Winnipeg Regional Health Authority | Office régional de la santé de Winnipeg

Wound up for Wounds

Issue 10 | June 2021

In this issue:

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Wound up (verb. To be excited) for Wounds (noun. Injuries to living tissue)

Welcome to the June 2021 edition of Wound up for Wounds. I want to say a huge thanks to all of you who stepped up to get your Level 2 certification in Pressure Injuries and Diabetic Foot Ulcers in the month of May. We are still working to arrange Part 2 of the Level 2 Arterial, Venous and Mixed Lower Leg Ulcers so that you can learn and perfect your wrapping technique with Coban™ 2 and receive your Level 2 certificate. Some of you chose to improve your wound assessment and dressing selection skills by attending Practice Days: Wound Assessment and Dressing Selection.

There was a great deal of enthusiasm at these wound care courses, (rather an odd concept to those who do not work in health care) however, it spoke to me about the fact that COVID-19 has made us all examine our skills and abilities and re-examine our individual and professional scope of practice. I am confident that those of you who brushed up or gained new skills in wound care will put this knowledge to great use and your patients, residents and clients will thank you for it.

I love this quote from Jan Rice RN, and it captures the essence of what we try to achieve with wound care education:

"An aspect of wound management often overlooked is defining the wound itself. The guiding principles of wound management have always been focused around defining the wound, identifying any associated factors that may influence the healing process, then selecting the appropriate wound dressing or treatment device to meet the aim and aid the healing process. This structured approach is essential, as the most common error in wound management is rushing in to select the wound dressings without actually giving thought to wound aetiology, tissue type and immediate aim"

- Jan Rice RN, Australia

All of the WRHA wound care courses teach Wound Bed Preparation using a paradigm which, if followed each time the wound is assessed (dressing change), gives the clinician a great shot at coming up with a treatment regime, including dressing selection.

Enjoy the warmer weather!

Stay safe and keep in touch.

Jane McSwiggan, MSc., OT Reg. (MB), IIWCC,
Education and Research Coordinator, Wound Care, WRHA

CARING FOR HEALTH
Winnipeg Regional Health Authority | Office régional de la santé de Winnipeg

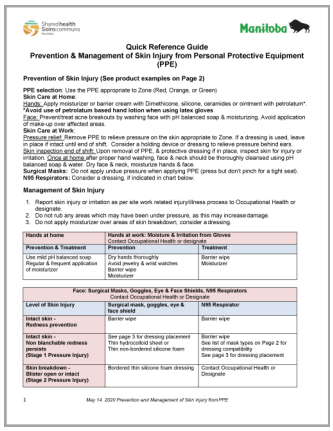
Did you know?

- In Manitoba, stages 3, 4 and unstageable pressure injuries are critical incidents if they meet the criteria.
- Please report using RL6 or call the Critical Incident Reporting and Support Line (24 hours) at 204-788-8222.
- Further information: http://home.wrha.mb.ca/quality/afterreported.php

Prevention & Management of Skin Injury from PPE

This **Quick Reference Guide** (link below) was developed by Kari Mann, CNS for Skin and Wound at HSC Winnipeg, and Jane McSwiggan Education and Research Coordinator, WRHA, in response to the development of staff skin injuries from the use of personal protective equipment (PPE) being worn on the face and irritation to hands from gloves.

https://sharedhealthmb.ca/files/covid-19-ppe-skin-injury-qrg.pdf



Quick Reference Guide
Prevention & Management of Skin Injury from Personal Protective Equipment (PPE)

Prevention of Skin Injury (See product examples on Page 2)

PPE selection: Use the PPE appropriate to Zone (Red, Orange, or Green)
Skin Care at Home:
Hands: Apply moisturizer or barrier cream with Dimethicone, silicone, ceramides or ointment with petrolatum*.
*Avoid use of petrolatum based hand lotion when using latex gloves
Face: Prevent/treat acne breakouts by washing face with pH balanced soap & moisturizing. Avoid application of make-up over affected areas.
Skin Care at Work:
Pressure relief: Remove PPE to relieve pressure on the skin appropriate to Zone. If a dressing is used, leave in place if intact until end of shift. Consider a holding device or dressing to relieve pressure behind ears.
Skin inspection and of shift: Upon removal of PPE, & protective dressing if in place, inspect skin for injury or irritation. Once at home after proper hand washing, face & neck should be thoroughly cleansed using pH balanced soap & water. Dry face & neck, moisturize hands & face.
Surgical Masks: Do not apply undue pressure when applying PPE (press but don't pinch for a tight seal).
N95 Respirators: Consider a dressing, if indicated in chart below.

