

# Health Sciences North MEDICAL DIRECTIVE

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<b>REVISION DATE:</b>	
TITLE:	WOUND CARE TREATMENT
	MD HSN 16

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Stakeholder Consultation and Review:	Date:
Operating Room Committee	January 15, 2020
Surgical Program Council Leadership	January 23, 2020
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Del Boyle	January 15, 2020
Chair, Nursing Professional Practice Council	Date:
Chief Nursing Executive	September 17, 2020
Arsa Smith	
Approval:	Date:
Dr. John Fenton	February 25, 2020
Chair, Medical Advisory Committee	
ARten	

## What

*Controlled Act #2*: Performing a procedure on tissue below the dermis, below the surface of a mucous membrane.

Controlled Act #6: Putting an instrument, hand or finger into an artificial opening into the body.

Specifically, to allow the HSN Registered Nurse Specialized in Wounds, Ostomy and Continence (NSWOC) to perform a physical assessment to determine current medical status and subsequently order specific treatment for patients.

# Who

<u>Delegator</u> Dr. John Fenton, Chief of Staff

Delegates HSN NSWOC

# Where

All HSN inpatient units as well as outpatients units requiring wound care support.

## When

Any registered HSN patient with acute and chronic wounds that require interventions, including but not limited to:

- Surgical wounds
- Palliative skin integrity
- Burns
- Fistulae
- Drains
- Pressure-related injuries
- Moisture-associated dermatitis
- Skin tears
- Lower extremity venous and arterial wounds
- Diabetic wounds
- Lower-limb edema

The following must exist before the directive can be implemented:

- A wound assessment must have been completed and documented by the primary care nurse
- The patient, or appropriate legal guardian, must consent to the plan of care and to receiving care from the NSWOC
- The MRP must be made aware, within 24 hours, of the wound and that a request for wound care assessment will be made. Due to time constraints in wound care the most responsible nurse may initiate the process.

Any untoward outcomes of performing care within this medical directive must be reported to the Most Responsible Physician.

See Appendix A for guidelines, contraindications and risks

## **Contraindications and Risks**

- The patient is not a registered HSN patient
- The patient, or legal guardian, does not consent to the plan of care or to receiving treatment from the NSWOC
- The NSWOC does not have the necessary knowledge, skill and judgment to perform the controlled acts

#### See Appendix A for guidelines, contraindications and risks

## Added Skills

he NSWOC must:

- Be a Registered Nurse in good standing with the College of Nurses
- Have a post-graduate certificate in Enterostomal Therapy Nursing
- Work under the HSN Ambulatory Care Unit

## Documentation

The NSWOC implementing the directive will document the following in the patient's health record:

- Specific medical directive by title and number (MD HSN 16)
- Time and date of implementation
- Name and signature of the health professional
- Name of the authorizing physician(s)

Recommended plan of care

## **Consultation and References**

Primary Contact Dr. John Fenton, Chief of Staff

#### <u>References</u>

Federation of Health Regulatory Colleges of Ontario. An interprofessional guide on the use of orders, directives and delegation for Regulated Health Professionals in Ontario.

Nurses Specialized in Wound, Ostomy, and Continence Canada. (2018). Position Statement.

Regulated Health Professions Act

University Health Network Medical Directive: Advanced Wound Care Patient Care Directive.

## PHYSICIAN APPROVALS

The following physicians have authorized patient care in accordance with this Medical Directive.

