



ONTARIO  
SKIN & WOUND

# INNOVATIONS IN PRACTICE

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WoundPedia 

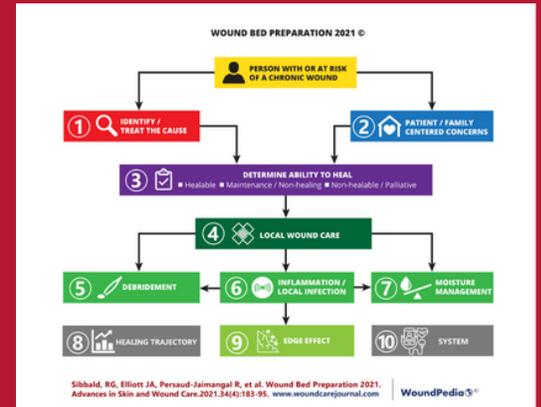
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## WOUND BED PREPARATION

We have developed Wound Bed Preparation as a prep for holistic patient care. Ideal wound care integrates patients and their circle of care with interprofessional wound care teams and health care system resources. The first article was published in 2000 and has undergone 7 revisions to Wound Bed Preparation 2021. This publication has been finetuned to reflect modifying factors in treatment of the cause, importance of patient and their circle of care (especially pain management and activities of everyday living). We have also separated out the ability of the wound to heal for optimal resource utilization.



For local wound care, documentation is followed by detail on debridement, inflammation/infection and moisture management. If a healable wound is not progressing at the expected rate (20-40% smaller at week 4 to heal at week 12), then we need to evaluate diagnostic procedures including skin biopsy, interprofessional team assessment or the potential use of adjunctive therapies (if cost-effective). Lessons learned from the first 120 patients in Project ECHO (Extension for Community Health Care Outcomes) Ontario Skin and Wound have led to some modifications to the 10 statements included in the Wound Bed Prep 2021 document. Each statement had an 80% or higher agreement by 21 interprofessional and international key opinion leaders.

Supporting evidence: Wound Bed Preparation (WBP) 2021 and WBP Paradigm Updated 2022 (numbered for comprehensive assessment guidance).

## DIAGNOSIS OF INFECTION

A mnemonic was created and validated for local infection (treat topically if 3 or more NERDS criteria). Systematic reviews of leg ulcers have shown that if silver dressings are used beyond 4 weeks, there may be minimal additional benefit and other factors need to be identified. The deep and surrounding infection is defined by 7 STONEES criteria (4 in the wound edges and 3 in the wound base). If there are 3 or more criteria, systemic antimicrobial agents should be used.

Supporting evidence:

- Woo KY, Sibbald RG. A cross-sectional validation study of using NERDS and STONEES to assess bacterial burden. *Ostomy Wound Manage*. 2009 Aug 1;55(8):40-8.
- Carter MJ, Tingley-Kelley K, Warriner RA 3rd. Silver treatments and silver-impregnated dressings for the healing of leg wounds and ulcers: a systematic review and meta-analysis. *J Am Acad Dermatol*. 2010 Oct;63(4):668-79. Epub 2010 May 14.

# IN PRACTICE

## INFRARED THERMOMETRY

The use of the infrared thermometer is one of the 7 STONEES criteria and an individual factor analysis was 8x more likely to be associated with deep and surrounding infection. We have validated less costly non-touch thermometers available for automotive and electronic uses to be equal to the scientific standard. We have also validated the infrared thermometer can be used in a zigzag pattern to give a maximum temperature that is equivalent to measuring 4 areas in the wound perimeter. A review of infrared thermometry has demonstrated its utility in detecting deep and surrounding infection (with 2 other STONEES criteria). Additional conditions that elevate local temperatures include deep inflammation (Charcot joint), unequal vascular supply and repetitive foot trauma that can lead to skin breakdown.