Management of Skin Injury

1. Report skin injury or irritation as per site work related injury/illness process to Occupational Health or designate.
2. Do not rub any areas which may have been under pressure, as this may increase damage.
3. Do not apply moisturizer over areas of skin breakdown, consider a dressing.

Hands at home	Hands at work: Moisture & Irritation from Gloves Contact Occupational Health or designate	
Prevention & Treatment	**Prevention**	**Treatment**
Use mild pH balanced soap Regular & frequent application of moisturizer	Dry hands thoroughly Avoid jewelry & wrist watches Barrier wipe Moisturizer	Barrier wipe Moisturizer

Face: Surgical Masks, Goggles, Eye & Face Shields, N95 Respirators Contact Occupational Health or Designate		
Level of Skin Injury	**Surgical mask, goggles, eye & face shield**	**N95 Respirator**
Intact skin - **Redness prevention**	Barrier wipe	Barrier wipe
Intact skin - **Non blanchable redness persists** **(Stage 1 Pressure Injury)**	See page 3 for dressing placement Thin hydrocolloid sheet or Thin non-bordered silicone foam	Barrier wipe See list of mask types on Page 2 for dressing compatibility See page 3 for dressing placement
Skin breakdown - **Blister open or intact** **(Stage 2 Pressure Injury)**	Bordered thin silicone foam dressing	Contact Occupational Health or Designate

1 *May 14, 2020 Prevention and Management of Skin Injury from PPE*

In consultation with Occupational Health and Safely, it was determined that N95 respirators could be fit tested with thin and flexible interface dressings which easily conform to the face, to see if a seal can be achieved. Please review the **Quick Reference Guide** carefully for the list of N95 respirators have been fit tested quantitatively using Portacount Pro Plus model 8038. It is important to note that a if respirator did not seal with a dressing it also did not seal without a dressing therefore a different model of respirator has to be fitted.

Please click the link below to view the poster **PPE - Tips for Prevention of Skin Injury**.

https://sharedhealthmb.ca/files/covid-19-ppe-skin-injury-poster.pdf

Important

- Contact Occupational Health Designate for work related skin conditions.
- Check the seal each time an N95 respirator is applied by performing a user seal check.

Wound Care Resources

Did you know? The Evidence Informed Practice Tools - Clinical Practice Guidelines for Wound Care can be found on the WRHA website at:

- https://professionals.wrha.mb.ca/old/extranet/eipt/EIPT-013.php

We are aware that some need updating, so other great resources are:

- **Skin and Wound Community of Practice (BC)**
  https://www.clwk.ca/communities-of-practice/skin-wound-community-of-practice/
- **Wounds Canada**
  https://www.woundscanada.ca/index.php?option=com_content&view=article&id=110&catid=12&Itemid=724
  https://www.woundscanada.ca/health-care-professional/education-health-care-professional/webinars

Lymphedema: a BIG Deal!

By Adrienne Pearson RN, BN, ET, Certified Lymphedema Therapist

World Lymphedema Day is celebrated annually on March 6th. Manitoba officially proclaimed this day Lymphedema Awareness Day, by passing Bill 209 in 2014. This is a national day of awareness for the incurable disease, which focuses on the importance of best treatment for lymphedema.

This year there were multiple local events via a virtual platform put on by the Lymphedema Association of Manitoba and the Breast Health Centre, to name a few.

Manitoba showed its support by lighting up the legislative building in a bright teal color, on the evening of March 6th, 2021! (Figure 1)

Adrienne Pearson RN, BN, ET, Certified Lymphedema Therapist

What is Lymphedema?

