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Wound Care CANADA

THE OFFICIAL PUBLICATION OF THE CANADIAN ASSOCIATION OF WOUND CARE

Kick-start Stalled Wounds: A Look at Laser Therapy

My Skin Health Passport: A New Tool For Preventing Avoidable Wounds

The Importance of Policy Analysis

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Contents

4 Executive Director's Page

6 Corporate News

9 News in Wound Care

12 Perspectives from a Peer Leader and Regional Self-Management Program Leaders: *PEP Talk: Diabetes, Healthy Feet and You* in Action
By Janet L. Kuhnke, Renato, Surkhab Peerzada, Katherine Farrell and Kathryn MacDonald

18 Remote Wound Consultation Series Part 2: Considerations for Service Delivery and Policy Development
By Elise Rodd and Sabrina Hasham

30 Wound Sleuth
By Rob Miller and Cathy Burrows

32 Maintaining Skin Health: My Skin Health Passport: Introducing a Way to Prevent Avoidable Wounds
By Rosemary Kohr and Andrea Trainor

34 Kick-start Stalled Wounds with Laser Therapy
By Fred Kahn and Fernanda Saraga

38 Health Policy: Policy Analysis
By Karen Laforet

42 The Wound Management Team: A Day in the Life of a Vascular Social Worker
By Penny Durnford

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The Canadian Association of Wound Care (www.cawc.net) is a non-profit organization of health-care professionals, industry participants, patients and caregivers dedicated to the advancement of wound prevention and care in Canada.

The CAWC was formed in 1995, and its official meeting is the CAWC annual conference held in Canada each year. The association's efforts are focused on five key areas: public policy, clinical practice, education, research and connecting with the international wound care community. The CAWC works to significantly improve patient care, clinical outcomes and the professional satisfaction of wound care clinicians.

Don't Miss Out

Each time a new issue becomes available, subscribers will be notified by an email that contains a live link to the online magazine. If you are not already a subscriber, send an email to info@cawc.net to get on the list. **It's free!**

Twenty Years of Advancing the Cause . . . with the Best Yet to Come

By Mariam Botros, Executive Director, Canadian Association of Wound Care

Twenty years after its establishment in 1995, the Canadian Association of Wound Care (CAWC) continues to be a strong force for advancing the cause of skin health and wound management in Canada. Dedicated staff and volunteers work continuously to improve the health of Canadians at risk for skin breakdown and the practice of the health-care professionals who care for them. I am excited to outline the programs we have planned that support our ideals.

In 2015, the CAWC will be focused on four priorities:

1. Professional education

- The organization continues to offer high-quality general wound education online and in the form of two-day onsite workshops across Canada. By the end of spring 2015, workshops will have been held in Yukon, Ontario and Nova Scotia.
- Specific diabetic foot education is delivered in the form of workshops to professionals with a special interest in managing the complications of the diabetic foot.
- The CAWC's annual conference is the largest wound-specific conference in Canada, and this year it will be held October 29 to November 1, 2015, at the Westin Harbour Castle in Toronto.
- Issues of *Wound Care Canada* and *Diabetic Foot Canada e-Journal* are sent several times per year to the largest skin and wound database in the country.
- eblasts and social media channels provide a means for the CAWC to send educational messages to health professionals.

2. Public information

- The CAWC has created programs to help patients manage their own health, including:
  - Prevention of diabetic foot complications, in the form of peer-led onsite workshops and web-based information (PEP Talk: Diabetes, Healthy Feet and You program)
  - A patient- and family-focused program on the prevention of pressure ulcers
- The CAWC uses the latest technology to connect with the public through social media and an interactive online community.
- With James Elliot as the new Director of Advocacy and Government Relations, 2015 will be a big year for advocacy at the CAWC. The CAWC has stepped up its advocacy efforts, with a national media campaign encouraging early intervention in the treatment of PAD and a government-targeted campaign aimed at policy changes to improve prevention of diabetic foot complications, leading to reduced rates of amputation. See CAWC News on page 9 for more on both these programs.

3. Research

The CAWC is pleased to announce that Dr. Michael Stacey has joined us as chair of the CAWC's Research Committee.

Over the course of the next two years, the committee will focus on:

- Participating and collaborating with others in wound research
- Identifying potential funding opportunities
- Contributing to and promoting the evaluation of new wound prevention and management strategies based on patient outcomes and health economic analyses
- Collaborating with the advocacy committee to use evidence to develop wound-related policies and disseminate the findings

4. Creating and nurturing partnerships

The CAWC connects with other groups through:

- Participation in conferences around the country
- Connecting with Health Canada and provincial/territorial health ministries to advance skin health and wound care across Canada
- Creating partnerships with other not-for-profit organizations with shared interests, universities, government health ministries, product and service companies and private and work-related insurance boards, among others

These are exciting times for those working in the area of wound prevention and management, and the CAWC is proud to support their efforts. Please visit www.cawc.net for regular updates.