Physician Name	Signature	Date
Dr. John Fenton	Actual	February 25, 2020

## **APPENDIX A**

# **Diagnostic Tests/Interventions**

Diagnostic Test / Intervention	Indications	Contraindictations / Special Considerations
Wound Swab for Culture and Sensitivity, Fungus or Viral	<ul> <li>Suspicion that the wound is infected as evidenced by signs of local infection (i.e. purulent exudate, odour, redness, swelling, pain, signs of systemic infection, elevated temperature, elevated white blood cell count, sudden increase in glucose in a diabetic patient)</li> <li>Evidence of delayed healing (i.e. a wound that has not shown any signs of healing in two weeks)</li> </ul>	
PT/OT Consult	<ul> <li>Consult for activity, positioning, mobility, seating, assistive devices</li> </ul>	
<ul> <li>Skin Barrier</li> <li><u>Product Names</u></li> <li>3M Cavilon No Sting Barrier Film</li> <li>Coloplast Criticaid Clear</li> </ul>	<ul> <li>To prevent skin damage from exposure to urine, feces, body fluids and adhesives</li> <li>To protect the peri-wound area from irritation</li> <li>To prevent maceration</li> </ul>	<ul> <li>Contraindications</li> <li>Not to be used as the only covering in situations requiring dressing protection from bacterial contamination or penetration such as IV sites, full or partial thickness wounds or infected areas.</li> <li>Special Considerations         <ul> <li>Although not common, may sting when applied to irritated skin.</li> <li>May be used over topical pharmaceuticals. Removal of barrier required before application of topical pharmaceuticals.</li> </ul> </li> </ul>
Transparent DressingConsists of a thin film backing with a non-latex, hypoallergenic adhesive. The dressing is breathable, allowing good oxygen and moisture vapour exchange. It is waterproof and impermeable to liquids and bacteria.Product Names • 3M Tegaderm • Transparent Film	<ul> <li>To cover or protect wounds</li> <li>To maintain a moist environment for wound healing</li> <li>May be used as a secondary dressing over gauze, alginates or hydrogels, as a protective cover over at-risk skin (i.e. Stage 1 pressure ulcers, abrasions, skin tears and blisters, chafed skin or skin continuously exposed to moisture)</li> <li>May be used to maintain a moist wound environment to facilitate autolytic debridement</li> </ul>	<ul> <li>Contraindications</li> <li>Not intended to replace sutures or other primary wound closure methods.</li> <li>Not intended for exudating wounds or wounds with undermining or sinus tract.</li> <li>Not intended for application over infected wounds.</li> <li>Not to be applied over rashes related to fungal, viral or bacterial infections where topical pharmaceuticals are required at regular intervals.</li> <li>Not to be applied over diabetic foot ulcers.</li> <li>Not to be applied to lower limb ulcers.</li> </ul>

Diagnostic Test / Intervention	Indications	Contraindictations / Special Considerations
Acrylic Absorbent Dressing A multilayered dressing composed of a transparent film and an acrylic polymer pad. <u>Product Names</u> • 3M Tegaderm Absorbent (Acrylic)	• For use on partial and full thickness wounds such as Stage 2 or Stage 3 minimal to moderately draining pressure ulcers, skin tears, abrasions, donor sites, superficial partial thickness burns, and also may be used as a secondary cover dressing over wound fillers.	<ul> <li>Special Considerations</li> <li>Has an indefinite wear time.</li> </ul>
Hydrocolloid DressingA dressing containing a hydrophyllic, absorbent material that provides absorption of wound drainage, supports a moist healing environment and protects the wound from outside contaminants while allowing for extended wear time.Product Names • Triad Cream • Duoderm extrathin • Coloplast barrier sheets • Opsite dressing IV3000	<ul> <li>As a protective dressing on at-risk skin and Stage 1 pressure ulcers.</li> <li>For use on wounds, including partial and full thickness wounds such as Stage 2 and Stage 3 pressure ulcers, leg ulcers, skin tears, abrasions, first- and second- degree burns and donor sites.</li> <li>Hydrocolloid dressing may be used on minimal to moderately draining wounds.</li> <li>May be used to support autolytic debridement.</li> </ul>	<ul> <li>Contraindications</li> <li>Not intended for application over infected wounds. Consult physician or wound care team if wound is infected.</li> <li>Not intended for use in highly exudating wounds or wounds with undermining or sinus tracts.</li> <li>Not to be applied over rashes related to fungal, viral or bacterial infections where topical pharmaceuticals are required at regular intervals.</li> <li>Not to be applied over diabetic foot ulcers.</li> <li>Not to be applied to lower limb ulcers where vascular supply is insufficient for healing</li> </ul>
Hydrogels Normal Saline or water- based clear, non-adherent, viscous liquids. <u>Product Names</u> • Intrasite Gel™	<ul> <li>Provides moisture to a dry wound, maintains a moist healing environment and promotes autolytic debridement.</li> <li>Can be used as the primary dressing for dry or minimally draining partial and full thickness wounds.</li> <li>Can be used to saturate gauze or ribbon packing for pack tunneled or undermined wounds.</li> </ul>	<ul> <li>Special Considerations <ul> <li>May remain in place up to 7 days.</li> </ul> </li> <li>Contraindications <ul> <li>Not to be used on moderate to heavily draining wounds.</li> <li>Do not use to fill tunneled or sinus tract in wound.</li> <li>Not to be applied over diabetic foot ulcers.</li> <li>Not to be applied to lower limb ulcers where vascular supply is insufficient for healing.</li> </ul> </li> <li>Special Considerations <ul> <li>Use in infected wounds only after careful consideration of alternatives.</li> <li>Consider skin barrier around periwound area to protect skin at wound edges.</li> <li>Must be secured with a cover dressing.</li> </ul> </li> </ul>