Supporting evidence:

- Mufti A, Coutts P, Sibbald RG. Validation of commercially available infrared thermometers for measuring skin surface temperature associated with deep and surrounding wound infection. *Adv Skin Wound Care*. 2015 Jan;28(1):11-6.
- Sibbald RG, Mufti A, Armstrong DG. Infrared skin thermometry: an underutilized cost-effective tool for routine wound care practice and patient high-risk diabetic foot self-monitoring. *Adv Skin Wound Care*. 2015 Jan;28(1):37-44; quiz 45-6.
- Mufti, Asfandyar BMSc; Somayaji, Ranjani MD, MPH, BScPT, FRCPC; Coutts, Patricia RN; Sibbald, R. Gary BSc, MD, DSc (Hons), MEd, FRCPC (Med Derm), FAAD, MAPWCA Infrared Skin Thermometry: Validating and Comparing Techniques to Detect Periwound Skin Infection, *Advances in Skin & Wound Care*: January 2018 - Volume 31 - Issue 1 - p 607-611



## WATERLOO WELLINGTON PATIENT NAVIGATION PILOT

In this quality improvement exercise as part of an ECHO blended model, home-based patients, their circle of care and primary nurse were connected virtually to a LHIN wound care nurse specialist and a key opinion leader physician. This expert interprofessional wound care team examined 48 patients at the time of quality improvement analysis. We were able to heal 29% of patients' longstanding ulcers and reduce wound size in 66% of patients. In over 70% of clients, we improved pain management and infection, along with decreased nursing visits/supply usage.

Supporting evidence: Waterloo Wellington LHIN Patient Navigation Infographic (see Page 12)

# INNOVATIONS

## AUDIBLE HANDHELD DOPPLER

The 8MHz Doppler has been used in clinical practice as a reliable method of measuring ankle brachial pressure index (ABPI). The ABPI is a comparison of the systolic pressure in the dorsalis pedis and posterior tibial artery with the brachial artery (taking higher measurement of the left or right arm with either foot). This technique is sometimes difficult to perform in the home because the patient needs to be lying flat for a number of minutes, requires squeezing the calf muscle which could be painful and values may be falsely high with calcification (up to 80% of persons with diabetes and 20% of persons over 65).



An alternative method is the audible handheld Doppler (AHHD) sound from the dorsalis pedis or posterior tibial artery. The AHHD can be used to distinguish a multiphasic signal (biphasic or triphasic) from a monophasic or absent signal. Any multiphasic wave is equivalent to an ABPI  $\geq 0.9$ . In the hands of an experienced operator, it takes less than 5 minutes compared to 20-30 minutes for an ABPI. The multiphasic wave is not influenced by calcification, the patient can be sitting in a chair, there is no need to compress the calf muscle, and there is no associated pain. The result can be recorded on a cell phone (MP3 file) and even entered into the electronic patient record. Some more expensive Dopplers have a screen identifying the wave form. This procedure was validated against the ABPI by Alavi et al. and used in the Waterloo Wellington Patient Navigation pilot.

Supporting evidence:

- Alavi A, Sibbald RG, Nabavizadeh R, Valaei F, Coutts P, Mayer D. Audible handheld Doppler ultrasound determines reliable and inexpensive exclusion of significant peripheral arterial disease. *Vascular*. 2015 Dec;23(6):622-9. Epub 2015 Jan 27. PMID: 25628222.
- Sibbald, R. Gary MD, DSc (Hons), MEd, BSc, FRCPC (Med Derm), FAAD, MAPWCA, JM; Ayello, Elizabeth A. PhD, MS, BSN, RN, CWON, ETN, MAPWCA, FAAN The Audible Handheld Doppler Facilitates Virtual and Blended Care Models During COVID-19, *Advances in Skin & Wound Care*: April 2021 - Volume 34 - Issue 4 - p 175

## LEG AND FOOT ULCERS

### PRIMARY CARE REFORM 2006-2008

Lower leg and foot ulcer interprofessional assessments were completed with an interprofessional consultative team for the Toronto and Mississauga Halton LHINs. The project's economic estimated analysis forecasted a saving of up to 2/3 of home care costs and improved patient outcomes with integrated coordinated care.

Supporting evidence: Primary Care Reform Project 11 Articles

# IN PRACTICE

## GUYANA DIABETES & FOOT CARE PROJECT 2008-2013

Built on the methodology and results of the Primary Care Reform Pilot, this project resulted in a 68% reduction in lower extremity amputations for persons with diabetes. First of all, interprofessional key opinion leader training was completed for 15 health care professionals in the International Interprofessional Wound Care Course (IIWCC).