CAWCEducation
PEER EDUCATION

The CAWC can deliver *PEP Talk: Diabetes, Healthy Feet and You* to your region

The CAWC's popular and effective peer education program (PEP), called PEP Talk, is an innovative workshop program, whose development was funded by the Public Health Agency of Canada, for persons with diabetes. Held in communities across the country, the workshops are conducted by a trained peer leader (a person with diabetes) partnered with a diabetes health-care professional.

The program has demonstrated the effectiveness of peer educators, who work in partnership with the diabetes health-care community and empower people living with diabetes to adopt self-management behaviours that can help them prevent foot complications by increasing their knowledge of risk factors and linking them to resources in their communities.

For more information on the PEP Talk program, please visit http://diabetespeptalk.ca/en/diabetes.

Get PEP!

To get a PEP Talk training session in your region, please email info@cawc.net.

News from Our Industry Partners

Covidien is Joining Medtronic

Together, Medtronic and Covidien are working to improve health care by addressing the needs of more people, in more ways and in more places around the world.

CONNECTING WHAT WE DO WITH WHAT PEOPLE NEED

Both Covidien and Medtronic are committed to improving the lives of people through our medical technologies. We brought our two companies together to accelerate and advance our ability to create meaningful innovations for hospitals, health systems and health-care providers so they can deliver the best care possible to patients and their families around the world.

COLLABORATIVE INNOVATION

We recognize that innovation is only meaningful if it is safe, effective and usable. That's why we are partnering with health systems and providers to combine our capabilities with their expertise to change the way we work together to achieve the best outcomes.

REMOVING BARRIERS, REACHING MORE PEOPLE

With changing health-care demands, companies that deliver health products and services must be willing to do things differently. The union of Medtronic and Covidien demonstrates that we are committed to thinking differently in solving problems to deliver better health.

New Leadership at Derma Sciences

After more than 30 years of dedicated service to Derma Sciences Canada, Peter Crawford has set his sights on a well-deserved retirement, effective February 1, 2015.

Peter, whose leadership and commitment have seen Derma become a major player in the wound care industry, joined what was then Dumex Medical in 1984 as Territory Manager, and was subsequently promoted to Marketing Manager where he led the successful transition to Derma Sciences.

Taking over the helm is D'Arcy Carr as Director, Sales & Marketing – Canada. D'Arcy received his Bachelor's degree from the University of New Brunswick and 25 years of medical device sales experience in Canada, including management positions with CR Bard, Omron Healthcare and most recently ConvaTec.

To Peter, we wish you all the best as you begin an exciting new chapter in your life.

Hydrofera Blue from Hollister

Hydrofera Blue antibacterial PVA foam continues to be widely and successfully used to overcome barriers to healing. In addition to maintaining moisture balance, Hydrofera Blue has broad spectrum activity against micro-organisms commonly found in wounds. New evidence continues to link Hydrofera Blue and autolytic wound debridement. A recent *in-vivo* study[1] compared test products on eschar wounds. Statistically significant reduction of devitalized tissue was reported with Hydrofera Blue dressing after 14 days. Please connect with your Hollister representative to explore how Hydrofera Blue can make an impact in your clinical outcomes.

1. Applewhite AJ, Attar P, Liden B, Stevenson Q. Gentian violet and methylene blue PVA foam antimicrobial dressing as a viable form of autolytic debridement in the wound bed. Surg Technol Int. 2015. In press.

New Product from Mölnlycke

Mölnlycke Health Care is proud to introduce Exufiber®, an innovative gelling fibre dressing with Hydrolock® technology. Exufiber's high tensile strength allows removal in one piece while its superior retention capacity reduces risk of leakage and maceration. Exufiber® represents the future of fibre dressings.

Mölnlycke Health Care is also excited to launch the addition of Mepilex® XT to the Mepilex® family of dressings with Safetac technology. Mepilex® XT's unique exudate channels absorb

low and high viscous exudate, providing superior fluid handling. This innovative dressing provides effective, comfortable management for all exudative wound healing stages that no other foam dressing currently available can provide. Optimal patient care can now be extended to every stage of the wound healing journey.

Combine the use of Exufiber® with Mepilex® XT for highly exuding wounds to gain the benefits of both Safetac® and Hydrolock® Technology.

Introducing Nanoderm™

Nanoderm™ is being introduced into the Canadian market with an exclusive distribution agreement between Axcelon Dermacare Inc. (ADI) and The Stevens Company.

Nanoderm™, a one-time dressing application, is a unique bacterial nanocellulose product indicated for a variety of wound treatments, including burns, dermabrasions as well as acute and chronic wounds. "We expect Nanoderm™ to play a crucial role in the cost-effective treatment of chronic wounds, which are a huge economic burden to the Canadian health-care system," said Claude LeDuc, President and COO of ADI.