Lymphedema is a chronic, inflammatory condition caused by a protein-rich fluid accumulation in the interstitial space as a result of damage or malformation of the lymph vessels or lymph nodes. The Canadian Lymphedema Framework estimates that 1 million Canadians are impacted by lymphedema. Lymphedema can affect those of all ages and races.

Primary lymphedema results when someone is born with a faulty lymphatic system. Symptoms can present from birth or develop later on, such as with puberty.

Secondary lymphedema is caused by various known factors that damage the lymphatic system. Some of these causes can be surgery and or radiation for cancer, trauma, infection, chronic venous insufficiency, and obesity. The most common cause of secondary lymphedema in developed countries is treatment for cancer, especially treatment for breast cancer (Klose Training).

Lymphedema is a highly underdiagnosed and misunderstood disease, with extensive costs to our health care system. Lymphedema management is challenging and those with lymphedema require close monitoring by a trained lymphedema therapist.

Figure 1-The Manitoba Legislature lit-up in teal for World Lymphedema Day, 2021.

Lymphedema Management

The gold standard for lymphedema management is complete decongestive therapy (CDT) by a trained therapist. CDT includes the following components:

1. compression therapy (garments, wraps, etc.);
2. manual Lymphatic drainage;
3. exercise programs;
4. skin Care.

Figure 2 shows a patient with advanced lymphedema, after just five days of short-stretch bandaging, with good effect. The left leg was initially left untreated, to demonstrate the effectiveness of the compression therapy as a treatment for lymphedema.

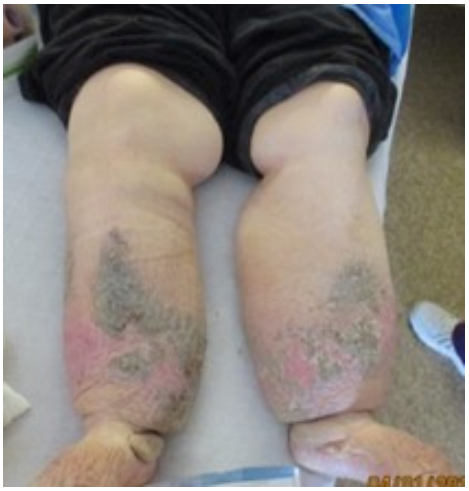


Figure 2- Stage 3 lymphedema to bilateral legs

Lymphedema: a BIG Deal! (continued)

What is Needed to Manage Lymphedema in Manitoba?

It is challenging to determine how many Manitobans are affected by lymphedema, as the condition is often underdiagnosed and underreported. There is a need for more definitive diagnoses of lymphedema as well as statistics specific to Manitoba on the prevalence of lymphedema.

World Lymphedema Day is a step in the right direction, for creating more education and awareness for both the public and health care providers.