A diabetic foot ulcer center of excellence was established at the Georgetown Public Hospital Corporation. New interprofessional skills education (portable 8MHz Doppler, Infrared Thermometry) was established in the diabetic foot clinic, where we integrated a simple plantar pressure redistribution toolkit of devices into practice. The physiotherapy assistants fulfilled the role of foot specialists. We would like to acknowledge the work of Dr. Brian Ostrow, project coordinator, Dr. Julia Lowe, Endocrinology along with the Guyanese Ministers of Health.

Supporting evidence:

- Lowe J, Sibbald RG, Taha NY, Lebovic G, Martin C, Bhoj I, Kirton R, Ostrow B; Guyana Diabetes and Foot Care Project Team. The Guyana Diabetes and Foot Care Project: a complex quality improvement intervention to decrease diabetes-related major lower extremity amputations and improve diabetes care in a lower-middle-income country. *PLoS Med.* 2015 Apr 21;12(4):e1001814
- Laura Lee Kozody enabler (Chiropody Mississauga Ont., IIWCC – University of Toronto)
- Dr. Bharat Kotru enabler (Podiatry India, IIWCC – Abu Dhabi)

## SIMPLIFIED 60 SECOND SCREENING TEST

In the Guyana Diabetes project, we needed a simplified screening test to prevent diabetic foot ulcers. The Narayan principles outlined interventions that are both cost saving to systems and improve patient outcomes. These included screening for the high-risk foot, determination of HbA1c and blood pressure control. We validated the simplified 60 second screening tool with 18 patients and assessments by 6 Guyanese and Canadian key opinion leaders in Georgetown, Guyana.

This simplified 60 second screen was carried out in 1266 patients with 48% determined to be high-risk. These patients were then referred to the diabetic foot clinic for further assessment and management. There were 9% of patients with an active foot ulcer that they were not aware of the condition or had no previous treatment. These patients had priority referrals.

Supporting evidence:

- Sibbald RG, Ayello EA, Alavi A, Ostrow B, Lowe J, Botros M, Goodman L, Woo K, Smart H. Screening for the high-risk diabetic foot: a 60-second tool (2012). *Adv Skin Wound Care.* 2012 Oct;25(10):465-76
- Woodbury MG, Sibbald RG, Ostrow B, Persaud R, Lowe JM. Tool for Rapid & Easy Identification of High Risk Diabetic Foot: Validation & Clinical Pilot of the Simplified 60 Second Diabetic Foot Screening Tool. *PLoS One.* 2015 Jun 29;10(6):e0125578.

# INNOVATIONS

## MISSISSAUGA HALTON COMPREHENSIVE INTERPROFESSIONAL WOUND CARE ASSESSMENTS ON THE DIAGNOSIS AND TREATMENT OF DIFFICULT TO TREAT HOME CARE CLIENTS 2013-2015

This project's interprofessional team identified a more precise and accurate diagnosis in over 80% of patients with difficult to heal wounds as well as assigned resource utilization based on the ability of wounds to heal. The project improved management of infection, pain, and patient coordination. The project's concept and design was approved and funded by Bill MacLeod, CEO, Mississauga Halton Local Health Integrated Network.

## THE IMPACT OF TEAM BASED INTERPROFESSIONAL COMPREHENSIVE ASSESSMENTS ON THE DIAGNOSIS AND MANAGEMENT OF DIABETIC FOOT ULCERS: A RETROSPECTIVE COHORT STUDY