"We are very pleased to have Nanoderm™ in our portfolio of wound care products as we believe it represents a breakthrough technology for wound care," said David Donnelly, Vice President, Business Development, The Stevens Company.

Marianne MacMillan has been named Director of Business Development for ADI and will support the efforts in partnership with Stevens to take Nanoderm™ to the next level.

Discover Nanoderm™ at www.nanoderm.com.

3M Develops IAD Guide

Incontinence-associated dermatitis (IAD) represents a significant health-care challenge worldwide. Recent consensus work has identified gaps in our current understanding and practice.

With this in mind, last fall 3M partnered with *Wounds International* to bring together the first truly international group of experts on IAD. Fourteen thought leaders met in London, UK, to review knowledge deficits in IAD and advance best practice principles to address the gaps. Key topics included risk assessment, the role of IAD in pressure ulcer development, assessment and categorization of IAD and development of a severity-based approach to treatment.

Following the meeting, a document reflecting the group's discussions and conclusions was developed that provides practical guidance on how to assess, prevent and manage IAD. For clinical leaders, a step-by-step guide on IAD prevention is provided, in addition to information on developing a structured prevention program.

We encourage you to read the consensus document at: www.woundsinternational.com/other-resources/view/incontinence-associated-dermatitis-moving-prevention-forward.

Stay connected!

Get on the CAWC mailing list!

To receive notifications, information, invitations and more, send an email to info@cawc.net.

Follow us on social media!

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- Mepilex XT's unique exudate channels absorb highly viscous exudate, drawing it away from the wound bed[2]
- Dressings with Safetac® technology are clinically proven to minimize damage to the wound and pain to the patient[3,4,5]
- Mepilex XT is a conformable foam dressing for all exuding wound healing stages including use on sloughy wounds[1,2]

References: 1. Fluid handling and retention properties Mepilex XT: Report no. 20130729-001 (SMTL). 2. Fluid handling and retention properties with Viscous test Fluid Mepilex XT, Report No. 20130104-004/ 20121012-004/20130104-004 (MHC). 3. White R. et al. Evidence for atraumatic soft silicone wound dressing use. Wounds UK, 2005. 4. Upton, D, Solowiej, K. Pain and stress as contributors to delayed wound healing. Wound Practice and Research 2010;18(3):114-122. 5. Upton, D, Solowiej, K. The impact of atraumatic vs conventional dressings on pain and stress. Journal of Wound Care 2012;21(5):209-216.

To learn more, contact a Mölnlycke Health Care representative at **1-800-494-5134** or visit **www.molnlyckewoundcare.ca**

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News in Wound Care

Canadian Association of Wound Care / Association canadienne du soin des plaies

CAWC News

The CAWC has been working hard to expand our reach and create active partnerships with like-minded organizations. As a result we are in a strong position to advance our goals. Over 2015 we will:

1. Increase our attention to health disciplines that are in need of enhanced skin and wound education, with priority focus on family physicians, nurse practitioners, government/agency decision-makers, the public and lay caregivers.
2. Move beyond wound care into skin health through education of clinicians, improving public awareness, advocacy aimed at prevention, all while continuing to strengthen wound management education and awareness.
3. Create more customized programs for groups, organizations and governments to better meet specific needs.
4. Utilize new technologies to deliver more types of programs to more people.
5. Enhance our role as facilitators across all sectors by continuing to connect with partners nationally and internationally and provide opportunities to organizations, governments and individuals to gather to exchange knowledge and resources.
6. Set the agenda for wounds and skin health in Canada, through events, white paper development, advocacy programs and more.

Advocacy

The CAWC is pleased to announce that James Elliott has joined us as Director of Advocacy and Government Relations.

The CAWC, along with a collaborative group of other non-profit organizations, and supported by Covidien Canada, launched the Just Leg Pain? Think Again campaign at the CAWC conference in October 2014. The campaign was aimed at increasing patient and health professional awareness about the need for early diagnosis of PAD (peripheral arterial disease). Patients with chronic diabetes or advanced vascular disease can develop painful legs and ulcers—and 40% of those patients progress to requiring major amputations. The campaign seeks to educate patients, health providers and policy makers that the type of early intervention seen in Europe should be applied in Canada for treating patients with PAD.

The campaign consisted of a media release

CAWC Conference

The Canadian Association of Wound Care conference will once again be held in Toronto, Ontario, at the Westin Harbour Castle Hotel, **October 29 to November 1, 2015**. If you are interested in improving your skin and wound care practice you will want to attend.

Toronto 2015

The conference features three full days of experts presenting the latest information on the most topical subjects in skin and wound care plus a day of hands-on workshops for anyone looking to improve specific skills. The most current research will be delivered through poster displays and special oral presentations. As always the formal and informal networking opportunities will provide attendees with access to colleagues from across the country who share common goals and challenges.

Please visit http://cawc.net/en/index.php/conference/ for more information and to register.

