to area
The Tumor Wound Guidelines provide a basis for the palliative management of wounds resulting from tumor infiltration and guides the selection of the most appropriate wound care supplies. There is no prevention and the aim of treatment is comfort and aesthetics. These wounds will not heal.

Malignant wounds are most often seen in patients with cancers of the breast, lung, stomach, kidney, bladder, uterus, ovary, colon, as well as melanomas, sarcomas and lymphomas. Poor vascular perfusion results in tissue ischemia and necrosis. Generally appears in the last 6 months of life.

**Definition: Malignant Cutaneous Wound (also referred to as fungating or ulcerating wound)** – a break in skin integrity caused by infiltration of malignant cells as a result of a primary lesion (i.e. skin cancer) or the result of a metastatic skin lesion as an extension or infiltration of a cancer.

**Manifestations include:**
- Drainage
- Odor
- Infection
- Tissue necrosis
- Bleeding
- Pain and Discomfort

**Assess Wound:**
Assess wound with each dressing change and document wound characteristics using the acronym CLOSED:

- Color
- Location
- Odor
- Stage and Size
- Exudate
- Depth
- + Wound Pain

**Tumor Wound Dressings:**
Choose a dressing that will provide comfort, improve management of exudate and odor, and maintain a moist environment to prevent wound/tissue trauma.

Base the frequency of dressing changes on the characteristics of the tumor wound, on the patient’s condition, and realistic wound care goals. Dressings should not remain in place for longer than 48 hours as daily wound cleansing and dressing changes are the best ways to manage odor.
Tumor Wound Guidelines

Treatment – Therapeutic Interventions

Odor Control:
Odor often leads to patient isolation and depression. Odor can be addressed with thorough and effective wound cleansing and by utilizing dressings that absorb exudate and seal in the odor; dressings containing antimicrobials to kill bacteria may also be used.

- Discard removed dressing away from patient area, double bagging if necessary
- Cleanse tumor wound with wound cleanser at every dressing change and pat dry
- Use silver antimicrobial dressings to reduce inflammation and odor:
  - Cut to fit and apply to wound bed (if wound bed is dry, activate dressing with sterile water)
  - Cover with appropriate secondary dressing
  - Change every 2 days and prn

Non-Pharmacologic Measures: (based on anecdotal evidence)
- Odor eliminators (not room deodorizers)
- Oil of Wintergreen - saturate a cotton ball and place in the patient’s room
- Kitty litter, charcoal briquettes or coffee grounds: place in an open container under the patient’s bed

Pharmacologic Measures:

<table>
<thead>
<tr>
<th>Metronidazole paste 1%</th>
<th>Apply a thin layer to wound bed daily or as directed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metronidazole 250mg tablets</td>
<td>Crush 1 to 2 tablets (enough to sprinkle a thin layer onto wound bed) and apply to wound bed daily or as directed</td>
</tr>
</tbody>
</table>

- Metronidazole is used to control odor associated with tumor wounds.
- After metronidazole is applied, the wound should be covered with an appropriate dressing.

Exudate Management:
Every effort should be made to absorb and contain excessive exudate. Exudate carries a high bacteria count and accounts for wound odor, patient discomfort and maceration of tissues. Exudate leakage on clothing and its associated odor is a major reason for patient isolation.

- Use a protective skin barrier for surrounding skin at every dressing change
- Minimal Exudate:
  - Apply composite border dressing
  - Change every 1-2 days and prn
- Moderate to Heavy Exudate:
  - Apply calcium alginate dressing to pack any cavity and/or cover all wounded surfaces that are draining
  - Cover with an absorbent dressing
  - Seal with appropriate cover dressing
  - Change every 1-2 days and prn
- If there is a cavity present:
  - Apply wound cavity dressing or calcium alginate rope dressing
  - Cover with hydrocellular foam dressing
  - Change every 2 days and prn
- No cavity present:
  - Apply absorptive non-adhesive dressing placed snugly against the wound/tumor surface to absorb and contain drainage
  - Secure dressing with transparent film dressing, gauze, tape or netting
  - Change every 1-2 days and prn
Non-Pharmacologic Measures:
• For excessive drainage: sanitary pads/tampons
• Use disposable diapers or poly-lined underpads to wrap wounds (works well with extremity wounds and breast lesions where you can secure with a loose bra)