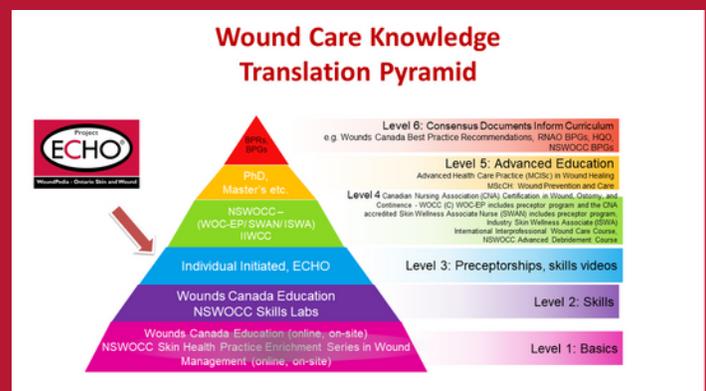
This retrospective study examined 49 patients (67.3% male) with a mean age of 64.2 years with a diagnosis of foot ulcer (6-week duration from the Mississauga Halton comprehensive interprofessional wound care assessments). Of these, 95% were referred with unspecified DFU and were reclassified to a diagnosis related to etiology, including neuropathy, ischemia or neuro ischemic etiology following interprofessional assessment ( $P < 0.001$ ). Post assessment ability to heal was identified in 100% of patients vs 44% prior to referral ( $P$  less than 0.001). Infection was identified in a greater number of patients and they were initiated on systemic therapy. Additional diagnosis included vascular insufficiency in an additional 14.3% ( $P=0.03$ ). Offloading footwear assessment was conducted in all patients compared with 30.6 percent prior to referral ( $P < 0.001$ ). Additional benefits were decreased dressing changes and improved pain scores. Therefore, the interprofessional teams were associated with improved diagnostic acumen and wound healing outcomes. This project provided patients with lower level of evidence plantar pressure redistribution devices with improved outcomes and cost-savings to the healthcare system (modelled after the success of Guyana Diabetes & Foot care Project).

Supporting evidence:

- Somayaji R, Elliott JA, Persaud R, Lim M, Goodman L, Sibbald RG. The impact of team based interprofessional comprehensive assessments on the diagnosis and management of diabetic foot ulcers: A retrospective cohort study. PLoS One. 2017 Sep 26;12(9):e0185251.

## Education Paradigms and Key Opinion Leader Training

Along with Nurses Specializing in Wound Ostomy and Continence Canada (NSWOCC), and Wounds Canada, we have developed a 6-level educational paradigm to train key opinion leaders. This paradigm could successfully train key opinion leaders in each of the 5 health districts as interprofessional team members that could consult on 20% of the home care patients that make up 80% of the cost for home wound care.



# IN PRACTICE

## **IIWCC (INTERNATIONAL INTERPROFESSIONAL WOUND CARE COURSE) WAS ESTABLISHED IN 1999**

This course was established at the University of Toronto with Dr. Dave Davis, Associate Dean, as the first university course of completion rather than attendance. An international faculty modeled interprofessional collaboration and the need to teach applied education theory with an assessment of healthcare system limitations. We are currently in the 24th Canadian Course with the 25th starting in Sept. 2022. The course has trained over 1500 key opinion leaders, primarily from Canada and 2/3 of the class are Ontario-based.

## **INTERNATIONAL INTERPROFESSIONAL WOUND CARE COURSE -INTERNATIONAL SITES 2007-2015 (24 courses)**

Our first international sites were in West Asia. The initial program was at the University of Tehran, Iran campus (2007). We trained endocrinologists, dermatologists and nurses in wound care which led to a countrywide network of Diabetic foot clinics with approximately 50 graduates. Prof. Sibbald's wound care fellow Dr. Afsaneh Alavi was key to the IIWCC course in Iran. Associate professor Alavi had moved to Toronto to retrain in dermatology and wound care as well as becoming faculty at the University of Toronto. She is now at the Mayo Clinic in Rochester Minnesota. We subsequently trained 100 + students in Saudi Arabia (2009) from over 12 regional countries. Two courses have been conducted at New York University led by Dr. Elizabeth Ayello.

## **ABU DHABI ANNUAL UPDATES (2008 – 2019) & IIWCC COURSE INTERNATIONAL HOME 2010 – Present (10 courses)**

Gulnaz Tariq, a nurse from Pakistan, living in Abu Dhabi was a graduate of the Iranian IIWCC course and mentee, created a regional wound care hub at Sheik Khalifa Medical City. The key opinion leaders created a wound care team, "link" nurses with the other services, an annual regional educational update, and a home for the IIWCC in West Asia. The first 500+ graduates formed the IIWCG (International Interprofessional Wound Care Group) as a society that successfully bid for the World Union of Wound Healing Societies meeting 2020 in Abu Dhabi.

