Wound Care: Wound Assessment and Management			
Signing Authority:	Chief Nursing Executive		
Approval Date:	03-12-2018	Effective Date:	03-12-2018

SCOPE:

This policy applies to nurses and occupational therapists, involved in the cleansing and dressing of wounds on patients at the Royal Victoria Regional Health Centre (RVH).

POLICY STATEMENT:

It is the policy of RVH that all staff approved through legislation and/or hospital policy involved in cleansing or dressing a wound shall adhere to the following:

1. A detailed wound assessment shall be completed prior to any wound management decisions.
2. Wound assessment shall occur with each dressing change, at which time the clinical status of the wound, and overall patient outcomes (progression or regression) shall be evaluated and treatment plan modified if indicated.
3. The wound assessment shall be documented on the patients' health record at the time the wound is initially discovered and at each dressing change.
4. The most responsible provider (MRP) shall be notified immediately if the wound is displaying signs of increased bacterial load (Appendix I).
5. If infection is suspected in a surgical wound, Infection Prevention and Control (IPAC) shall be notified by means of a phone call. A message is to be left at the IPAC general extension number 44555, providing the date and medical record number of the patient. A notation shall be made on the patients' health record noting that a call has been placed to IPAC.
6. A prescriber order is required for all dressings containing pharmaceuticals which include antibiotics, enzymes, biologics, and pharmacy prepared solutions (i.e. Acetic Acid).
7. A prescriber order is required for all Negative Pressure Wound Therapy dressings.
8. With the exception of those dressings noted above, non-antimicrobial dressings and dressings in the following antimicrobial categories shall be applied at the discretion of the nurse or occupational therapist with the appropriate knowledge, skill, and judgment:
    a. Silver dressings
    b. Iodine based dressings and solutions
    c. Chlorhexidine derivative dressings and solutions
    d. Polyhexamethyl-biguanide (PHMB) dressings
    e. Gentian Violet/Methylene Blue dressings
    f. Hypertonic dressings

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g. Honey dressings

9. If a wound dressing has been initiated, an MRP order to continue with management shall be obtained within 24 hours.
10. It is the responsibility of every nurse and occupational therapist to maintain an up to date knowledge of wound prevention and care.
11. All new surgical site incisions shall be dressed utilizing surgical aseptic technique for a minimum of the first two weeks of wound healing.
12. The nurse or occupational therapist shall utilize aseptic technique when cleansing and/or dressing a wound. With the exception of surgical site incisions, the nurse or occupational therapist shall determine the type of aseptic technique utilized when completing a dressing change considering the following:
    a. surgical asepsis technique is most appropriate for those patients at high risk for infection and for certain procedures such as sharp wound debridement.
    b. medical asepsis technique is most appropriate for those not at high risk for infection such as patients with routine dressings for chronic wounds, venous leg ulcers, or wounds healing by secondary intention with granulation tissue.
    c. manufacturer guidelines
    d. holistic patient assessment (i.e. patient diagnosis, comorbidities, risk for infection, wound size, patient preference, etc.)
13. The frequency of dressing change is determined by wound presentation, such as amount of exudate, type of dressing selected, and/or by prescriber order.
14. Wound care management shall follow the Wound Prevention and Management Cycle (Refer to Appendix III)
15. Consulting the Wound Care Specialist does not require a physician order; however, the following criteria shall be met:
    a. there has been a prior assessment of the wound by the primary nurse or occupational therapist which is documented in the patients' health record
    b. the patient, substitute decision maker, or power of attorney shall be notified that a wound care consultation will be requested
    c. consult requests should meet one of the following criteria:
        i. the frequency of the dressing change is greater than 3 times per week
        ii. the etiology of the wound is unknown or the reason for failure to heal is unknown
        iii. the size of the wound has not decreased by 20-30% by week three of treatment
        iv. if the patient has multiple wounds
        v. if the wound requires packing
    d. the primary nurse shall inform the MRP of treatment recommendations within 24 hours of the wound care specialist consultation

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DEFINITIONS:

Aseptic technique: Asepsis means free from pathogenic microorganisms. Aseptic technique can refer to either medical asepsis (clean technique) or surgical asepsis (sterile technique).

Medical Asepsis: Meticulous hand washing, use of a clean field and clean gloves, sterile instruments, and prevention of equipment and materials becoming contaminated.

Surgical Asepsis: Meticulous hand washing, use of sterile field, use of sterile gloves for application of sterile dressing, and use of sterile instruments. Sterile equipment and products shall not come in contact with non-sterile materials or surfaces.

Compress: Apply cleansing solution such as saline to sterile gauze with excess fluid wrung out prior to application. Apply moistened sterile gauze to wound bed using sterile forceps. A compress should remain in place for 30 seconds and then be replaced with a second compress.

Depth: The deepest part of a wound.

Exudate: Any fluid which has come from tissue or its capillaries, including fluid, cells, or cellular debris.

Healable: A wound with adequate blood supply that can be healed if the underlying cause is addressed.

Length: Is measured as the longest axis of the wound.

Maceration: softening caused by wetting or soaking.