Act fast to take advantage of the Conference Early Bird pricing!

and educational materials. An information piece geared to clinicians to help them work with patients and a brochure aimed at patients to help them understand PAD and its implications can be downloaded from the CAWC site at http://cawc.net/en/index.php/public/peripheral-arterial-disease/. They are available in English and French.

The CAWC—along with the Registered Nurses' Association of Ontario, Canadian Association for Enterostomal Therapy, the Canadian Diabetes Association and a number of other organizations and individuals—is spearheading an advocacy movement to encourage health ministries around the country to implement policy changes supporting the prevention of foot complications in persons with diabetes. For more on this initiative, please see Advocating for Diabetic Foot Care Change in Canada, an article in *Diabetic Foot Canada e-Journal* written by James Elliot (www.diabeticfootcanadajournal.ca/journal-content/view/advocating-for-diabetic-foot-care-change-in-canada).

Research

The CAWC is pleased to announce that Dr. Michael Stacey has joined us as Chair of the CAWC's Research Committee.

Recent projects have included the CAWC, Queen's University and the Government of Ontario's study to evaluate the impact of an interactive online support group relating to diabetes self care and a paper developed by the CAWC, sponsored by several companies, on the role of advanced therapies in the management of diabetic foot ulcers.

Education

The CAWC offers opportunities to health-care professionals for ongoing professional career growth in the areas of skin health, wound prevention and wound management.

The basis for the education is a series of online modules (The Foundations of Wound Care) that provide foundational knowledge, followed by onsite case-based workshops to take the knowledge, give it context and provide methods of applying the knowledge to practice.

Onsite workshops must be sponsored by a health region, facility or organization. If you are a member or employee of the sponsoring body, you can register through them. If you are not a member or employee, indicate your interest in attending a workshop by emailing info@cawc.net. Your name will be placed on a list and you will be notified about upcoming workshops. Please visit http://cawc.net/en/index.php/educational/ for more information on upcoming events.

CAWCEducation

If your facility is interested in sponsoring an educational event and has a minimum number of 50 participants, we are able to deliver the program in your community. For more information on this opportunity, please email info@cawc.net.

For more information on CAWC education, please visit http://cawc.net.

Diabetic Foot Canada

The Diabetic Foot Canada online community is being refurbished with a great new look and enhanced functionality. Please visit www.diabeticfootcommunity.ca soon to see the changes.

The Canadian Association for Enterostomal Therapy
Association Canadienne des Stomothérapeutes

CAET News

By Catherine Harley, RN, eMBA, Executive Director, CAET

The CAET is pleased to announce that Paulo DaRosa, RN, BScN, MCLScWH, CETN (C) is the new CAET President. Paulo is currently employed as a Nurse Clinician and Certified Enterostomal Therapist at the London Health Sciences Centre.

The CAET recently partnered with Diabetic Foot Canada (DFC) to support the PAD campaign and participated in an Ontario Ministry of Health meeting that took place February 3, 2015, in Toronto, Ontario, with the CAWC, DFC, the Canadian Diabetes Association and the Registered Nurses' Association of Ontario to raise awareness around the issues that patients are facing in the area of the prevention and management of diabetic foot complications. Follow-up will be taking place in order to support progress to improve patient outcomes.

The CAET has been working with Ostomy Society Canada (formerly UOAC) to raise awareness of the need for ostomy reimbursement changes through the Assistive Devices Program (ADP) in Ontario. The CAET has also been a participant in the Pan-Canadian Ostomy Reimbursement initiative with the Canadian Colorectal Association of Canada and other stakeholders to improve ostomy reimbursement across Canada.

The CAET Informatics and Research Core program just launched a Patient Decision Aid for Intermittent Self Catheterization – "Is it the right choice for you?" You will see information on this patient decision aid in the Research and Informatics report in the recent issue of the *CAET Link*. Please take time to read it in order to see a new way to help to empower patients. For further information on this initiative, please go to www.caet.ca and click on "Education and Research" and look under "Education and Research" Patient Decision Aid.

The CAET Academy is offering a "Writing for Publication Course," which will assist individuals interested in learning how to write and publish a paper. For further information on this course, or if you are interested in becoming an Enterstomal Therapist, please go to www.caetacademy.ca or feel free to email me directly at catherine.harley@sympatico.ca.

OntWIG Ontario Woundcare Interest Group

Ontario Woundcare Interest Group News

By Valerie Winberg, OntWIG President

The Ontario Woundcare Interest Group (OntWIG) continues to advance our Wound Care Framework document: "Fewer Wounds, Faster Healing (2012)." OntWIG created this document to foster dialogue among health-care providers, policy makers and the general public about the growing challenge wound care presents to wound management. The need for a pan-provincial strategy to govern and improve efficiencies in wound care is urgently needed.

OntWIG continues to engage multidisciplinary health-care providers in activities that pertain to wound health policy and political action in Ontario.