Bleeding Control (localized):
Bleeding can often be prevented by maintaining a moist wound environment and by being very gentle when cleaning the wound and changing the dressings.
• If the wound is dry or has only light drainage:
  - Apply hydrogel as a thin layer to the tumor wound bed at every dressing change
  - Cover with nonadherent dressing
• If wound has moderate to heavy exudate:
  - Apply calcium alginate dressing
  - Change every 2 days and prn, to help control bleeding (do not remove calcium alginate dressing until it separates on its own)

Non-Pharmacologic Measures:
• Apply direct pressure to area as tolerated by patient until bleeding ceases
• Local ice packs

Pharmacologic Measures:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminocaproic acid solution for injection 250mg/mL</td>
<td>Soak a 2x2 gauze in 5mL of aminocaproic acid. Unfold the gauze to create a 4x4 gauze and place it over the bleeding area. Repeat up to 4 times a day for 7-10 days.</td>
</tr>
<tr>
<td>Epinephrine 0.1% (1:1000) solution for injection 1mg/mL</td>
<td>Soak gauze with epinephrine and place it over the bleeding area. Apply pressure to the gauze until bleeding stops.</td>
</tr>
</tbody>
</table>

• Epinephrine is a potent vasoconstrictor. When using this therapy, the patient should be monitored for signs of wound/tissue ischemia.

Pain Related To Dressing Change:
• Pre-medicate patient as necessary with analgesics (e.g. opioids)
• Pain levels should be considered when choosing dressing type
• Apply and remove adhesive dressings properly, per manufacturers recommendation to minimize tissue damage
• Use non-adhesive dressings whenever possible
  - Absorbent gauzes, nonadherent pads, nonelastic roll gauzes, stockinette

Pain Related To Tumor Wound:
• Evaluate effectiveness of systemic pain control regimen, modify as appropriate

Pharmacologic Measure:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine/Intrasite Gel 1mg/mL</td>
<td>Apply a thin layer directly to the wound bed. Cover with appropriate dressing. Change the dressing and reapply the gel every 12 or 24 hours.</td>
</tr>
</tbody>
</table>
References:
4. Oncology Nursing Society, Pittsburgh, Pennsylvania
5. Wound Ostomy and Continence Nurses Society, Glenview, Illinois
6. Smith & Nephew, Wound Management Division, Largo, Florida
7. ConvaTec, A Bristol-Myers Squibb Company, Princeton, New Jersey
The Venous Ulcer Guidelines provide a basis for the palliative management of venous ulcers and selection of the most appropriate wound care supplies.

Venous ulcers occur on the lower legs and are the manifestation of venous hypertension resulting from insufficient flow of venous blood from the legs to the heart due to incompetent valves in perforating veins.

**Predisposing Factors:**

*Most prevalent with:*
- Valve incompetence in perforating veins
- History of deep vein thrombophlebitis (DVT) and thrombosis
- Previous history of venous ulcers

*Additional risk factors include:*
- Advanced age
- Congestive Heart Failure
- Decreased activity
- Family history
- Leg pain reduced by elevation
- Obesity

**Anatomic Location:**
- Medial aspect of lower leg and ankle

**Wound Characteristics/Appearance:**
- Flat, irregular wound margins without undermining
- Superficial wound
- Ruddy, granular tissue
- Moderate to heavy exudate
- Edema: pitting or non-pitting; possible induration and cellulitis
- Dilated superficial veins
- Skin temperature normal, warm to touch
- Surrounding skin scaling, weepy
- Infection uncommon
- Periwound and leg hyperpigmentation
  - Hemosiderin Staining: hyper-pigmentation stain of skin from leakage of red blood cells into the tissue
  - Atrophie Blanche: white plaques with dotlike capillaries
- Possible dermatitis
- Lipodermatosclerosis: woody induration of the leg, leg looks like an inverted champagne bottle
- Minimal pain (typically); pain typically worsened by dependency and reduced by elevation
- Peripheral pulses present/palpable (if no coexisting arterial disease)
- Capillary refill normal (<3 seconds) (if no coexisting arterial disease)
Treatment - Therapeutic Interventions

**Overall Goal: Symptom Management**
- Absorb exudate
- Control edema
- Maintain moist wound environment
- Protect intact skin
- Maintain patient comfort

Effective treatment of a venous ulcer involves caring for the wound and managing the underlying venous disease. Controlling edema is the most important goal in managing chronic venous insufficiency. Methods to accomplish this include elevation of the affected limb, compression therapy (if the patient is ambulatory) and, sometimes medications or surgery. Wound care involves selecting the best dressing for a venous ulcer.