Periwound: The region directly adjacent to the wound edge which extends until the tissue colour and consistency change.

Maintenance: A wound with healing potential, but also has a patient or health system barrier preventing wound healing from taking place. For example, non-adherence to treatment or lack of access to resources.

National Pressure Ulcer Advisory Panel (NPUAP) Staging System: A staging system that describes the depth of tissue involvement in a unilateral dimension of deterioration created by the NPUAP. Appendix IV outlines the NPUAP staging system with a definition of each stage.

Non-healable: Including palliative wounds, these are wounds which cannot heal due to irreversible causes or associated illnesses, such as critical ischemia, or malignancy which is unable to be treated.

Prescriber: A physician, dentist, midwife, or registered nurse in the extended class (nurse practitioner) who has privileges to prescribe within RVH.

Sinus tract: Also known as tunnelling, a sinus tract is when tissue is destroyed in a specific direction from the surface or edge of the wound. This involves a smaller section of the wound whereas undermining involves a significant section of the wound edge.

Undermining: An area of tissue damage extending under intact skin along the underlying edge of a wound.

Width: Is measured at 90 degrees to the length at the next longest axis.

Wound bed: Is the bottom of the wound and can be described by identifying the type of tissue that is predominant in the wound base according to colour and consistency.

Wound cleansing: Is the process of using non-cytotoxic fluids to reduce the bacterial burden and to remove devitalized tissue, metabolic wastes and topical agents that can delay wound healing, while minimizing wound trauma. 0.9% sodium chloride is recommended for all wound types as it is compatible with human tissue and is unlikely to cause cellular damage. Certain dressings such as silver based dressings require sterile water solution be utilized instead of saline.

Wound dressings: Cover wounds and serve to provide: protection from wound contamination and trauma, provision of compression if bleeding or swelling is anticipated, application of medications, absorption of drainage, or debridement of necrotic tissue.

Wound irrigation: Irrigation uses the mechanical force of a stream of solution to remove debris, bacteria and necrotic tissue from a wound. The pressure needed to irrigate wounds is between 4 and 14 psi (pound per square inch). This pressure can be obtained by using a 100-118 millilitre squeeze bottle, or a 30-35 millilitre syringe with a 19-guage angiocath. The wound should be irrigated with at least 100 to 150 millilitres or a sufficient amount to completely irrigate the entire wound surface. This wound cleansing technique can cause more harm than benefit if the force applied causes more pain or tissue damage. In cases of non-healable or maintenance wounds, extensive irrigation is unnecessary and does not require the same amount of irrigation and force as a healable ulcer.

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PROCEDURE:

Wound Assessment & Management

EQUIPMENT:

a. Clean gloves
b. Disposable wound measurement tool
c. Sterile cotton/foam tip applicator
d. Culture swab, if applicable
e. 0.9 % sodium chloride (single-use) or other wound cleansing solution
f. Sterile dressing tray, if applicable
g. Sterile scissors
h. Sterile gloves, if applicable
i. Appropriate personal protective equipment (PPE) (based on risk assessment and/or additional precautions)
j. Wound dressing product
k. Tape (optional depending on type of dressing selected)
l. Protective waterproof under pad

Wound Assessment

1. Perform hand hygiene and don PPE where applicable.
2. Introduce yourself to the patient and family using AIDET.
3. Two identifiers will be used to identify patients.
4. Ensure patient privacy and comfort.
5. Explain the procedure to the patient.
6. Assess patient's level of pain on a scale of 0 to 10.
7. Administer pain medication if required as ordered 30 minutes prior to dressing change.
8. Review patient's wound history, medical history, goals, quality of life issues, nutritional intake and pain.
9. Assess the patient for allergies such as to adhesives or to antiseptics.
10. Review orders for wound care dressing procedure.
11. Assess if the patients family is willing or able to participate in the dressing change.
12. The nurse or occupational therapist will employ aseptic technique when cleansing and dressing wounds.
13. Prepare supplies on bedside table to best facilitate performing procedure.
14. Position patient, expose wound site, adjust lighting, and place a water-proof barrier under the affected region.
15. Perform hand hygiene.
16. Open sterile dressing tray, if applicable.

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17. Establish sterile surface.
18. Apply non-sterile gloves and other appropriate PPE, based on risk assessment.
19. Remove existing dressing, examining for quality and quantity of drainage and odour.
20. The following assessment shall be undertaken when a wound is located on an extremity:
    a. Assessing for a regional pulse.
    b. If a wound is located on a foot, a dorsalis pedis pulse shall be assessed by palpation, and if felt, arterial flow should support wound healing as this indicates 80mmHg is present.
    c. If a wound is located on a hand or arm, a radial pulse may be utilized to determine if appropriate arterial supply is present as if present it would indicate 70mmHg is present to support wound healing.
    d. If no pulse is palpable, the MRP shall be notified as further testing should be considered.
    e. If compression is being considered further testing shall be undertaken prior to application, such as an Ankle Brachial Pressure Index, Arterial Doppler, or Computed Tomography Angiography. If this testing has not been completed the MRP shall be notified.
        i. An Ankle Brachial Pressure Index may not be accurate if the patient is diabetic.
21. Assessment of the wound includes the following information:
    a. Location and etiology of the wound
    b. If a pressure injury, stage of the wound according to NPUAP staging system (Refer to Appendix IV)
    c. Size of wound (length, width, and depth) – See Appendix V for measuring directions
        i. Wound size measurements shall provide information related to wound healing and allow progress to be monitored
        ii. Wound measurement can be completed using a disposable ruler, other measurement devices, transparency tracings, or photography
    d. Wound surface area (length X width)
    e. Presence of sinus tracts, undermining, or tunneling
        i. A sterile cotton tip applicator can be utilized for measuring under the wound edge, or measuring wound tunneling
        ii. Using your thumb and index finger grip the applicator at the point where it is equal to the surface of the skin and measure the distance from your finger to the end of the applicator
        iii. Undermining and tunneling shall be documented using the anatomical clock (Refer to Appendix VI)
    f. Appearance of the wound bed including presence of or probing to any exposed bone