Our current activities are focusing on the engagement of members in working groups:

1. Developing clinical pathways across sectors for various wounds
2. Defining qualifications and role of the wound specialist in Canada
3. Standardizing wound data collection across all health-care sectors

OntWIG remains involved at the steering committee level with the Canadian Wound Care Alliance, a national group with the objective of lobbying for and building a national centre of excellence and innovation for wound care in Canada.

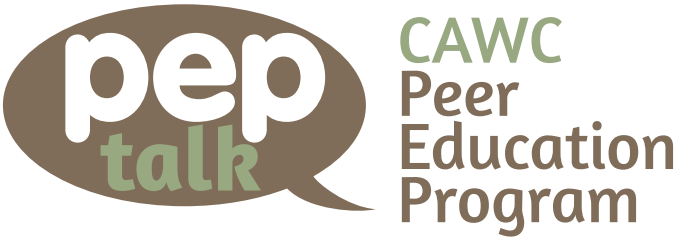
To join OntWIG, renew membership and/or participate in an OntWIG working group, please go to www.OntWIG.ca/register.

To contact an executive member of OntWIG, please email Ontwig@gmail.com.

Perspectives from a Peer Leader and Regional Self-Management Program Leaders:

PEP Talk: Diabetes, Healthy Feet and You in Action

By Janet L. Kuhnke, RN, BA, BScN, MSc, Renato,* Surkhab Peerzada, MPH, Katherine Farrell, HBK, MPH, and Kathryn MacDonald, RD, CDE



Introduction

Peer-led education programs are designed to help empower and inform clients and their families living with chronic conditions.[1] The goal of self-management and self-care related to foot care is to have the client positively manage their daily foot care. The Canadian Association of Wound Care, the Canadian Diabetes Association and the Public Health Association of Canada clearly state the seriousness of diabetes mellitus and its related foot complications.[2,3]

The following panel report is from the 20th annual Canadian Association of Wound Care conference in Toronto, Ontario, which was held in the fall of 2014. The PEP Talk panel presentation was led by a dynamic client presenter who shared his story of living with diabetes and, as a result, how he became involved in the PEP Talk program as a volunteer PEP Talk Peer Leader.[4,5] As well, Self-Management Program co-ordinators and leaders from three Local Health Integration Networks (LHINs) shared their journey with the PEP Talk program from their respective geographic areas. The following questions were asked of the panel members after their presentation. They provide insight on the program and how implementing the program across Canada can improve the lives of persons living with diabetes.

Client Perspective

What is the nature of the wound you are currently living with?

My primary wound site involves the lateral border of my right foot where the fifth metatarsal was amputated, in addition to debridement of the surrounding soft tissue. While this wound

** Renato has requested his last name not be used in this article.*

site was closed with a skin graft, the area remains sensitive and is subject to recurring issues. I have experienced both pressure ulcers and blistering of the skin, which can arise for various reasons.

Renato, when did you first learn of your ulcer?

As a result of my denial, it was only after the initial infection in my right foot degenerated to such an extreme that I went to the emergency department at a local hospital. All the diagnostics, testing and treatment were performed there between July and August of 2013, where I remained a patient for a total of 44 days. Today, having finally broken through the barrier of denial I now receive regular chiropody care and immediately report any issues to my team of health-care providers.

What was your initial reaction, and how are you coping?

By the time I had presented to the emergency department, I knew I was in serious trouble. Intellectually, I understood the gravity of the situation but I remained paralyzed with fear in seeking treatment. I consider myself lucky, as I could have easily lost my leg, if not my life, if things had progressed much further. For me, coping is a matter of addressing my total health care. This involves actively seeking proper treatment from the appropriate health-care professionals and doing everything I can to make better decisions regarding my overall health.

How did you hear about the PEP Talk program?

I had mentioned to my chiropodist that I was interested in advancing the cause of better diabetes foot management and he was the one who introduced me to the co-ordinators of the PEP Talk program.

"PEP Talk community workshops . . . are aimed at informing either patients with diabetes or their caregivers about the importance of proper foot management."
— Renato, PEP Talk Peer Leader

Can you tell us about your role in the PEP talk program?

I completed the PEP Talk Peer Leader training session to become a certified PEP Talk Peer Leader. So I am now qualified to conduct PEP Talk community workshops, which are aimed at informing either patients with diabetes or their caregivers about the importance of proper foot management. If diabetes has one redeeming quality, it is that so much can be done to prevent complications. By raising awareness and sharing my story, it is my hope that others may be inspired to make better decisions for themselves or their loved ones.

LHIN Regional Chronic Disease Leader Perspectives

The chronic disease co-ordinators/leads (the other panelists at the conference) submitted key points from their presentation.

Introduction

Self-management programs (SMPs) in Ontario—which are mandated to support people living with chronic disease to learn evidence-based self-management behaviours and skills—are funded by the Ontario Ministry of Health and Long Term Care.[6] There are 14 self-management programs across the province, one per LHIN, and each program is hosted by a range of health-care organizations. Various host organizations, based on their individual needs, have adopted the PEP Talk program, with the goal of empowering and helping people living with diabetes learn good (daily) foot care practices.[7]

Can you tell us how you got involved in the PEP Talk program?