Occlusive dressings are typically selected for venous ulcers because they promote growth of granulation tissue and reepithelialization. If an ulcer contains necrotic debris, a moist gauze dressing or hydrocolloid dressing can be used to provide autolytic debridement. The goal in dressing selection is to effectively control exudate while maintaining a moist wound surface. Hydrocolloid dressings and foam dressings retain moisture in the wound while absorbing light to moderate drainage. More absorbent dressings can be used for venous ulcers with moderate to heavy drainage.

**Periwound Area:**
- Apply skin protectant or protectant paste to periwound area at every dressing change

**Exudate Management:**
- Minimal
  - Moisture-retentive dressings: thin foam dressing, transparent film dressing
  - Change every 3-5 days and prn
- Moderate and Heavy
  - Absorbent dressing: calcium alginate dressing
  - Cover with hydrocellular foam dressing
  - Change every 2-3 days and prn

**Assess Bacterial Burden:**
- Assess patient for signs/symptoms of increased bacterial burden
  - Friable granulation tissue, change in color of wound bed, absent or abnormal granulation tissue, impaired healing, increased or abnormal odor, increased serous drainage, increased pain at wound site
- Utilize antimicrobial dressing
  - Cover with appropriate secondary dressing based upon amount of exudate
  - Change every 3 days and prn
Compression Therapy to Overcome Venous Hypertension:
(Therapy not available from HP)

- Assess Ankle-Brachial Index (ABI)
  - ABI: Vascular assessment technique which determines the ratio of the ankle to the brachial systolic pressure; normal: above 0.9

- Select appropriate compression therapy to provide at least 30mm Hg compression at the ankle
  - Therapeutic support stockings
  - Unna’s Boot
  - Compression pumps
  - Short stretch bandages

*Note: Use with caution in patients with cardiac insufficiency, because of the resulting increase in cardiac preload.*

References:
1. Wound, Ostomy and Continence Nurses Society, Glenview, IL
   Clinical Fact Sheets: Quick Assessment of Leg Ulcers, Venous Insufficiency (Stasis)
Arterial Ulcer Guidelines

The Arterial Ulcer Guidelines provide a basis for the palliative management of arterial ulcers and selection of the most appropriate wound care supplies.

Arterial ulcers are the result of tissue ischemia due to arterial insufficiency. Arterial insufficiency occurs when arterial blood flow is interrupted by an obstruction or by narrowing of an artery (arterial stenosis). Occlusion can occur in any artery and can result from trauma or chronic ailment. In time, arterial insufficiency leads to arterial ulcers.

Predisposing Factors:

Etiology:
- Arteriosclerosis

Additional risk factors include:
- Advanced age
- Diabetes mellitus
- Family history
- Hypertension
- Obesity
- Peripheral vascular disease
- Smoking

Anatomic Location:
- Between toes or on tips of toes
- Over phalangeal heads
- Lateral malleolus
- Heels/pressure points
- Areas subjected to repetitive trauma or rubbing of footwear

Wound Characteristics/Appearance:
- Small, round with smooth, well-demarcated borders – “punched out” appearance
- Gangrene, necrosis or eschar may be present
  - Wet gangrene: result of infection, dry gangrene becomes soggy, moist, soft, with pus
  - Dry gangrene: dark brown, black non-viable tissue forming a hard mass, may separate and auto-debride without treatment
- Wound bed deep, pale usually lacking granulation tissue
- Periwound tissue blanched or purpuric
- Painful
  - Intermittent claudication: cramping in the lower extremity during activity, pain begins with activity and stops after rest
  - Nocturnal/positional pain: pain with elevation of legs commonly noticed at night
  - Resting pain
- Cellulitis, edema is variable and localized (dependent, pitting)
- Exudate: minimal to none, dry unless infected
- Thin, shiny, taut, dry skin
- Hair loss on lower extremity
- Thickened toenails
- Pallor on elevation and dependent rubor
- Cyanosis of lower extremity
**Arterial Ulcer Guidelines**