Diagnostic Test /	Indications	Contraindictations /
Intervention		Special Considerations
Sterile Sodium Chloride	<ul> <li>For wounds with moderate to heavy</li> </ul>	Contraindications
Impregnated Dressing	drainage.	Dry wounds and dry eschar fused
Vienen polyester gauze	<ul> <li>Wounds in the yellow inflammatory</li> </ul>	to all wound margins.
Viscose polyester gauze dressing impregnated with	phase, including infected wounds.	Special Considerations
15% crystalline sodium		Special Considerations
chloride.		<ul> <li>Increase in the amount of drainage and the size of the</li> </ul>
		wound during initial treatment will
Product Name		occur due to reduction of edema
Mesalt ®		and removal of wound debris.
		Discontinue when wound
		drainage has decreased to a
		point that there is insufficient
		drainage to saturate the dressing
		in a 24-hour period.
Hydrofibre Dressing	<ul> <li>Supports moist wound healing.</li> </ul>	Contraindications
	<ul> <li>Highly absorbent dressing for the</li> </ul>	<ul> <li>Sensitivity to the dressing</li> </ul>
A non-woven pad or ribbon	management of superficial wounds, leg	components.
composed of hydrocolloid	ulcers, surgical wounds, second degree	<ul> <li>Do not use for packing of sinus</li> </ul>
fibres, which absorbs wound	burns, traumatic wounds, pressure ulcers,	tracts.
fluid and creates a soft gel.	infected wounds, oncology wounds and	
Product Name	wounds healing by secondary intention.	
Aquacel Extra ®		
Foams	<ul> <li>Indicated for use on leg ulcers, pressure</li> </ul>	Contraindications
Foanis	<ul> <li>Indicated for use of leg dicers, pressure ulcers, traumatic wounds, painful wounds,</li> </ul>	<ul> <li>Not intended for dry wounds.</li> </ul>
A flexible absorbent foam.	wounds with compromised peri-wound	<ul> <li>Not intended for pressure</li> </ul>
	skin.	reduction, relief or padding.
Product Name	<ul> <li>May be used as a primary dressing on</li> </ul>	reduction, relief of padding.
Mepilex ®	shallow, exudating wounds and a cover	
	dressing for deeper wounds.	
Non-Adherent Cellulose	Prevents dressing adherence and	
Acetate Dressing	protects regenerating tissue.	
_	Minimizes pain at dressing change.	
A fine mesh primary	• Allows exudate to pass through easily into	
dressing made of cellulose	secondary dressing.	
acetate and petrolatum		
emulsion designed to protect		
the wound.		
Product Namo		
Product Name ● Adaptic™		