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i. If during probing bone is felt, the MRP shall be notified of the possible risk of osteomyelitis

g. Exudate (type and amount)
h. Odour
i. Condition of the periwound skin and wound edges
j. Level of Bacterial Load (Refer to Appendix I)

22. Referrals should be made to interdisciplinary health care providers as appropriate (e.g. Occupational Therapist, Physiotherapist, Dietitian, Pharmacist, Acute Pain Service). A discussion with the MRP shall take place regarding those health care providers whose consultation requires an order.
23. If cultures of the wound are ordered:
    a. Irrigate the wound with 0.9% sodium chloride until loose debris has washed away
    b. Utilizing a moist swab (may utilize 0.9% sodium chloride to moisten swab), swab a 1 cm^2 area of the cleanest and deepest part of the wound and/or area of granulation tissue
    c. Use enough pressure to release tissue exudate for a period of five seconds
    d. Do no swab exudate or slough (Refer to Appendix VII)
24. Based on wound assessment document on patients health record if the wound should be healable, if it should be considered maintenance, or non-healable due to assessment findings.

<u>Wound Management</u>

1. Perform hand hygiene and don appropriate PPE equipment based on risk assessment.
2. Irrigate or compress the wound with a non-cytotoxic cleansing solution such as 0.9% sodium chloride. Do not irrigate into unexplored tunnels or cavities that the fluid cannot be retrieved from. If irrigating, remove any excess fluid from the wound base.
3. Using forceps and sterile gauze, dry the periwound area.
4. Protect the periwound area using skin barrier as appropriate.
5. Prior to determining dressing choice refer to the Wound Management Decision Algorithm (Refer to Appendix VIII)
6. Determine appropriate dressing based on:
    a. A comprehensive assessment
    b. Consultation with the inter-professional team
    c. Wound ability to heal
    d. Debridement needs
    e. Inflammation/infection
    f. Moisture balance

g. Wound edge
h. Protection from contamination of outside organisms
i. Reducing wound and periwound trauma
j. Patient preference
k. Maintaining wound integrity (i.e. not leaving fibres/debris in the wound)
l. Nursing time, ease of use, and cost
m. For wound products and their attributes refer to the RVH Wound Care Product Formulary found in the Royal Victoria Regional Health Centre Wound Care Resource Binder.
n. For assistance determining the correct dressing for skin tears, full or partial thickness wounds, or pressure injuries please refer to the RVH Wound Care Guidelines in the Royal Victoria Regional Health Centre Wound Care Resource Binder.
o. If contemplating use of an antimicrobial dressing please refer to Appendix I and Appendix II.

7. Determine if prescriber order is required for dressing choice.
8. Apply selected dressing according to manufacturer's instructions.
9. Clean up dressing supplies, disposing of PPE, sharps and biohazardous waste appropriately.
10. Perform hand hygiene.
11. Reposition patient and assess tolerance of procedure.
12. Develop a patient specific interprofessional wound care plan for continuity of care. This includes appropriate referrals and informing the MRP of the wound.
13. Document the initiated or ordered dressing on the patient health record and Kardex. Any information that is not captured on the wound care documentation record shall be documented as a note on the patients chart.

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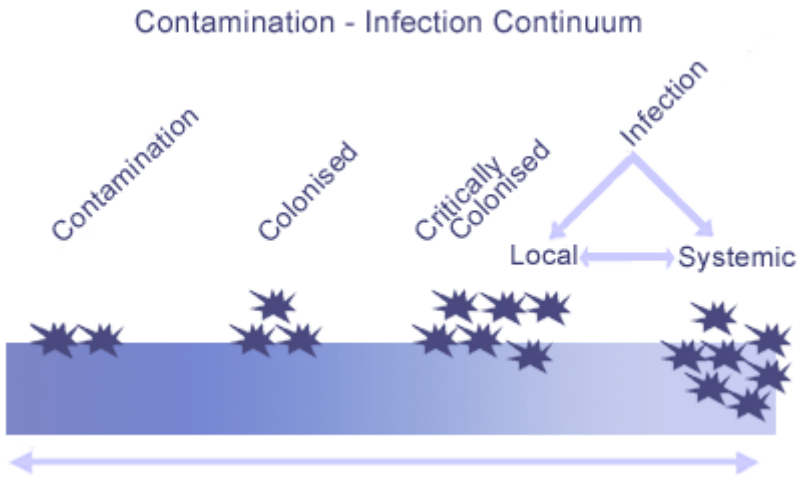

All wounds are contaminated. As bacterial load increases, it poses a greater risk to the patient. Once the level of bacteria reaches critical colonization, it should be managed appropriately to decrease the level of bacterial load and prevent an infection from occurring. To know when antimicrobial management is necessary we must first be able to differentiate the level of bacteria load.