- Skin temperature decreased
- Peripheral pulses absent or diminished
- Capillary refill delayed (>3 seconds)
- Abnormal ankle-brachial index (ABI) very low, generally <0.5
  - ABI: Vascular assessment technique which determines the ratio of the ankle to the brachial systolic pressure
  - Normal: above 0.9
  - Less than 0.8 common indicator of arterial disease

**Treatment – Therapeutic Interventions**

**Overall Goal: Symptom Management**
- Maintain dry wound environment to decrease risk of infection
- Keep the wound protected
- Maintain patient comfort

Arterial wounds require surgical treatment to heal. If surgical treatment is not an option, arterial wounds should be treated as follow:
- Avoid taping dressings to patient’s skin; tape from one area of the dressing to another
- Compression therapy is contraindicated
- Cleanse wound at every dressing change with wound cleanser, pat dry

**Periwound Area:**
- Apply skin protectant to periwound at every dressing change

**Gangrene Management:**
- Intact dry gangrene
  - No debridement, leave intact
  - Paint with skin protectant or povidone-iodine daily to keep dry
  - Loosely cover with gauze dressing to protect
- Unstable gangrene
  - Conservative debridement required, consult with physician
- Wet to damp dressings:
  - NSS or Dakin’s ⅛ strength soaked gauze dressing
  - Cover with dry gauze dressing or tubular dressing
  - Change up to 3 times a day

**Infected Tissue: Consult with physician**

**Pain Management:**
- If patient is ambulatory, encourage walking to patient’s pain tolerance three times per week
- Treat with pain medications (patient may require opioid therapy) and other traditional pain relief methods
- Neutral leg positioning
- Avoid cold and/or extreme temperatures
**Dressing Choices:**
Apply dry gauze dressing, change every 2 days and prn – keep wound dry
For arterial wounds, gauze dressing choices include:
- Nonadherent Sterile Pad
- Gauze Sponge
To secure gauze dressing in place, choices include:
- Conforming stretch bandage
- Tubular dressing

**References:**
1. Wound, Ostomy and Continence Nurses Society, Glenview, IL.
   Clinical Fact Sheet: Quick Assessment of Leg Ulcers
   Arterial Insufficiency
7. Smith & Nephew, Wound Management Division, Largo, Florida
8. ConvaTec, A Bristol-Myers Squibb Company, Princeton, New Jersey
The Skin Tear Guidelines provide a basis for the management of skin tears and selection of the most appropriate wound care supplies.

A Skin Tear is a traumatic wound that often results from external friction and/or shearing forces that separate the epidermis from the dermis (partial thickness wound) or separate both the epidermis and dermis from the underlying structure (full thickness wound).

The goal is to promote an environment conducive to healing. The dressing may be left in place for 5 days or longer, as long as there is no sign of infection. Frequent dressing changes will increase discomfort and disrupt healing. If adhesive products are used as a barrier, they should be left undisturbed and allowed to fall off (clip loose edges).

*Tip: Mark the outside of the dressing with a waterproof, non-toxic ink pen to indicate that dressing should be removed beginning with the side nearest where the skin flap is attached to the skin, pulling gently in that direction.*

**Prevention – Refer to Pressure Ulcer Prevention and Skin Care**

**Payne-Martin Classification System for Skin Tears:**
Category I – Skin Tear without tissue loss  
Category II – Skin Tear with partial tissue loss  
Category III – Skin Tear with complete tissue loss  

**Treatment – Therapeutic Interventions**
- Cleanse area with wound cleanser, pat dry  
- Apply skin protectant to intact surrounding skin  
- Approximate edges of skin tear as closely as possible with cotton tipped applicator if skin flap is viable  
- If skin is not fragile and there is minimal to no drainage  
  - Apply transparent film dressing  
  - Change every 5 days and prn  
  - If wound bed is dry, apply hydrogel  
- For very fragile skin  
  - Apply nonadherent gauze dressing  
  - Secure with gauze dressing or tubular dressing  
  - Change every 5 days and prn  
- For moderate to heavy drainage  
  - Apply hydrocellular foam dressing  
  - Change every 5 days and prn  
- For signs of infection  
  - Apply an antibiotic ointment  
  - Cover with gauze dressing or tubular dressing  
  - Change every 1-2 days and prn
Glossary of Wound Care Terms