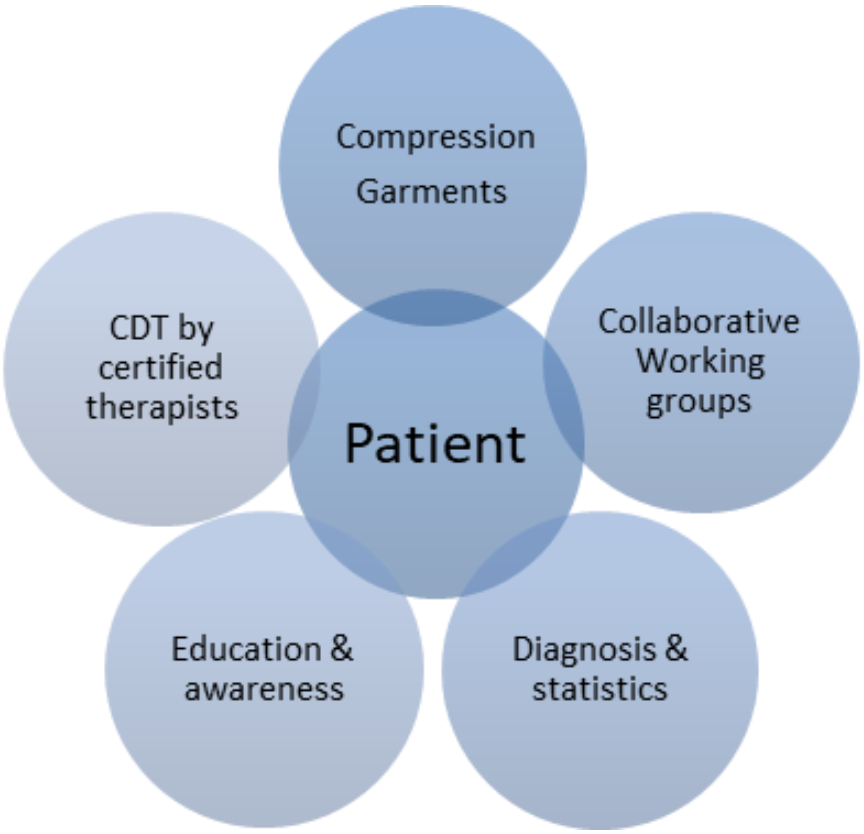


Illustration provided by: The Lymphedema Association of Manitoba

Focuses should be on education of both patients and health care professionals on the identification, early diagnosis and best management of lymphedema. Education should include preventative and risk reduction practices, with focuses on wellness and health promotion with the condition.

Manitoba has over 25 certified lymphedema therapists, who play an important role in patient and public education as well as providing complete decongestive therapy for those with lymphedema. Additionally, collaborative working groups and the development of lymphedema programs are needed for raising awareness for lymphedema, as well as to advocate for equitable funding for management in Manitoba and across Canada. Funding for lymphedema care varies widely provincially.

In Manitoba, there is limited access to provincial funding, except for those who experience breast cancer- related lymphedema. This leaves many individuals responsible to cover the costs of their own lymphedema treatment. This can prove challenging, as some do not have adequate individual funds or insurance coverage for things like compression garments and manual lymphatic drainage as treatment. Organizations like the Lymphedema Association of Manitoba are working hard to build collaborative working groups, which create awareness and advocacy for more access to funding for all Manitobans affected by lymphedema.

Adult Pressure Injury Prevention Quick Reference Guide

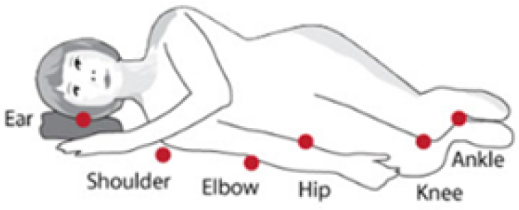
KNOW THE RISKS...

- Decreased mobility
- Advance age
- Fragile skin
- Previous or current pressure injury (PI)
- Nutritional deficiency
- Significant cognitive impairment
- Decreased perfusion
- Medical devices e.g. oxygen tubing, catheters, masks, wheelchairs
- Prolonged hospital stay

COMMON AREAS TO ASSESS...

- **Over bony prominences**
  - Heels
  - Tail bone (coccyx)
  - Lower back (sacrum)
  - Hip pointer (trochanter)
  - Elbows
  - Back of the head (occiput)
- **Under and around medical devices**
  - Bridge of nose
  - Nasal septum
  - Behind ears
  - Mucosal membrane e.g. nostrils and mouth

* Remember to check under skin folds for bariatric patients



WAYS TO PREVENT...