Diagnostic Test / Intervention	Indications	Contraindictations / Special Considerations
Non-Adherent Non- Impregnated Dressings to Reduce Trauma to Wound A thin cotton sheet covered with a perforated thin plastic layer. <u>Product Name</u> • Telfa™	<ul> <li>Appropriate for minimally draining wounds to minimize adherence and trauma to the wound bed.</li> </ul>	<ul> <li>Contraindications</li> <li>Not intended for highly exudating wounds.</li> </ul>
Antimicrobial Dressings		
Povidone-Iodine 10% Proviodone 10% antiseptic solution	• For chronic, non-healable wounds with or without infection, palliative wounds, arterial, diabetic, pressure and malignant wounds to decrease bacteria burden and to dry wound base.	<ul> <li>Contraindications</li> <li>Not to be used in patients with known sensitivity to iodine.</li> <li>Do not use over large areas of the body.</li> </ul>
Acetic Acid 5% Diluted to 0.5%	<ul> <li>Use for local superficial pseudomonas wound infections.</li> <li>For bacterial burden and odor control.</li> </ul>	<ul> <li>Special Considerations</li> <li>Acetic acid 5% is cytotoxic and should be limited to use in patients where the primary goal is bacterial burden reduction and only after careful considerations of alternatives.</li> </ul>
Hydrogen Peroxide	<ul> <li>Effective for loosening wound debris and dissolving blood clots.</li> <li>Has little bactericidal effect.</li> </ul>	<ul> <li>Contraindications</li> <li>Not to be used in wound cavities due to the risk of air embolism.</li> <li>May harm healthy granulating tissue and should only be used after careful consideration of alternatives.</li> </ul>
Sodium Hypochlorite <u>Product Name</u> • Hygeol 1:20 • Hygeol 1:100	<ul> <li>Effective for loosening wound debris and reducing high bacterial levels.</li> <li>Can be used as solution with packing.</li> </ul>	<ul> <li>Contraindications</li> <li>Limited to use in patients only after careful consideration of alternatives.</li> <li>Not recommended for long-term use.</li> </ul>
Antimicrobial Impregnated Gauze Dressing with Polyhexamethylene Biguanide (PHMB) Product Names • AMD <sup>™</sup> gauze • Packing gauze	<ul> <li>Effective against many pathogens including MRSA, VRE, pseudomonas, gram positive and gram negative bacteria, yeast and fungi.</li> <li>For packing large wounds, narrow sinuses for bacterial control.</li> </ul>	<ul> <li>Contraindications</li> <li>Cannot be used with sodium hypochlorite (Hygeol or Dakin Solution), as these agents deactivate the PHMB and will cause yellowing of the products.</li> <li>Special Considerations</li> <li>Always change the dressing when it has reached its absorbent capacity or replace every 3 days.</li> </ul>

Diagnostic Test / Intervention	Indications	Contraindictations / Special Considerations
Antimicrobial: Methylene Blue/Gentian Violet Foam	<ul> <li>For wounds with moderate to large amounts of exudate which show signs and symptoms of local wound infection.</li> </ul>	<ul> <li>Contraindications</li> <li>Do not use in patients with known sensitivity to ingredients.</li> </ul>
<ul><li><u>Product Name</u></li><li>Hydrofera Blue</li></ul>	• May be used with enzymatic debridement or growth factor products.	• Do not use for third-degree burns.

Diagnostic Test /	Indications	Contraindictations /
Intervention		Special Considerations
Cadexomer lodine 0.9% concentration of iodine contained in a three dimensional lattice which is slowly released into the wound providing antimicrobial effect. <u>Product Name</u> • lodosorb <sup>™</sup>	<ul> <li>An antibacterial ointment for the treatment of sloughy infected wounds.</li> <li>Effective against many pathogens including MRSA.</li> <li>May penetrate biofilms.</li> </ul>	<ul> <li>Contraindications</li> <li>Do not use in patients with known or suspected iodine sensitivity.</li> <li>Contraindicated in Hashimoto's hyroiditis.</li> <li>In patients with a prior history of hyperthyroidism, it is not recommended to use iodine-containing products.</li> <li>Do not use in the case of nontoxic nodular goiter and in children.</li> <li>Do not use in pregnant or lactating women.</li> <li>May be absorbed systemically especially when large wounds are treated. Patients with severely impaired renal function or a history of any thyroid disorder are more susceptible to alterations in thyroid metabolism with chronic therapy.</li> <li>There is a potential interaction of iodine with lithium, sulphafurazoles, and sulphonylureas therefore, co-</li> </ul>
		<ul> <li>administration is not recommended.</li> <li>Special Considerations <ul> <li>For ointment, a single application should not exceed 50 g.</li> <li>Total amount of ointment used in one week must not exceed 150 g.</li> <li>Change dressing approximately 3 times a week or when the ointment has become saturated with wound exudate, indicated by a loss of colour.</li> <li>If wound exudating heavily, daily dressing changes may be needed. For each dressing change and at the end of treatment, gently remove the remaining ointment from the wound surface with sterile water, saline or a sterile swab.</li> <li>The duration of treatment should not exceed 3 months in any single course of treatment. An adherent crust can form when the ointment dressing is not changed with sufficient frequency.</li> </ul> </li> </ul>