## **SOUTH AFRICAN STELLENBOSCH UNIVERSITY IIWCC & DECLARATIONS FOR AFRICA 2012 - 2015 (5 courses)**

As part of South African IIWCC courses\* (Course coordinator Hiske Smart 2010-2015), the UBUNTU conference, and joint Conference with the Wound Healing Association of South Africa & World Council of Enterostomal Therapists created a key opinion leader network that improved collaborative wound care practice. Due to visa restrictions and local obstacles, the South African and other African students are now accommodated and subsidized in the Abu Dhabi course with up to 10 students attending annually. We have trained students from over 12 African countries including South Africa, Nigeria, Ethiopia, Cameroon, etc. with over 100 wound care graduates on the continent. We would like to thank Eveline and Richard Schulte, members of the Brenninkmeijer family and the Porticus team for supporting the African program.

# INNOVATIONS

## PROJECT ECHO ONTARIO SKIN AND WOUND 2018-2021, 2022-2024

Project ECHO Ontario Skin and Wound was funded by the Ministry of Health 2018 – 2021 and included a partnership with WoundPedia, Queen's University Faculty of Health Sciences Office of Professional Development and Educational Scholarship (OPDES), and the Registered Nurses' Association of Ontario. We trained 450 health care providers (at 96 healthcare organizations) and provided team consultations to over 120 complex patients. This project was renewed to 2022 – 2024 and includes a partnership with WoundPedia, Queen's University OPDES and Nurses Specializing in Wound Ostomy and Continence Canada (NSWOCC).

Supporting evidence: One-page summary reports on ECHO Sessions and Virtual Skills Videos/Assignments

## ADVANCED CERTIFICATE OF COMPLETION-QUEENS UNIVERSITY AND UNIVERSITY OF TORONTO- 2022

The combined ECHO 2 cycles (2x 8 sessions x 2 hours =32 hours) with 10 hour virtual skills =42 hours (Queen's) and IIWCC has two residential weekends: 3 days x 7 hours = 21 hours x2 = 42 hours (U. of Toronto). This certificate requires 4 methods of evaluation (required modules, optional modules, and selective from the IIWCC along with case presentations, a reflective diary from the ECHO cycles, and the virtual skills assessment). This can serve as the core curriculum of a wound care fellowship with the new WoundPedia Charity providing donations for successful applicants.

Supporting document: Advanced Certificate of Completion 1-pager

Educational Component	Days -Hours	Interactive component	Accreditation	Evaluation
IIWCC 1 <sup>st</sup> Educational Sessions	3 days x 7 hours =21 hours	Chat line for questions Votes – 1 per 15 min + 5 min question + answers	21 hours U of T * module review *patient review *introduction selective *introduction skills	1. Self study modules x 5 compulsory – marked 2. Self-study modules x4 student selected and marked
IIWCC 2 <sup>nd</sup> Educational Sessions	3 days x 7 hours =21 hours	Chat line for questions Votes – 1 per 15 min + 5 min question + answers	1, Module review 2, Patient day 3. Selective day	3. Selective – oral presentation and reflective SWAT analysis on implications for practice in the workplace
Skills	10 hours 3 sessions – 4, 3 and 3 hours between the 2 educational sessions	9 videos introduced with assignments for the students to hand end for each video	10 hours – Queens University	4- Skills videos assessed by faculty that they meet or exceed standard for the skills and participant profession (doctor, nurse, allied health)
ECHO sessions	Cycle 1- leg & foot ulcers Cycle 2-Pressure injuries & misc. wounds	Chat line for questions Each interprofessional session have spokes presenting cases for discussion with other spokes & then with co-hubs	Each cycle has 8 sessions each 2 hours long 2 cycles 16 sessions 2 hours =32 hrs	5. Proposed reflective report of the implications for practice from ECHO sessions : * interprofessional team – do you have a plan *how to improve patient outcomes *Gap or SWAT analysis
Overall	4 activities	At least 33 percent of time is interactive	21 x2 = 42 hrs. U. of Toronto 10-skills + 32 ECHO = 42 hrs. Queens University	*4 methods of evaluation * 5 <sup>th</sup> area proposed

# IN PRACTICE

## ECHO INTRODUCTION SESSIONS ON FOOT ULCERS (Open registration)

Wednesdays from 2-4 P.M. Didactic 40 minutes followed by interactive case discussions. Accredited by Queen's University Office of Continuing Education and Professional Development. Nurses to receive certificate of attendance.