Central West: In the Central West LHIN there is a high rate of diabetes.[8,9] PEP Talk offers an opportunity to increase

and reinforce the knowledge and skills of basic diabetes foot care, which is aligned with information provided by health-care-provider team members and helps to connect people living with diabetes to foot care and community diabetes services, including peer support.

North East: In the North East LHIN, PEP Talk was launched because of the high rates of diabetes, diabetic foot complications and amputations reported in Northern Ontario.[10,11] PEP Talk also helped increase the diversity of programming offered by Living Healthy Northeast because it is a one-time 2.5-hour workshop. Moreover, PEP Talk aligns with the strategic priorities of our health-care providers in providing diabetic foot care and self-management skills.

Toronto Central: For the Toronto Central Self-Management Program,[12] adding the PEP Talk peer-led program was a way to support a need identified by the Toronto Central LHIN's Diabetes Program.[13] As well, it gave us the opportunity to continue to work with the goal of working in the neighbourhood improvement areas (NIA) of the Toronto Central LHIN region.[14]

Renato speaking during the 2014 CAWC conference in Toronto.

Can you tell us what your prior experience was working with persons living with foot ulcers related to diabetes?

Central West: Being the co-ordinator of the Central West Self-Management Program (SMP), as well as a registered dietitian[15] and certified diabetes educator[16] has provided me the opportunity to work with people with diabetes as well as health-care providers involved in diabetes care. My role on a diabetes education team involved working with other team members in the area of communication of basic foot care for persons with diabetes and connecting clients to foot care specialists.

North East: In the North East LHIN, I have limited experience working with persons living with diabetic foot ulcers. I have some clinical experience from my years practising as a kinesiologist.

Toronto Central: In the Toronto Central LHIN, our program had limited exposure to persons living with diabetic foot ulcers. PEP Talk has been a wonderful addition to programs offered by us.

For any program to be successful in implementation and evaluation, it is important to know who is on your team and who is committed to supporting your initiative. Having team members from frontline to managers to policy makers is essential for success.

How have you navigated the health-care system to implement the PEP Talk program?

Central West: In our region our Self-Management Program has engaged with the diabetes education programs, primary care physicians and chiropodists to increase awareness about the PEP Talk program. This includes recruitment of health-care professional trainers and

peer leaders and launching the community workshops. Through partnerships with our local diabetes education programs and community health centres we have been able to offer PEP Talk workshops to complement the clinical services provided. We are also in communication with the Chronic Disease Prevention and Management Team at our LHIN about possible uptake of a regional Foot Care Tool Kit, which has referral to PEP Talk workshops embedded in addition to Inlow's 60-Second Diabetic Foot Screen tool.[17]

North East: In the North East we reached out to our regional and community contacts that we have partnered with before for other CDSMP and CPSMP workshops, and with the NE LHIN and regional diabetes programs to build awareness and interest in the PEP Talk program. From these connections we were able to train seven health-care providers in December 2013 from the region in PEP Talk. After the training, the health-care providers all identified potential peer leaders from their health-care practices to be trained. In 2014, several peer leader trainings took place throughout the region, and most of the peer leaders have gone on to complete at least one community workshop.

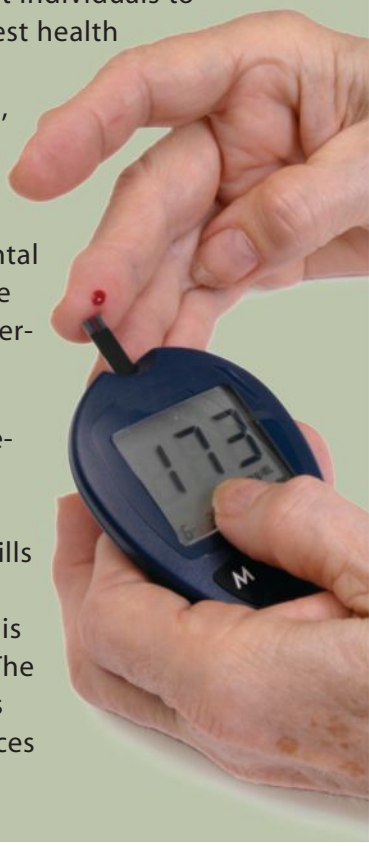
Toronto Central: With the support of the Toronto Central LHIN's Diabetes Program, we formally presented the PEP Talk workshop to the leaders representing various diabetes education programs. We also engaged the Canadian Diabetes Association and more specifically the Greater Toronto Area staff. Subsequently, during the December 2013 training, we selected eight health-care providers and three program managers, each representing a specific NIA and a community-focused service provider. The program is being implemented in 2014–2015 fiscal year as a pilot.