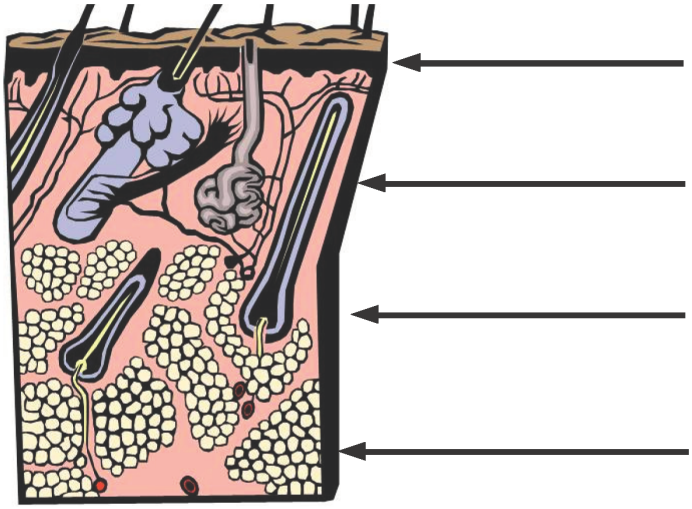
- Educate patients and caregivers
- Implement risk assessment findings
- Develop prevention plan based on risk assessment
- Apply barrier cream
- Keep skin clean and dry under medical devices
- Pressure redistribution surface e.g. suitable pillow, foam mattress
- Friction reduction strategies
- Reposition patient at least every 4 hours

*** Prescribers shall complete documentation regarding indications for use of medical devices**

WRHA Wound Care 2020

Adult Pressure Injury Staging Quick Reference Guide

STAGING OF PRESSURE INJURIES...



Stage 1: involves epidermis

Stage 2: involves epidermis & dermis

Stage 3: involves epidermis, dermis & subcutaneous layers

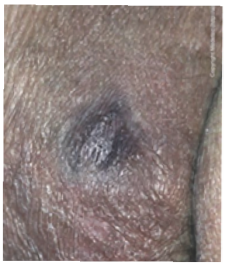
Stage 4: involves epidermis, dermis subcutaneous, & deep tissue such as tendon, muscle & bone

WHAT TO LOOK FOR...

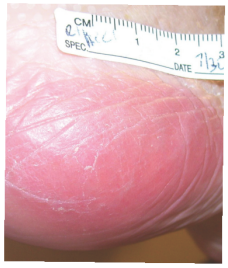
Stage 1: Intact skin, does not blanch, firm, warm, painful
Stage 2: Intact or ruptured serum filled blister, abrasion,
or shallow crater, no slough
Stage 3: Subcutaneous tissue (fat visible), +/- slough and/or eschar
Stage 4: Structures (bone, muscle, tendon) in base of wound

Unstageable: Slough or eschar obscures base of wound
Deep Tissue Pressure Injury (DTPI): Intact skin, blood blister, maroon, purple
Mucosal: Present on mucosal tissue, not staged

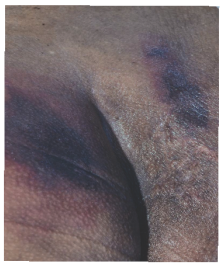
STAGE 1 AND DTPI ARE TRICKY ONES TO STAGE...



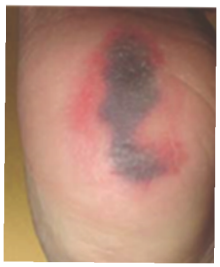
Stage 1
Darker skin tone
Ischial Tuberosity
Started 12-24 hours ago



Stage 1
Lighter skin tone
Calcaneus
Started 12-24 hours ago



DTPI
Darker skin tone
Sacral area
Started 48-72 hours ago



DTPI
Lighter skin tone
Calcaneus
Started 48-72 hours ago

WRHA Wound Care 2020

New Tools for your Toolkit

Evidence Informed Practice Tool: Preventing Medical Treatment Related Skin and Tissue Injuries in Adults and Children. Visit **https://professionals.wrha.mb.ca/old/extranet/eipt/files/EIPT-071.pdf** to download the file.

Enabler Series: A series of enablers have been developed, Enabler #3, Wound Irrigation is featured on Page 10. Others in the series are: Enabler #1 Choosing an antimicrobial dressing, Enabler #2 Sub-bandage Pressure and Lower Leg Compression, Enabler #4 Heel Prevention Pressure Injury Algorithm

If you would like any wound care resources sent to you directly, please contact Jane McSwiggan, Education and Research Coordinator-Wound Care at **jmcswiggan@wrha.mb.ca**.

Practice Corner: Role of Wound Debridement

Debridement is indicated for non-viable wound tissue in a wound bed with adequate perfusion. Slough, eschar and hyperkeratosis (callous) are all non-viable, and in most cases should be removed.