**Bioburden**: Amount of infection producing organisms in a wound

**Cellulitis**: Inflammation of the tissue around the skin injury

**Colonization**: Presence of bacteria in a wound, no signs/symptoms of infection are present

**Dead space**: An area of no tissue, must be packed to provide a healing wound environment

**Debridement**: Removal of non-viable tissue from the wound bed

- **Autolytic**: Use of the body's white blood cells to breakdown non-viable tissue (occlusive dressings, hydrogel)
- **Enzymatic**: A chemical agent is placed in the wound to destroy non-viable tissue
- **Mechanical**: Use of external force to remove non-viable tissue (wet-to-dry-dressings), very painful, not recommended
- **Sharp**: Use of instruments (scalpel, scissors) to remove non-viable tissue
- **Biologic**: Use of medically supplied maggots to remove non-viable tissue

**Deep tissue injury (DTI)**: An area of purple discoloration that may indicate tissue destruction below the surface of the skin (Classified as a stage I pressure ulcer)

**Epithelial**: Pink, scar-like tissue

**Erythema**: Area of redness (asymmetrical pattern in peri-wound skin may indicate infection)

**Eschar**: Hard, dry non-viable tissue, often dark black or brown, leather-like appearance

**Excoriated**: Red, raw irritated skin

**Exudate**: Wound drainage; assessment of the quantity and type aid in appropriate wound treatment

- **Type**:
  - **Serous**: Clear, watery fluid
  - **Sanguineous**: Bloody drainage
  - **Serosanguineous**: A mix of clear and bloody exudates, pinkish in color
  - **Purulent**: Thick yellow, green, or brown drainage, may have a foul odor

- **Quantity**:
  - **Small/scant**
  - **Minimal/moderate**
  - **Heavy**
  - **Copious**

**Fistula**: Abnormal passage between two organs or an organ and the body surface

**Fluctuance**: A soft, boggy area of movement below a wound surface

**Friable**: Tissue that bleeds with minimal touch

**Friction**: Skin moves in one direction across a support surface
Glossary of Wound Care Terms

**Full thickness**: Tissue loss that extends deep into the dermis of subcutaneous tissue (used to classify non-pressure related wounds)

**Gangrene**: Dead, devitalized tissue, a result of an interruption of blood flow

**Granulation**: Beefy red tissue with a cobblestone-like appearance

**Induration**: A hard raised area around the wound edge (may indicate infection)

**Kennedy Terminal Ulcer**: Phenomena associated with end-of-life, quick developing ulcer usually located on the sacrum that may begin red and progress to black or a full thickness wound in a little as 36 hours

**Maceration**: A prune-like appearance of skin related to excessive moisture

**Partial thickness**: Superficial loss of tissue from the epidermis or early into the dermis (used to classify non-pressure related wounds)

**Peri-wound skin**: Area of intact skin around the wound

**Shear**: Adjacent surfaces slide across one another; skin remains stationary and underlying tissue shifts

**Slough**: Stringy, wet non-viable tissue, may be yellow, grey, brown

**Tunneling**: An area of dead space that creates a pathway leading away from the original wound site

**Undermining**: Loss of tissue underlying the intact skin around the wound margins

**OASIS Specific terms**:
(Pressure or vascular ulcers)

**Fully granulating**: Wound bed filled with granulating tissue to the level of the surrounding skin, no dead space, no avascular tissue, no signs or symptoms of infection, wound edges are opened

**Not healing**: >25% of wound bed is covered in avascular tissue OR signs or symptoms of infection OR clean but not granulating wound bed OR hyperkaretotic wound edges OR persistent failure to improve despite comprehensive wound management