In some instances, antimicrobial dressings can be utilized for infection prevention in patients at risk. In most instances the NERDS (non-healing, exudative wound, red and bleeding wound, debris, and smell) and STONEES (size is bigger, temperature is increased, os – probes to bone, new area of breakdown, erythema/edema, exudate, and smell) pneumonic can assist in determining the extent of bacterial load. The NERDS pneumonic is developed to assist in identifying signs of critical colonization, while the STONEES mnemonic is developed to assist in identifying infection. Three or more of the following signs and symptoms provide a valid, reliable, and sensitive means to identify moderate to high levels of bacterial load, which would benefit from an antimicrobial dressing (NERDS) and may benefit from systemic antibiotics (STONEES) which should be discussed with the patients MRP. Some symptoms such as probing to bone should be independently evaluated to rule out an underlying infection such as osteomyelitis. For example, if during an assessment bone is probed the MRP shall be made aware of the risk of osteomyelitis, even if no other signs of infection are present.

The chart on the following page will assist the clinician in determining if an antimicrobial dressing is warranted and if the patient's MRP should be contacted to discuss if systemic antibiotics are necessary.

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Appendix I: Assessment and Management of Critical Colonization and Infection

Assess the wound for signs and symptoms of NERDS and STONEES	
↓	↓
NERDS Signs of **Critical Colonization**	**STONEES** Signs of **Infection**
Non-Healing: Wounds which have not healed more than 20-40% in 4 weeks	**Size is bigger:** Increased wound size according to longest length and widest width measurements. This only applies to depth for very deep wounds and stage 3 or 4 pressure injuries which should have depth measured with a probe
Exudative wound: Increases in wound exudate or more than 50% of the dressing is stained with exudate	**Temperature is increased:** Increased periwound margin temperature by more than 3 degrees Fahrenheit between two mirror image sites
Red and bleeding wound: Tissue bleeds easily with gentle manipulation, and tissue is bright red and filled with exuberant granulation	**Os (Probes to bone or exposed bone):** Wounds which have exposed bone or the bone is able to be probed during assessment
Debris: Presence of discolored granulation tissue, slough, and necrotic/non-viable tissue	**New area of breakdown:** Appearance of new satellite wounds or areas of breakdown
Smell from wound: Unpleasant or sweet sickening odor	**Erythema/Edema:** Reddened skin and/or swelling in the periwound area
	Exudate: Increased amounts of exudate
	Smell: Unpleasant or sweet sickening odor
↓	↓
If **three** or more NERDS criteria is present consider using an antimicrobial dressing	If **three** or more STONEES criteria is present consider using an antimicrobial dressing and speaking with the MRP about systemic antibiotics

Woo, K.Y., Sibbald, R.G. (2009). A cross-sectional validation study of using NERDS and STONEES to assess bacterial burden. *Ostomy Wound Management, 55*(8), 40-48.

Appendix II: Topical Antimicrobial Agents

Topical Antimicrobial Agents			
Antimicrobial	Dressing Forms	Benefits	Limitations/Cautions
Silver	- Alginates (ie. Silvercel™) - Foams (ie. Mepilex® Ag) - Hydrophilic fibers (ie. Durafiber™ Ag/ Aquacel® Ag) - Gels (ie. Silvasorb) - Powders (ie. Arglaes® Powder) - Coated polyethylene mesh (ie. Acticoat™ Flex 3) - Impregnated hydrocolloids - Combined with charcoal in a sachet (ie. Actisorb™)	- Minimal systemic absorption (Ionic silver dressings) - Ionized silver has potent antimicrobial properties - Ag^0 has anti-inflammatory properties	- Wounds must be moist for ionization to occur - Tissue staining may occur - May be cytotoxic to fibroblasts and keratinocytes - Dressings with high silver content may cause burning and pain - Saline based products when interacting with silver can reduce or negate the silver properties
Iodine	- Solution which can be painted onto wounds (ie. 10% povidone-iodine) - Cadexomer Iodine (ie. Iodosorb™) - Iodophor–impregnated gauze (ie. Iodoform) - povidone iodine impregnated non-adherent gauze (ie. Inadine™)	- Broad spectrum against gram negative, gram positive, anaerobes, viruses, and fungi - Small molecules such as in cadexomer iodine (iodosorb™) allow for biofilm penetration. - Some dressings such as Inadine™ are not likely to stick to the wound bed	- Thyroid function should be monitored especially with prolonged use, large vascular wounds, and patients with uncontrolled thyroid disease - Use with caution in inflammatory wounds as these are inflammatory dressings - Should be avoided for patients with significant renal disease - Not recommended for use with pregnant or breastfeeding women or children up to six months old