3 REASONS to implement peer-led self-management in your region

1. Chronic disease self-management aims to get individuals to actively participate in achieving their own best health and wellness. It involves gaining confidence, knowledge and skills to manage the physical, social and emotional aspects of life with chronic conditions.[18]

2. Peer-led programs provide a non-judgmental forum for clients to hear from other people in similar situations, be listened to, be understood and learn.

3. Peer leaders model the use of self-management skills to support behaviour change. They are natural partners in care as they support the learning of knowledge and skills by reinforcing what has been learned with clinicians and moving them into action. This results in more engaged and confident clients. The skills taught also help build more effective visits with clinicians and increase connection to services and resources.



What is your vision short-term and long-term for the PEP Talk program in your LIHNs?

Central West: Our short-term goal is to continue raising awareness of the PEP Talk program in our region within the community and among health-care providers. In the future we hope to offer additional PEP Talk Peer Leader training sessions to assist withn the spread and sustainability of PEP Talk in our region.

North East: Our short-term goal is to continue offering the program to the communities and organizations that originally showed interest and trained health-care professionals and peer leaders in the program. The long-term goal is to establish the program in more

communities throughout our region, especially in our remote communities that have limited access to foot care.

Toronto Central: Our short-term goal is to assess the success of the pilot before the end of the current fiscal year as well as host one Peer Leader training session to build capacity so that a health-care professional and peer leader team can co-facilitate the PEP Talk workshop. In the long term, we hope to expand beyond the four sites. Specifically, we hope to establish an accessible system for PEP Talk in which the Toronto Central LHIN's diabetes education programs can refer clients. These clients will gain reinforcement and empowerment to conduct daily healthy foot care practices through knowledge gained at the PEP Talk workshops offered on an ongoing basis.

For more information, or to inquire about how to get the PEP Talk program implemented in your region, please contact Janet Kuhnke, PEP Talk Co-Director, at info@cawc.net.

Janet L. Kuhnke *is an Enterostomal Therapist, CAWC PEP Talk Co-Director and Nursing Faculty at St. Lawrence College BScN Collaborative Program, Cornwall, Ontario.*

Renato, PEP Talk Peer Leader*. Many thanks to Renato. His presence on the panel made this national presentation client-centred.*

Surkhab Peerzada *is the Coordinator for the Toronto Central Self-Management Program at South Riverdale Community Health Centre (TC LHIN), Toronto, Ontario.*

Katherine Farrell *is the Coordinator, Chronic Disease Self-Management at Health Sciences North – Horizon Santé-Nord, (North East LHIN) Sudbury Outpatient Centre, Sudbury, Ontario.*

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Look for the signs and symptoms of peripheral arterial disease (PAD).

Peripheral arterial disease (PAD) is a term used to describe diseased blood vessels that are not related to your heart. It results from a buildup of plaque in the walls of blood vessels (arteries). This reduces or blocks the flow of blood to your legs and other organs. PAD is most commonly seen in the legs.

What are the signs?[1-5]

Cramps in the leg muscles (buttocks, thigh or calf) that occur during activities like walking or climbing stairs.

Pain in the legs and/or feet while at rest or that disturbs sleep.

Sores or Wounds on toes, feet or legs that heal slowly, poorly or not at all.

Colour Changes in the skin of the feet, including paleness or blueness.

Lower Temperature in one leg compared with the other leg.

Poor Nail Growth and poor hair growth on toes and legs.

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Remote Wound Consultation Series

PART 2:

Considerations for Service Delivery and Policy Development

By Elise Rodd, RN, BSN, CETN (C) and Sabrina Hasham, PEng, MBA, LLM

Technological innovation, coupled with implementation of best practice wound care, can universally enhance healing times, improve clinical outcomes, increase patient and provider satisfaction and reduce costs. Around the world many health-care specialties, including wound management, are embracing remote consultation as a solution to bridge the geographical and service access divides between patients and specialists.[1,2,3,4] Remote wound consultation is a high-impact practice that promotes evidence-informed service delivery and enhances the effectiveness of community care.[5]

Evidence supporting telehealth (also known as telepractice) outcomes is compelling.[3,4] Various studies have demonstrated improved wound healing and cost savings with remote consultation over usual care.[6,7,8]Additionally, remote wound consultations offer mentorship opportunities for frontline community providers and informal caregivers.[9] High patient satisfaction with both synchronous (live—usually by video) and asynchronous (time-separated data collection and analysis) telehealth applications have been reported.[3,4,8,10] A recent study in Australia found that remote wound care served to overcome many of the barriers to optimal care such as the need for multiple health-care providers, lack of nurses' confidence, insufficient training in wound management, limited access to specialists, as well as incomplete and inconsistent documentation of wound history and management.[11]

Despite the promise of remote wound consultation to improve care outcomes, the introduction of a technology-based solution to address insufficient system capacity should be approached carefully. Medico-legal considerations, including patient privacy, professional licensure and jurisdiction, protocol and guideline requirements,

medical records management and care provider liability should be considered prior to implementation of the service.[12,13] In this second of two articles (see Part 1, Clinical Digital Photography), considerations for the development of telehealth policies and the provision of remote wound consultation will be addressed.