Debridement should **not** be attempted when:

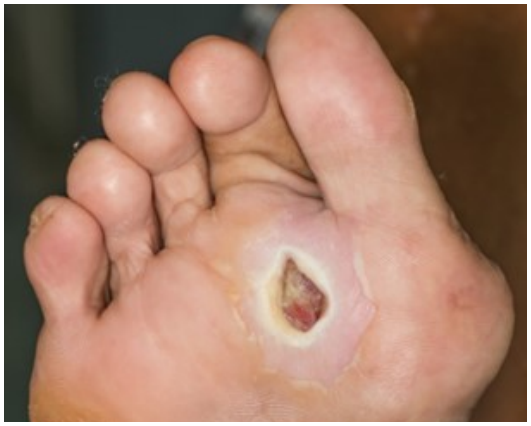
- There is no necrotic tissue the wound bed
- There is dry gangrene or stable ischemic ulcers and/or inadequate blood supply.
- There is a stable eschar cap on a heel
- The affected limb is pulseless or has an abnormal Ankle Brachial Pressure Index (ABPI) or toe pressures.
- There is a high risk of exposing bones, joints, or tendons[1].

Debridement techniques include autolytic, mechanical, conservative sharp, and surgical. Vascular assessment is recommended prior to debridement to rule out arterial vascular compromise.

Select the method of debridement most appropriate to the patient condition and treatment goals, type, quantity, depth and location of necrotic tissue, caregiver and patient reference[2].

Debridement into action:

What forms of debridement does this wound require? It has slough in the wound bed and hyperkeratosis (callus) on the wound edge



Callus: If you answered ***conservative sharp wound debridement (CSWD)*** you are correct. Hyperkeratosis (callus) cannot be removed by autolytic or mechanical debridement. CSWD can remove hyperkeratosis.

Slough: If you answered ***mechanical or autolytic debridement*** to remove the slough you are correct.

What's in your scope?

Mechanical and autolytic methods are within scope. CSWD requires training and certification for competency in the skill. Refer to an Advanced Wound Care Clinician and/or Diabetic Foot Clinic for CSWD.

References:

1. Wound bed preparation. Evidence informed practice tools (2016). Winnipeg Regional Health Authority. 16-17. https://professionals.wrha.mb.ca/old/extranet/eipt/files/EIPT-013-015.pdf
2. Slachta, P. (2012). Caring for chronic wounds: A knowledge update. *Wound Care Advisor, 1*(1), 24- 31.

Introducing Elise and Melissa: Student Occupational Therapists

I (Jane) am currently the educator for Elise van der Zweep and Melissa Gunn who are first year Master of Occupational Therapy students. It is always a great honour and pleasure to have students in the wound care portfolio and they have quickly become my colleagues in this busy area. Elise and Melissa have embraced the concept of Health Care Professionals being the client in this setting and have both co-taught several of the earlier mentioned Level 2 and Practice Days courses.

Elise van der Zweep

I am a first-year occupational therapy student at the University of Manitoba completing an 8-week collaborative placement with my peer Melissa Gunn and my educator Jane McSwiggan. My background includes a degree in Psychology, minoring in Anthropology. I have a passion for working with the geriatric population and look forward to applying my new knowledge of wound care to my future practice.

This placement is providing me experience and insight regarding what the role of an occupational therapist can be within the corporate setting of healthcare. Prior to this year I was unaware of the wide variety of areas an occupational therapist could work and was surprised to learn interprofessional education was included within the profession's scope. Jane's role of wound care research and education provides accessible information to health care professionals therefore facilitating practice change.

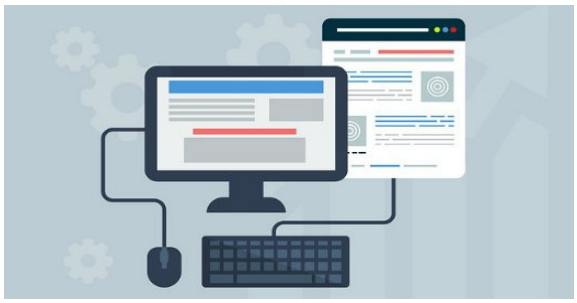
Elise van der Zweep, First year Master of Occupational Therapy Student, U of M.