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Chlorhexidine Derivatives	- Solution which can be painted onto wounds (ie. 2% Chlorhexidine Gluconate) - Petroleum gauze impregnated with Chlorhexidine (ie. Bactigras™)	- Low systemic absorption - Certain dressings are non-adherent to the wound bed - Bactigras™ is bacteriostatic and bactericidal effective against gram positive and negative bacteria.	- Ineffective against heat resistant spores and acid-fast bacilli - Bactigras™ should not come in contact with eyes, the middle ear, meninges or brain - Caution should be used if using Bactigras™ on more than 15% of body area for adults and 10% for children
Polyhexa-methyline-biguanide (PHMB)	- Ribbon gauze - Gauze squares - Transfer foam - Backed foam - Non-adherent dressings - Gels	- Low risk to tissue toxicity - Broad spectrum antimicrobial activity - High tensile strength material for packing - certain forms such as gauze dressings can be used with Negative Pressure	- There is limited absorption with gauze forms of PHMB - Loosely woven gauze may stick the wound bed - Certain PHMB dressings do not release the antimicrobial into the wound and only affect the bacteria in the dressing
Gentian Violet/ Methylene Blue	- Foam (ie. Hydrofera Blue®)	- Highly absorbent - Can be used for packing - Compatible with enzymatic debridement agents (ie. Santyl®) - Absorbs and wicks away bacteria from the wound into the dressing	- Dressing should be replaced when it changes from blue to white in color - May not be as effective on dry wounds - Dressing must be kept moist - Small amounts of the antimicrobial may leak from the dressing causing a purple/blue hue to the wound edges however this is not cytotoxic

Hypertonic Saline	- Gauze - Gel	- Assists with debridement of necrotic tissue - Assists with controlling bacterial loads	- Due to the sodium content some patients may find the dressing painful - Should not be applied to non-healable wounds
Honey	- Liquid - Alginate pads - Hydrocolloids	- Effective debridement agents against fibrin - Can reduce inflammation and wound pain - Can assist in reducing odor - Contains antioxidants	- May increase wound exudate - Not as effective when there is high levels of exudate present - Not appropriate for dry necrotic wounds

Adapted from:

Keast, D., & Lindholm, C. (2012). Ensuring the correct antimicrobial dressing is selected. *Wounds International, 3*(3), 22-28.

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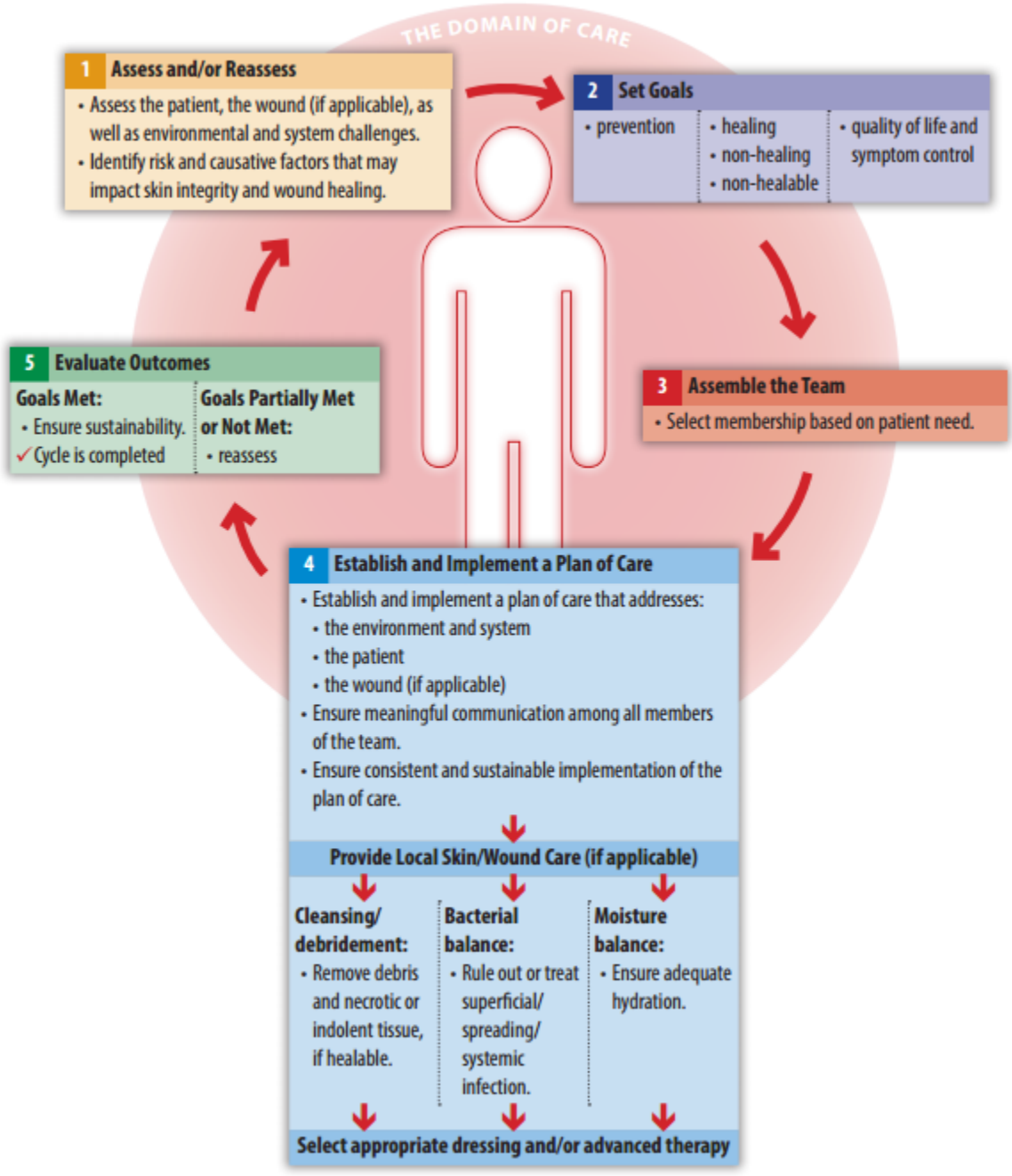
Appendix III: The Wound Prevention and Management Cycle