- June 1 – Session 1: Prevention, 60 Second Foot Screen
- June 8 – Session 2: Management of Arterial Disease
- June 15 – Session 3: Management of Infection
- June 22 – Session 4: Plantar Pressure Redistribution

## FULL ECHO CYCLE – STARTS WEDNESDAY SEPTEMBER 7

Preference given to attendees that have at least 2 disciplines working as a team (physician, nurse, allied health). Suggested training for LHIN centred interprofessional teams. These individuals will be trained to assess complex clients (20% of home care makes up approximately 80% of costs. Costs could be reduced by 1/3 – 2/3 with interprofessional assessments and patient navigation methodology that's integrated and coordinated with home care. Important that these teams are available to all service provider organizations. Need sessional fee for team leads (MDs vs Nurse Practitioners). Training in ECHO could be designed to facilitate these teams if we had enough interest.

Session ID	Echo Identified Session Cohort D/Session /Cycle	Date (2022)	Topic
<b>Cycle 1: Lower limb/leg &amp; foot ulcers</b>			
Session 1	Cohort D/S1/C1	September 7	Diabetes and foot ulcers
Session 2	Cohort D/S2/C1	September 14	Arterial supply and <del>healability</del>
Session 3	Cohort D/S3/C1	September 21	Infection
Session 4	Cohort D/S4/C1	September 28	Plantar Pressure Redistribution
Session 5	Cohort D/S5/C1	October 5	Pain Control
Session 6	Cohort D/S6/C1	October 12	Vascular Leg Ulcers
Session 7	Cohort D/S7/C1	October 19	Venous Ulcers, Lower leg edema-compression therapy
Session 8	Cohort D/S8/C1	October 26	Other Leg Ulcers

Session ID	Echo Identified Session Cohort D/Session /Cycle	Date (2022)	Topic
<b>Cycle 2: Pressure injury/Other wounds</b>			
Session 1	Cohort D/S1/C2	November 2	Prevention of Pressure Injuries
Session 2	Cohort D/S2/C2	November 9	Pressure Injury: Pressure Relief and Redistribution
Session 3	Cohort D/S3/C2	November 16	Management of the Pressure Injury Contributing Factors
Session 4	Cohort D/S4/C2	November 23	Nutrition Treatment of the Whole Patient for Wound Healing
Session 5	Cohort D/S5/C2	November 30	Non-Healable Maintenance and Inflammatory Wounds
Session 6	Cohort D/S6/C2	December 7	Post-Surgical Wound
Session 7	Cohort D/S7/C2	December 14	Burns and Trauma
Session 8	Cohort D/S8/C2	December 21	Malignant and End of Life Skin Changes

# OPPORTUNITIES

## DEVELOPMENT OF NORTHERN DISTRICT

One of the aims of ECHO Ontario Skin and Wound is to develop the Northern remote and underservices areas along with the indigenous community.

1) Work with Sault College with collaboration from Northern Ontario School of Medicine (NOSM) (to be confirmed)

- E-curriculum for nursing programs in Ontario consists of 15 3-hour interactive learning sessions on skin and wound care (basic level)
- 5-hour mini courses: Leg and Foot ulcers, Pressure injuries (basic to intermediate level)
- Micro credential courses: 5 courses x 30 hours each. Co-accredited by the Northern Medical School (TBC) and Queen's University (TBC) for physicians with micro credentials for nursing and allied health

Micro credential courses:

§ Leg and Foot Ulcers – accredited education to complement Cycle 1 in ECHO

§ Pressure Injuries and Miscellaneous – accredited course to complement Cycle 2 in ECHO

§ Accredited course on local wound care and infection based on Wound Bed prep 2021 with superficial infection (treat topical) and deep/surrounding infection (treat systemically)

§ Skin care – a primer in dermatology for physicians, nurse practitioners, nursing and allied health professionals.

Partnerships will be offered to Dr. Anastasia Shamsuyarova (Thunder Bay), Wendy Wallace (Sault Ste. Marie), Sylvia Martinez (Sault Ste. Marie – starting September 1, 2021), Dr. Lyne Giroux (Sudbury), Dr. Tiffany Parsons (Sudbury) Long Term Care education for the frail elderly spearheaded by NSWOC for physicians, nurses and allied health

2) Challenge fund and ECHO Ontario Skin and Wound – Funds have been obtained to host a Skin and Wound Week (5-day event from Mon. Oct. 24 – Fri. Oct. 28)