Melissa Gunn

I am a first-year student occupational therapist completing the Master of Occupational Therapy program at the University of Manitoba. I am pleased to be working alongside Elise van der Zweep and Jane McSwiggan for the eight weeks of my intermediate I fieldwork placement. My background is in social work, and I have worked as a Registered Social Worker in Manitoba since 2016 in both Thompson and Winnipeg. I strongly believe in being an advocate for improved health, well-being and equity for all populations. So far, this placement has exceeded my learning expectations and has provided me with a unique opportunity, as Jane's role as the Education and Research Coordinator for Wound Care is a somewhat non-traditional role for an occupational therapist. My knowledge of wound care and the role within the corporate setting has increased exponentially, and I look forward to applying my new-found knowledge to my future work.

Melissa Gunn, First year Master of Occupational Therapy Student, U of M.

Introducing Elise and Melissa: Student OTs (cont.)

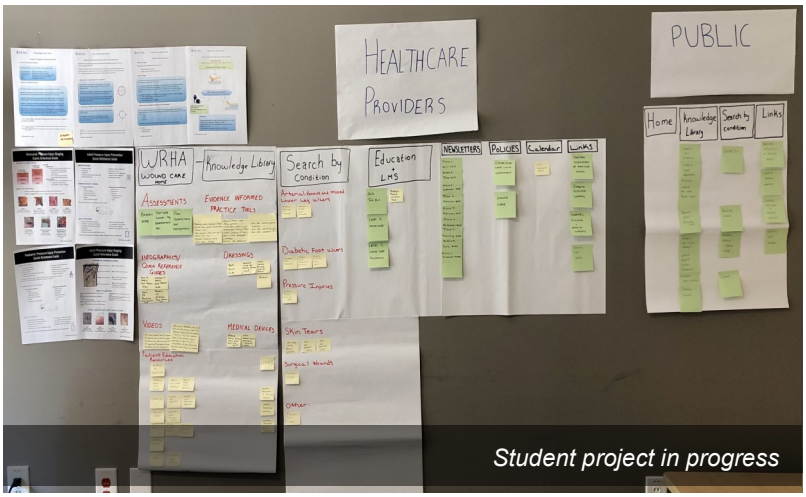


For our eight-week placement with WRHA Wound Care, one of the undertakings we have been assigned is an exciting project that was identified as a need by the Regional Wound Care Committee. It has been identified that wound care resources are currently housed in multiple locations between INSITE and the WRHA website. Due to the multiple locations, this causes difficulties for health care professionals to find the information they require regarding wound care best practices, staff education tools, and patient education materials in an expeditious manner, which is a problem as it ultimately affects consistency in safe patient care.

Therefore, we have been working on designing a website to house easily accessible information for health care professionals on wound care that is not dependent upon having a computer or INSITE access. Thus, the website will be accessible to all healthcare providers working in Manitoba. Further, there will be a section that houses information that the public can access as well.

Over these last few weeks, we have immersed ourselves in wound care content that facilitates wound care best practice. Our passion for this topic has been increasing more and more as we recognize current gaps in practice and the need for improvement in wound care assessment and treatment. As well as the impact that wounds have on the quality of life in the patient population.

One of the first things we decided to do was conduct a needs assessment of healthcare knowledge to help determine the needs or "gaps" from the perspective of healthcare professionals who provide wound care. We created a survey to accomplish this goal and sent it out to the Regional Wound Care Committee. We gained valuable feedback in the thoughtful responses we received, and we took this information into significant consideration when planning the website. This information has also been used to inform us of what content still needs to be developed.