**Partially granulating**: >25% of wound bed is covered in granulation tissue, <25% of wound is covered in avascular tissue, wound may have dead space, no signs or symptoms of infection, wound edges are opened
<table>
<thead>
<tr>
<th>BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK</th>
<th>1 Point</th>
<th>2 Points</th>
<th>3 Points</th>
<th>4 Points</th>
<th>SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sensory Perception</strong> Ability to respond meaningfully to pressure-related discomfort</td>
<td>Completely limited: Unresponsive (does not moan, flinch, or grasp) to painful stimuli because of diminished level of consciousness or sedation. OR Limited ability to feel pain over most of body surface.</td>
<td>Very limited: Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness. OR Has a sensory impairment that limits the ability to feel pain or discomfort over half of body.</td>
<td>Slightly limited: Responds to verbal commands but cannot always communicate discomfort or need to be turned. OR Has some sensory impairment, which limits ability to feel pain or discomfort in 1 or 2 extremities.</td>
<td>No impairment: Responds to verbal commands. Has no sensory deficit that would limit ability to feel or voice pain or discomfort.</td>
<td>1 Point</td>
</tr>
<tr>
<td><strong>Moisture Degree to which skin is exposed to moisture</strong></td>
<td>Constantly moist: Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.</td>
<td>Very moist: Skin is often, but not always, moist. Linen must be changed at least once a shift.</td>
<td>Occasionally moist: Skin is occasionally moist, requiring an extra linen change approximately once a day.</td>
<td>Rarely moist: Skin is usually dry; linen requires changing only at routine intervals.</td>
<td>4 Points</td>
</tr>
<tr>
<td><strong>Activity Degree of physical activity</strong></td>
<td>Confined to bed. Chairs: Ability to walk severely limited or nonexistent. Cannot bear own weight and/or must be assisted into chair or wheelchair.</td>
<td>Walks occasionally: Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.</td>
<td>Walks frequently: Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.</td>
<td>No limitations: Makes major and frequent changes in position without assistance.</td>
<td>1 Point</td>
</tr>
<tr>
<td><strong>Mobility Ability to change and control body position</strong></td>
<td>Completely immobile: Does not make even slight changes in body or extremity position without assistance.</td>
<td>Probably inadequate: Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.</td>
<td>Slightly limited: Makes frequent though slight changes in body or extremity position independently.</td>
<td>Adequate: Makes frequent changes in body or extremity position independently.</td>
<td>4 Points</td>
</tr>
<tr>
<td><strong>Nutrition Usual food intake pattern</strong></td>
<td>Very poor: Never eats a complete meal. Rarely eats more than one third of any food. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement. OR Is NPO and/or maintained on clear liquids or IVs for more than 5 days.</td>
<td>Probably inadequate: Rarely eats a complete meal and generally eats only about half of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement. OR Receives less than optimal amount of liquid diet or tube feeding.</td>
<td>Adequate: Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement if offered. OR Is on a tube-feeding or TPN regimen that probably meets most of nutritional needs.</td>
<td>Excellent: Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplements.</td>
<td>3 Points</td>
</tr>
<tr>
<td><strong>Friction and Shear Problem</strong></td>
<td>Requires moderate to maximal assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximal assistance. Spasticity, contractions, or agitation leads to almost constant friction.</td>
<td>Potential problem: Moves feebly or requires minimal assistance. During a move skin probably slides to some extent against sheets, chair, restraints, or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.</td>
<td>No apparent problem: Moves in bed and in chair independently and has sufficient muscle strength to sit up completely during move. Maintains good position in bed or chair at all times.</td>
<td>Total Score:</td>
<td>2 Points</td>
</tr>
</tbody>
</table>


Very High Risk: Total Score < 9
High Risk: Total Score 10-12
Moderate Risk: Total Score 13-14
At Risk: Total Score 15-18

*If other major risk factors are present, advance to next level of risk. (Ayello & Braden 2002)
## Differential Diagnosis of Leg Ulcers

<table>
<thead>
<tr>
<th></th>
<th>Venous</th>
<th>Arterial</th>
<th>Diabetic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Site</strong></td>
<td>gater area, medial malleolus</td>
<td>any part of leg, commonly below the ankle</td>
<td>any part of leg, commonly below the ankle &amp; on the foot</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>usually large</td>
<td>usually small</td>
<td>often very small</td>
</tr>
<tr>
<td><strong>Edge</strong></td>
<td>shallow with diffuse edges</td>
<td>deep with “cliff” edges</td>
<td>deep with “cliff” edges (callus)</td>
</tr>
<tr>
<td><strong>Floor</strong></td>
<td>exuding/granulating</td>
<td>dry (necrotic)</td>
<td>dry (necrotic)</td>
</tr>
<tr>
<td><strong>Edema</strong></td>
<td>generalized</td>
<td>localized</td>
<td>localized</td>
</tr>
<tr>
<td><strong>Staining</strong></td>
<td>always</td>
<td>never</td>
<td>never</td>
</tr>
<tr>
<td><strong>ABI</strong></td>
<td>&gt;0.8</td>
<td>&lt;0.8</td>
<td>not reliable</td>
</tr>
<tr>
<td><strong>Pulses</strong></td>
<td>normal</td>
<td>reduced or absent</td>
<td>not reliable</td>
</tr>
<tr>
<td><strong>Pain</strong></td>
<td>some (dependent)</td>
<td>present, especially at night (elevated)</td>
<td>none – neuropathy</td>
</tr>
</tbody>
</table>