Diagnostic Test / Intervention	Indications	Contraindictations / Special Considerations
Povidone Iodine Non- Adherent Impregnated Mesh DressingTopical dressing with slow release povidone iodine, polyethylene glycol and purified water.Product Name • Inadine ®	<ul> <li>Use in acute and chronic wounds.</li> <li>Use in low exudating wounds.</li> <li>May be used in infected wounds or to prevent infection in minor wounds.</li> <li>May be used in heavily infected wounds in conjunction with systemic antibiotics.</li> <li>Effective against bacterial, protozoal and fungal organisms.</li> </ul>	<ul> <li>Special Considerations</li> <li>Loss of colour indicates loss of antiseptic efficacy and need for dressing change.</li> <li>May be changed up to 2 times a day.</li> <li>May not be used if known iodine hypersensitivity, prior to or after radioiodine, pregnant or breastfeeding women, or patients with thyroid disease.</li> <li>Iodine may be absorbed through unbroken skin and in large wounds.</li> </ul>
Active Leptospermum Honey Gel Pad Absorbent primary wound dressing with leptospermum honey and sodium alginate. <u>Product Name</u> • Honey Colloid™ Gel	<ul> <li>Effectively kills pathogens including MRSA.</li> <li>Moist wound healing and autolytic debridement.</li> <li>Use in lightly to moderate exudating wounds, diabetic foot ulcers, leg ulcers, pressure ulcers (partial and full thickness), first- and second-degree burns, donor sites, surgical and traumatic wounds.</li> </ul>	<ul> <li>Contraindications <ul> <li>Third-degree burns.</li> <li>Patients with known sensitivity to sodium alginate or honey.</li> </ul> </li> <li>Special Considerations <ul> <li>A slight transient stinging may occur with dressing application.</li> <li>Dressing high osmolarity may contribute to increased exudates. Manage increased moisture by adding an absorbent cover</li> </ul> </li> </ul>
Antimicrobial Hydrofibre Dressing Ionic silver dressing with hydrofibre technology. <u>Product Name</u> • Aquacel Ag ®	<ul> <li>For traumatic wounds, dehisced wounds, infected exudating wounds or those at risk for infection.</li> <li>Absorbs and contains exudate.</li> </ul>	dressing. Contraindications • Do not use in patients with silver sensitivities. Special Considerations • Provides antimicrobial activity in the dressing for up to 14 days.
Alginate and Silver Dressing An absorbent carboxymethylcellulose plus alginate antimicrobial dressing. <u>Product Name</u> • Silvercel Non-Adherent ® • Urgo Tul AG	<ul> <li>Primary dressing designed for the management of a wide range of infected or potentially infected wounds including pressure ulcers, diabetic foot ulcers, venous ulcers and surgical and traumatic wounds.</li> <li>Facilitates autolytic debridement.</li> <li>Used for moderate to heavily exudating partial and full thickness wounds.</li> </ul>	<ul> <li>Contraindications</li> <li>Do not use in patients with silver sensitivities.</li> <li>Must be removed prior to MRI.</li> <li>Avoid contact with electrodes and conductive gel.</li> </ul>
Other Products		
Tube Securement Bandages	<ul><li>Holds dressings in place.</li><li>Use for patients with sensitivity to tape or</li></ul>	<ul><li>Special Considerations</li><li>Use correct size and dimensions</li></ul>
Tubular elastic net.	fragile skin.	to avoid excessive tightening. • Contains latex.
Product Name • Surgifix ®		