Student project in progress

By working on this project and with the knowledge and insight we have gained in assisting Jane with the educational delivery of wound care courses, we see how vital it is for health care professionals to use best practice in regards to wound care. We recently learnt that wound care is 2-3%[1] of any health care budget; therefore, it has the potential to cost the WRHA $5.7 million annually. Thus, it is also possible to decrease costs by improving efficiency and effectiveness of care for people at risk of developing wounds. Access to wound care best practices, staff education tools and patient education materials is imperative to accomplish this and by developing this website that is a step in the right direction.

-Elise van der Zweep and Melissa Gunn.

References:

1. Posnett, J., Gottrup, F., Lundgren, H., Saal, G. (2009). The resource impact of wounds on health-care providers in Europe. *Journal of Wound Care 18*(4), 154–161.

Wound Care Enabler Series

Enabler #3: Wound Irrigation

1) Wounds should be irrigated to:

- Remove slough, surface bacteria, wound exudate and dressing residue.
- Prepare the wound bed for swabbing when there is a deep and surrounding infection.

2) How to Irrigate:

- Use eye protection and other appropriate personal protective equipment because of the potential of splash back of body fluids.
- Irrigation pressure should not cause trauma to the wound bed. Pressures of 8-12 pounds per square inch (psi) are recommended. Irrigation with higher pressures risks trauma to the wound bed and impairs healing[1].
- **Use the 30-20-10** method to produce pressures of 8-12 psi
    - 30-cc syringe with an 18-gauge IV catheter (blunt needles are used for irrigation)
    - Filled with 20 cc of fluid: Sterile Normal Saline and Sterile water are the solutions of choice for cleansing wounds and should be at least room temperature 20c[2]
    - Hold syringe 10cm from the wound bed

3) Contraindications to Wound Irrigation:

Do NOT irrigate areas where the base of the wound is not clearly visible, as it is unclear where the fluid is going and may not be retrievable[3]. This can include areas such as:

- Cavities
- Sinuses
- Tunnels

Consult a wound care specialist or physician if unsure.

References:

1. Joanna Briggs Institute (2008). Solutions, techniques and pressure in wound cleansing. *Nursing standard (Royal College of Nursing (Great Britain): 1987), 22*(27), 35–39.
2. British Columbia Provincial Nursing Skin & Wound Committee (2018) Procedure: Wound cleansing, 1-9. Retrieved from: https://www.clwk.ca/buddydrive/file/procedure-wound-cleansing
3. Sibbald, R. G., Goodman, L., Woo, K., Krasner, D., Smart, H., Tariq, G. et al. (2011). Special considerations in wound bed preparation 2011: An update. *Advances in Skin and Wound Care, 24*(9), 415-436.

Wound Care Course Update

Level 1 wound care is still available online for **Staff with LMS access**

Log into the Learning Management System (LMS) from any computer or device at https://sharedhealthmb.learnflex.net.

If needed, create a new account by clicking “New User”.

Enter “**WOUND CARE**” in the global search bar.

- Level 1 is a bundle of 8 modules so scroll down to the bottom of the window to find the course
- Stay tuned for news of Level 2 Courses planned for September 2021!

Have a question?

Contact Jane McSwiggan, Education and Research Coordinator-Wound Care at jmcswiggan@wrha.mb.ca.

Lanyard card for wound assessment

(Print, cut out and laminate)

Wound Assessment		NERDS
Identify/Treat the cause		(≥3 antimicrobial dressing, no swab)
Person-centred concerns & pain		**N**on healing wound
Healable, Maintenance, Non-Healable?		**E**xudative wound
T/D:	Type of tissue?	**R**ed, friable granulation tissue
	Need for debridement?	**D**ebris (slough/eschar)
I:	Infection/Inflammation	**S**mell or unpleasant odour
	NERDS or STONEES?	**STONEES**
M:	Moisture Balance, not too wet, not too dry	(≥3 antimicrobial dressing, swab, abx)
E:	Edge of wound & peri-wound skin	**S**ize is bigger
		Temperature is Increased
		Os (probes to bone)
		New or satellite areas of breakdown
		Exudate,
		Erythema, edema
		Smell or unpleasant odour

Wound *Care*

Arterial ulcers need to be fed

Venous ulcers need to be hugged

Diabetic Foot Ulcers need to be protected

- Tej Sahota