*Permission to use granted from Smith & Nephew, Wound Management Division, Largo, FL, 2004.*
### Wound Care Product File

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wound Cleanser</strong></td>
<td></td>
</tr>
<tr>
<td>Skintegrity Wound Cleanser (Medline)</td>
<td>8 oz spray bottle</td>
</tr>
<tr>
<td><strong>Hydrocolloid Dressings</strong></td>
<td></td>
</tr>
<tr>
<td>Exuderm OdorShield (Medline)</td>
<td>Hydropolymer 4” x 4”</td>
</tr>
<tr>
<td>Exuderm OdorShield (Medline)</td>
<td>Hydropolymer sacral 6” x 6.5”</td>
</tr>
<tr>
<td><strong>Tape</strong></td>
<td></td>
</tr>
<tr>
<td>Tape, Paper 1” (Medline)</td>
<td>1”x10yds</td>
</tr>
<tr>
<td>Tape, Paper 2” (Medline)</td>
<td>2”x10yds</td>
</tr>
<tr>
<td><strong>Hydrogel</strong></td>
<td></td>
</tr>
<tr>
<td>Skintegrity Hydrogel (Medline)</td>
<td>hydrogel 4 oz</td>
</tr>
<tr>
<td><strong>Hydrocellular Foam Dressings</strong></td>
<td></td>
</tr>
<tr>
<td>Allevyn Adhesive (SN)</td>
<td>3” x 3”</td>
</tr>
<tr>
<td>Allevyn Adhesive (SN)</td>
<td>5” x 5”</td>
</tr>
<tr>
<td>Allevyn Adhesive (SN)</td>
<td>7” x 7”</td>
</tr>
<tr>
<td>Allevyn Sacrum (SN)</td>
<td>6 3/4” x 6 3/4”</td>
</tr>
<tr>
<td>Allevyn Sacrum (SN)</td>
<td>9” x 9”</td>
</tr>
<tr>
<td>Allevyn Heel (SN)</td>
<td>heel nonadhesive</td>
</tr>
<tr>
<td>Allevyn Thin (SN)</td>
<td>2” x 2 3/8”</td>
</tr>
<tr>
<td>Allevyn Thin (SN)</td>
<td>4” x 4”</td>
</tr>
<tr>
<td>Allevyn Plus Adhesive (SN)</td>
<td>5” x 5”</td>
</tr>
<tr>
<td>Allevyn Plus Adhesive (SN)</td>
<td>7” x 7”</td>
</tr>
<tr>
<td>Allevyn Cavity (SN)</td>
<td>2” circular</td>
</tr>
<tr>
<td>Allevyn Non-Adhesive (SN)</td>
<td>2” x 2”</td>
</tr>
<tr>
<td>Allevyn Non-Adhesive (SN)</td>
<td>4” x 4”</td>
</tr>
<tr>
<td>Allevyn Non-Adhesive (SN)</td>
<td>6” x 6”</td>
</tr>
<tr>
<td><strong>Calcium Alginate Dressings</strong></td>
<td></td>
</tr>
<tr>
<td>Maxorb Extra Calcium Alginate (Medline)</td>
<td>2” x 2”</td>
</tr>
<tr>
<td>Maxorb Extra Calcium Alginate (Medline)</td>
<td>4” x 4”</td>
</tr>
<tr>
<td>Maxorb Extra Calcium Alginate (Medline)</td>
<td>12’ Rope</td>
</tr>
<tr>
<td><strong>Gauzes</strong></td>
<td></td>
</tr>
<tr>
<td>Gauze Sponge (Medline)</td>
<td>Gauze sponge ST 8ply 2x2</td>
</tr>
<tr>
<td>Gauze Sponge (Medline)</td>
<td>Gauze sponge ST 8ply 4x4</td>
</tr>
<tr>
<td>Gauze Sponge (Medline) - sent by pack</td>
<td>Gauze sponge 4x4 8ply NS</td>
</tr>
<tr>
<td>Soform Gauze Roll (Medline)</td>
<td>Gauze roll relaxed 3”</td>
</tr>
<tr>
<td>Soform Gauze Roll (Medline)</td>
<td>Gauze roll relaxed 4”</td>
</tr>
<tr>
<td>Abdominal Pad (Medline)</td>
<td>Abdominal pad ST 5x9</td>
</tr>
<tr>
<td>Abdominal Pad (Medline)</td>