Diagnostic Test / Intervention	Indications	Contraindictations / Special Considerations
<b>Fixation/Tape</b> Soft, gentle, breathable, comfortable surgical tape.	<ul> <li>Moderate adhesion for securing dressings and appliances.</li> <li>For anchoring surgical dressings where swelling is expected.</li> </ul>	<ul> <li>Special Considerations</li> <li>Apply tape without tension.</li> <li>To protect at-risk skin, apply a liquid barrier first.</li> </ul>
<u>Product Name</u> ● Medipore™ Tape		
Multi-Purpose Tubular Bandage Tubular bandage of covered elastic threads. <u>Product Name</u> • Tubigrip ®	<ul> <li>Provides tissue support in the treatment of strains and sprains, soft tissue injuries, general edema, post-burn scarring and ribcage injuries.</li> <li>Used for pressure dressing and arm fixation.</li> </ul>	<ul> <li>Contraindications</li> <li>Contains natural rubber latex. Should not be used on patients with latex allergy or sensitivity.</li> <li>Special Considerations         <ul> <li>Cut product twice the length for limb with an extra 2-3 cm for overlap.</li> </ul> </li> </ul>
Negative Pressure TherapyProduct Names• V.A.C. Therapy KCI• Prevena™ Incision Management System• V.A.C Veraflo™ Therapy	• Therapy system that promotes wound healing through negative pressure wound therapy. Delivers negative pressure (a vacuum) that helps draw wound edges together, removes infectious materials and promotes the formation of granulation tissue.	<ul> <li>Contraindications</li> <li>Presence of necrotic and fibrotic tissue.</li> <li>High output, non-enteric and unexplored fistulas.</li> <li>Severe excoriation of periwound.</li> <li>Special Considerations         <ul> <li>Infected wounds.</li> </ul> </li> </ul>
Dressing Calcium/Sodium Alginate <u>Product Name</u> • Kaltostat	<ul> <li>Indicated as a primary dressing for the management of heavily exuding wounds including chronic wounds such as leg ulcers (venous, arterial and diabetic), pressure sores, fungating carcinomas, and acute wounds such as donor sites, abrasions, lacerations and post surgical wounds.</li> </ul>	<ul> <li>Contraindications</li> <li>Known sensitivity to Kaltostat or its components.</li> <li>Special Considerations <ul> <li>The dressing will be of little value if applied to wounds that are very dry or covered with hard black necrotic tissue.</li> <li>Wounds that show signs of clinical infection may be dressed with Kaltostat, which should be changed daily. In this situation, a non-adhesive secondary dressing is recommended. Adjuvant therapy should be initiated as appropriate.</li> </ul> </li> </ul>

Diagnostic Test / Intervention	Indications	Contraindictations / Special Considerations
Dressing Chlorhexidine Paraffin Gauze BP <u>Product Name</u> • Bactigras	Used as a wound dressing for the prevention of infection in minor skin loss injuries and ulcerative wounds.	<ul> <li>Contraindications</li> <li>Do not use in patients with known hypersensitivity to chlorhexidine.</li> <li>Special Considerations <ul> <li>It is not the product of choice for the treatment of existing wound infections, as the amount of chlorhexidine that is released from the dressing is limited. May be used as an adjunct to</li> </ul> </li> </ul>
Antimicrobial Silver <u>Product Names</u> • Interdry • Interdry AG	<ul> <li>Effectively manages complications with skin folds.</li> <li>Helps manage symptoms associated with intertriginous dermatitis such as maceration, erythemia, erosion, itching/burning, odor and pain.</li> <li>Wicks and translocates moisture.</li> <li>Silver within the textile provides effective antimicrobial action for up to 5 days.</li> </ul>	systemic antibiotic therapy where appropriate. Contraindications • Interdry should not be placed directly onto an open wound.
Cautery Agent – Silver Nitrate <u>Product Name</u> • Silver Nitrate (AGNO3) Sticks for wound care	<ul> <li>For removal of hypergranulation tissue (proud flesh).</li> <li>To open rolled wound edges.</li> </ul>	<ul> <li>Contraindications</li> <li>Sensitivity or allergy to silver.</li> <li>Special Considerations</li> <li>Consult a physician, nurse practitioner or NSWOC prior to use.</li> </ul>