(Orsted, et al., 2017)

Appendix IV: NPUAP Pressure Ulcer Staging

NPUAP STAGING OF PRESSURE INJURIES	
Stage 1 Pressure Injury: Non-blanchable erythema of intact skin	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.
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-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 (MARSI), 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 extent of tissue loss this is an Unstageable Pressure Injury.
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 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.
Deep Tissue Pressure Injury: 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 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.
Unstageable Pressure Injury: 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 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, intact without erythema or fluctuance) on the heel or ischemic limb should not be softened or removed.
Medical Device Related Pressure Injury	Medical device related 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.

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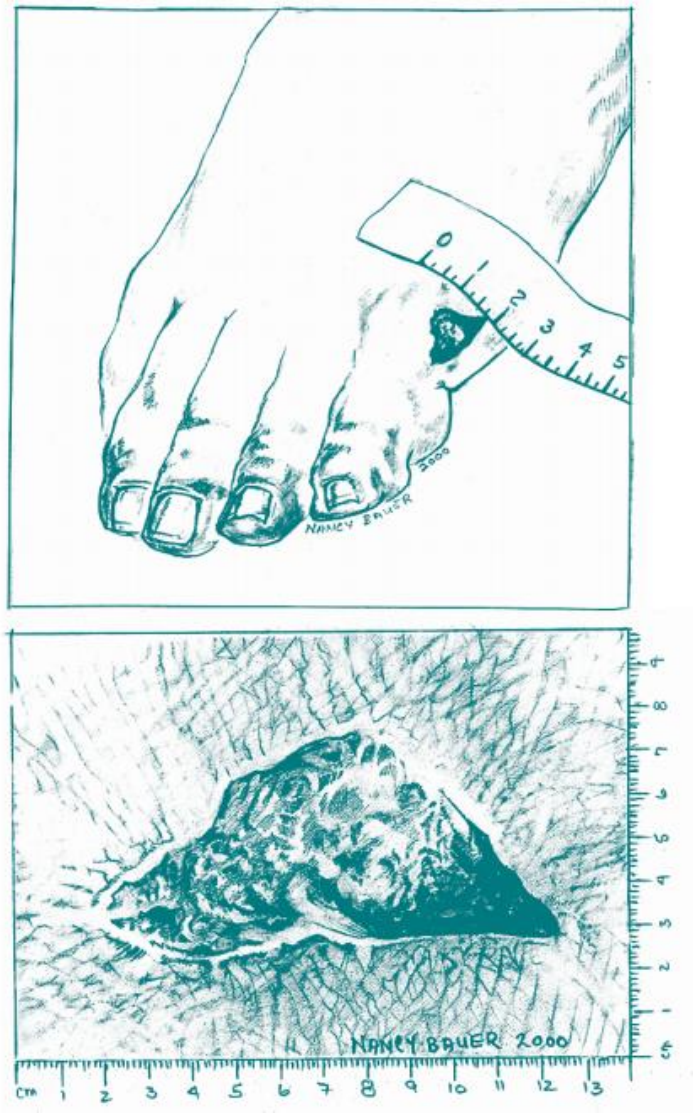
Appendix IV: NPUAP Pressure Ulcer Staging

Mucosal Membrane Pressure Injury	Mucosal membrane pressure injury is found on mucous membranes with a history of a medical device in use at the location of the injury. Due to the anatomy of the tissue these injuries cannot be staged.

Reverse staging should not be used to describe the healing process of a wound. For example a Stage III Pressure Injury that is healing is called a healing Stage III Pressure Injury and not a Stage II or Stage I as the area fills in because the quality of healed tissue is weaker than regular tissue.

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



Surface Area = Length X Width
Where length is the longest axis of the wound and width is 90 degrees to the length at the next longest axis.