<td>Abdominal pad ST 8x10</td>
</tr>
<tr>
<td>CATEGORY</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Tubular Dressings</td>
<td></td>
</tr>
<tr>
<td>Surgilast Tubular Elastic Drsg - sent by box</td>
<td>Sz 3 25 yds</td>
</tr>
<tr>
<td>Surgilast Tubular Elastic Drsg - sent by box</td>
<td>Sz 4 25 yds</td>
</tr>
<tr>
<td>Transparent Film Dressings</td>
<td></td>
</tr>
<tr>
<td>Mefilm (TDM)</td>
<td>2.4” x 2.8”</td>
</tr>
<tr>
<td>Mefilm (TDM)</td>
<td>4” x 4.8”</td>
</tr>
<tr>
<td>Mefilm (TDM)</td>
<td>6” x 8”</td>
</tr>
<tr>
<td>OpSite (SN)</td>
<td>5 1/2” x 4”</td>
</tr>
<tr>
<td>OpSite (SN)</td>
<td>11” x 11 3/4”</td>
</tr>
<tr>
<td>Non-Adherent Dressings</td>
<td></td>
</tr>
<tr>
<td>Nonadherent Sterile Pad (MCK)</td>
<td>2” x 3”</td>
</tr>
<tr>
<td>Nonadherent Sterile Pad (MCK)</td>
<td>3” x 4”</td>
</tr>
<tr>
<td>Exudry Dressing (SN)</td>
<td>4” x 6”</td>
</tr>
<tr>
<td>Exudry Dressing (SN)</td>
<td>6” x 9”</td>
</tr>
<tr>
<td>Composite Border Dressings</td>
<td></td>
</tr>
<tr>
<td>Stratasorb Composite Island Dressing (Medline)</td>
<td>4” x 4”</td>
</tr>
<tr>
<td>Stratasorb Composite Island Dressing (Medline)</td>
<td>6” x 6”</td>
</tr>
<tr>
<td>Silver Antimicrobial Dressings</td>
<td></td>
</tr>
<tr>
<td>Maxorb Extra Ag CMA/Alginate (Medline)</td>
<td>1” x 12” rope</td>
</tr>
<tr>
<td>Maxorb Extra Ag CMA/Alginate (Medline)</td>
<td>4” x 4.75”</td>
</tr>
<tr>
<td>Skin Care</td>
<td></td>
</tr>
<tr>
<td>Sureprep (Medline)</td>
<td>skin protective wipe</td>
</tr>
<tr>
<td>Remedy 4-in-1 Body Cleanser Foam (Medline)</td>
<td>9 oz foam cleanser</td>
</tr>
<tr>
<td>Soothe &amp; Cool No-Rinse Shampoo/Body Wash (Medline)</td>
<td>8 oz nonrinse shampoo/bodywash</td>
</tr>
<tr>
<td>Remedy Dimethicone Moisture Barrier (Medline)</td>
<td>4 oz barrier cream</td>
</tr>
<tr>
<td>Soothe &amp; Cool Moisturizing Lotion (Medline)</td>
<td>8oz moisturizing body lotion</td>
</tr>
<tr>
<td>Remedy Antifungal Cream (Medline)</td>
<td>4 oz antifungal cream</td>
</tr>
<tr>
<td>Remedy Calazime Protectant Paste (Medline)</td>
<td>4 oz protective moisture barrier</td>
</tr>
<tr>
<td>Medications</td>
<td></td>
</tr>
<tr>
<td>Aminocaproic Acid (250 mg/mL) Solution for Injection</td>
<td></td>
</tr>
<tr>
<td>Dakins 1/4 Strength Solution</td>
<td></td>
</tr>
<tr>
<td>Epinephrine 0.1% (1:1000) 1 mg/mL vial Solution for Injection</td>
<td></td>
</tr>
<tr>
<td>Metronidazole 1% Paste</td>
<td></td>
</tr>
<tr>
<td>Metronidazole Tablets 250mg (crushed to sprinkle on wound bed)</td>
<td></td>
</tr>
<tr>
<td>Morphine/Intrasite Gel 1 mg/mL</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
</tr>
</tbody>
</table>