- 50 Northern Ontario healthcare teams (indigenous, remote and isolated communities) would have ability to have partial payment of attendance at Skin and Wound Week Northern Ontario Sessions.
- Invitations will be sent to Key Stakeholders in the community and province for this event
- Emphasis will be on the care of diabetic foot ulcers with community kits containing Dopplers, infrared thermometers, plantar pressure redistribution devices and enablers for practice to Northern communities to move knowledge, not patients
- Each day would have 1 of the 5 micro credential courses highlighted with separate attendance
- Skills sessions would be offered for participants in Project ECHO Ontario Skin and Wound Cycle 1 and these would be run on days to complement leg and foot ulcer sessions
- Teams attending Skin and Wound Week would be required to sign up for practice mentoring and support including a practice portfolio of wound patients
- A hybrid format would be offered so that attendees could be part of the sessions virtually at the same time as the in-person sessions were conducted
- Partners would be recruited from the Aboriginal community, NOSM (to be confirmed), Queen's University (to be confirmed) and WoundPedia

3) Virtual Reality (VR) Project

Simplified 60 Second Diabetic Foot Screen and Diabetic Foot Ulcer care will be introduced during Skin and Wound Week

# PATIENT NAVIGATION PILOT

## Blended (Virtual and In-Home) Interprofessional Home Care Navigation for Chronic Complex Wounds During COVID-19

Helen Arputhanathan MSc, BScN, RN, IIWCC, NSWOC; Jane Hyde, BScN, RN, IIWCC, NSWOC, WCC(C); R Gary Sibbald, MD, M.Ed., D.Sc (Hon), FRCPC (Med,Derm)  
Home and Community Care Support Services, Waterloo Wellington; WoundPedia and ECHO Wound Program

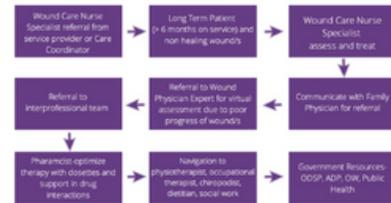
### Project Aim

To virtually navigate an interprofessional home care team assessment and treatment for patients with chronic complex wounds during COVID-19



#### Eligibility

- Patients who completed a wound clinical pathway without wound closure.
- Palliative patients with complex wounds.
- Patients without a diagnosis or wound best practice.



### Interprofessional Team

### Referral Process

### Methods



#### Using Wound Bed Preparation 2021:

- **Manage the cause with interprofessional consultation** (blood supply, co-factors impacting healing)
- **Address patient centered concerns** (pain, activities daily living, circle of care)
- **Determine healability** (Healable, Maintenance or Non-healable)
- **Optimize local wound care** (debridement, infection, moisture management)
- **Evaluate outcomes** (healing, re-assessment, utilization of adjunctive therapies)

### Results

Since April 2020, forty eight patients on service between 2012 and 2021 were referred to the Home and Community Care Support Services (HCCSS) Wound Care Nurse Specialist for holistic blended care model.



REDUCED NURSING VISITS



REDUCED SUPPLY USAGE



REDUCED WOUND SURFACE AREA



PAIN REDUCED



APPROPRIATE MANAGEMENT OF INFECTION (Local/Deep)



WOUND CLOSURE

#### Overall Outcome

Wound bed preparation is an excellent tool to ensure effective management of persons with wounds. This project validated the use of wound bed preparation and collaboration with the virtual interprofessional team, benefiting both patients and improved utilization/cost savings of the health care system overall.



### Lessons Learned for Practice

1. Used validated tools to identify and treat wound cause, comorbidities, surgical history, skin characteristics, nutrition and medications
2. Optimized resource management through use of electronic records
3. Reviewed healability, activities of daily living and symptom goals
4. Identified interprofessional team members to maintain and manage skin integrity and to optimize patient's overall health and well being
5. Implementation of evidence-informed holistic plan of care focused on optimizing local wound environment, selecting appropriate dressings and potential use of adjunctive therapy
6. Evaluation of outcomes to determine whether goals of care have been met, adjust treatment and support prevention to reduce the risk of recurrence

HOME AND COMMUNITY CARE SUPPORT SERVICES  
Waterloo Wellington



WoundPedia

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**WoundPedia** 

The text "WoundPedia" is written in a large, bold, white, sans-serif font. To the right of the text is a small, white icon of a globe showing the continents of North and South America.