Registered Nurses' Association of Ontario (2007). Assessment & Management of Stage I to IV Pressure Ulcers (Revised). Toronto, Canada: Registered Nurses' Association of Ontario.

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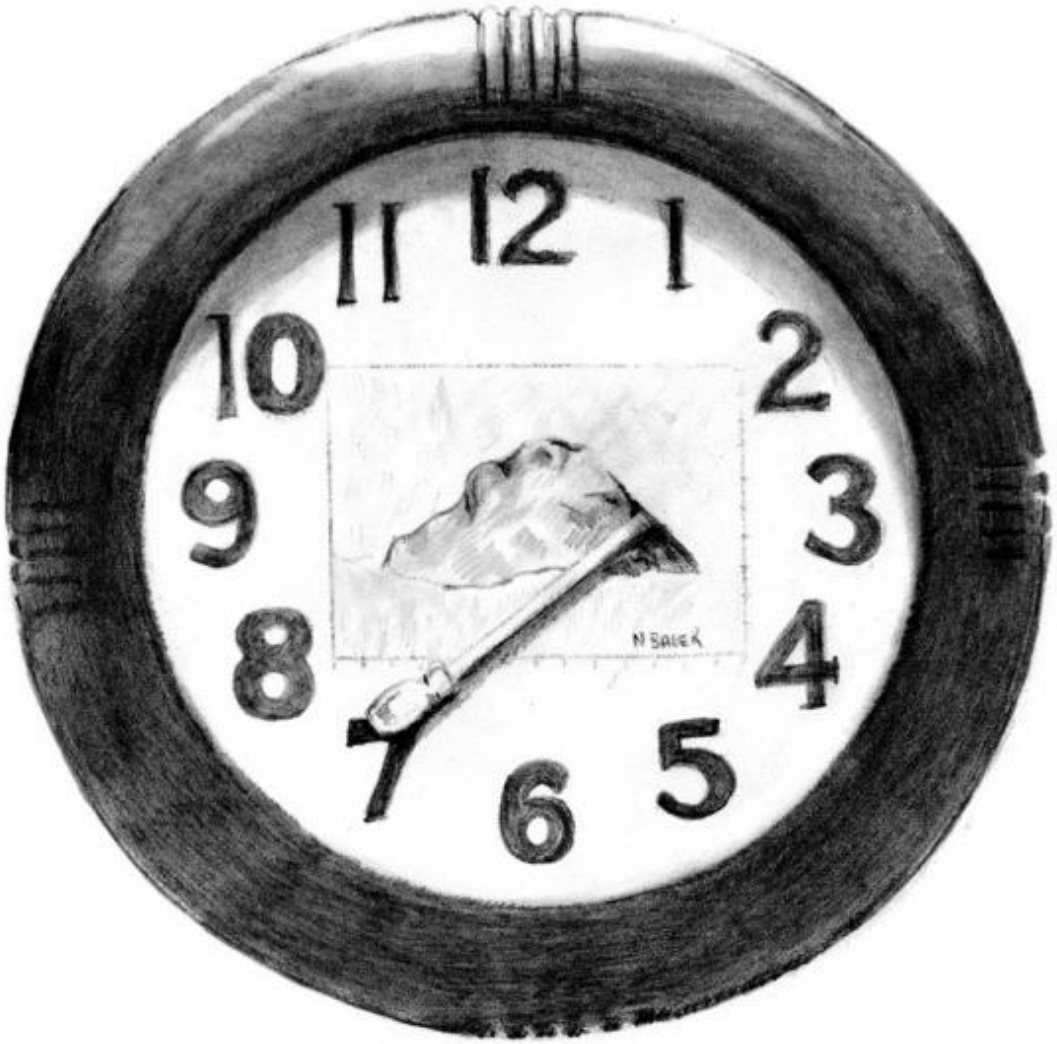
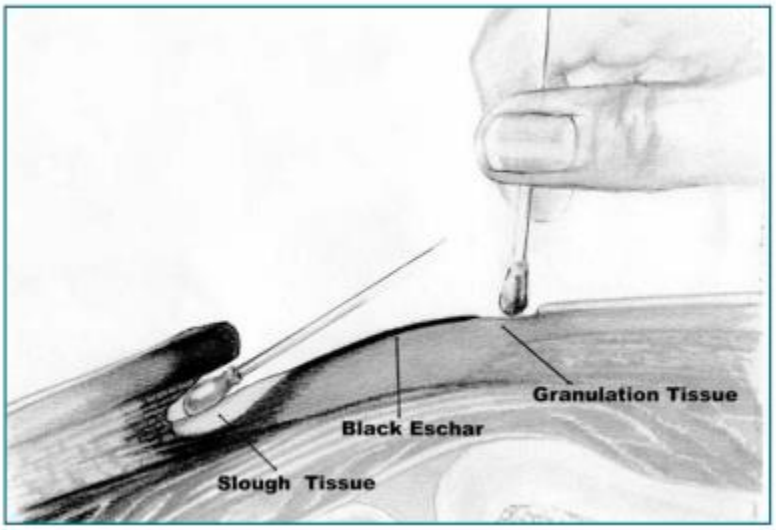
The location of undermining and tunneling should be documented. This is generally done in terms of time. The “clock face” is oriented according to the location of the wound on the client’s body, with the head of the body at 12 o’clock and the feet at 6 o’clock.

In this illustration the undermining would be described as noted at approximately 2 o’clock.



Registered Nurses’ Association of Ontario (2007). Assessment & Management of Stage I to IV Pressure Ulcers (Revised). Toronto, Canada: Registered Nurses’ Association of Ontario.

Appendix VII: Taking a Wound Swab



Obtaining a swab from the drainage will provide information about the exudate **not** the wound. Clean the wound, remove exudate and debris, THEN take a swab from the healthiest looking tissue – you should obtain results that are consistent with the infectious condition of the wound. It is also appropriate to swab any areas with undermining.

Registered Nurses' Association of Ontario (2007). Assessment & Management of Stage I to IV Pressure Ulcers (Revised). Toronto, Canada: Registered Nurses' Association of Ontario.

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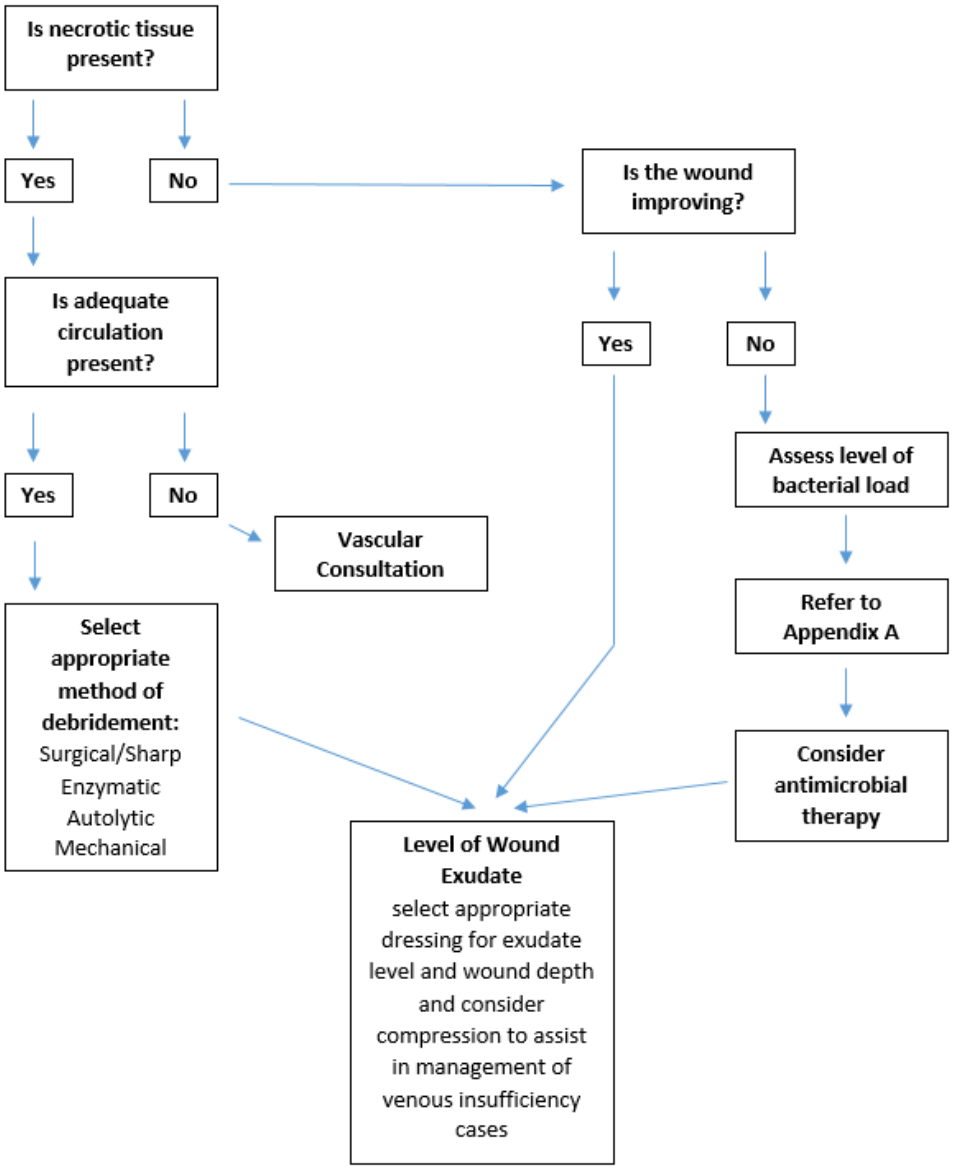
Appendix VIII: Wound Management Decision Algorithm



Tips

- Fill wound cavities/dead space
- Protect the periwound skin (ie. silicone dressings or use of skin preparation)
- If used, allow skin preparation to dry prior to applying adhesives
- Avoid adhesives on friable skin

Adapted from: Smith & Nephew. (n.d.). Wound Bed Preparation. Retrieved from: http://www.smith-nephew.com/professional/products/featured-products/wound-bed-preparation/