Technology Considerations

The College of Nurses of Ontario defines telepractice as "the delivery, management and co-ordination of care and services provided via information and telecommunication technologies, which may include the use of telephones, personal digital assistants, faxes, the Internet, video/audio conferencing, tele-radiology, computer information systems and telerobotics."[14] Although the simple capture and transmission of photographic images is not specifically listed, this practice also falls under the rubric of remote consultation.

"The introduction of a technology-based solution to address insufficient system capacity should be approached carefully."

The use of smartphones for digital imaging is an emerging practice for which Canadian guidance should be addressed by the wound care community, in collaboration with experts in technology. In the United Kingdom guidelines on clinical digital photography explicitly state that mobile telephones should never be used, as the practice "poses unacceptable risks to the security and confidentiality of the images,"[15] but these guidelines are a decade old. The patient's perspective of the use of smartphone cameras may be different. In a recent study in the U.S. where mobile phone cameras were used to submit wound images to a remote medical provider, patients had few concerns regarding privacy and security and found the practice acceptable.[16] This may be reflective of the patient's lack of awareness of the privacy risks or simply that patients' desire for timely and high-quality care overrides any health information safety concerns. The automatic photo geotagging function of many smart devices is one potential privacy risk that should be managed. Disabling the geotagging app could mitigate some of the risks in the community setting; however it would interfere with the distance-tracking applications used by some home-care agencies. Geotagging indoors is dependent upon the patient location within the building.

Duty of Care and the Nurse-patient Relationship

A patient-provider relationship and a "duty of care" are established in all telehealth encounters between the remote consultant and the

patient,[13,14] in a manner similar to that in a face-to-face encounter. In nursing, it is understood that the provider-patient relationship is based on trust,[14] and to establish this patients need to be informed of the name, professional designation, place of work and province of registration of the remote consultant providing care.[17] In an asynchronous consultation, the availability of a biographical photo of the consultant can be helpful to the patient. Patients also need to be given clear instructions regarding the professional who, at the conclusion of the telehealth consultation, will have ongoing responsibility for continuing health care.[17,18]

Nurse-patient communication is key to establishing and maintaining a therapeutic relationship; this can be challenging with asynchronous remote consultation applications. Remote service consultants should consider adopting or creating consultation platforms that list questions in a logical sequence, avoid medical jargon, take into account language and cultural barriers, allow for subjective patient input and facilitate referral to a higher level of care should the patient's needs exceed the nurse's knowledge, skill and judgment.[14]

Consent

Patient consent serves two purposes, one of which is to inform the patient of the proposed treatment, risks, benefits and alternate care. The other is to shield the provider and employer from legal exposure.[19] When a digital image is used as part of the standard electronic documentation, consent is considered "implicit,"[18] but all consent needs to be informed.[17] Information for the patient should include how information will be stored and recorded, who will have access to it, who will be present during the interaction and alternate methods of care available.[17]

Formal written consent should be obtained if there is any likelihood that wound images may be used for education or publication purposes, or if the patient information may be transmitted to a consultant outside the patient's circle of care. It is also advisable for videoconference interactions,[18] although as synchronous consultations become more routine many telemedicine networks have eliminated explicit consent requirements. Integrating consent procedures into existing patient admission processes can avoid duplication and confusion[18] and decrease workload.

"Patient consent serves two purposes . . . to inform the patient of the proposed treatment, risks, benefits and alternate care . . . [and] to shield the provider and employer from legal exposure."

Health Information Protection

Telehealth settings pose more challenges to maintaining patient confidentiality than do traditional settings.[17,18] There are additional risks to patient privacy related to the collection, transmission, storage and review of data. Legislation and regulation pertaining to personal health information protection and access to information and privacy are governed by provincial/territorial jurisdictions. These should be taken into consideration when developing policy specific to clinical digital photography and remote consultation.

The consultant in remote interactions must ensure that they are in a location with sufficient privacy to ensure that only those in the circle of care are privy to the health professional-patient interaction.[18] Patients need to be informed of any health-care team members who may view or listen in on a telepractice interaction, including students,[14,17,20] and whether the interaction is being monitored for quality improvement purposes.[14] The patient has a right to decline to participate in a telehealth consultation or to end the interaction at any time. However, patients do not have the right to ask for telehealth records to be destroyed[21] as they form part of the medical records (including associated photos).

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Documentation

In provider-to-provider interactions (e.g., remote enterostomal therapy nurse to frontline RN), the interaction should be documented by both the remote consultant and the direct caregiver if no specific consultation app is in use. If the remote interaction is directly between a provider and a patient, there is no legal requirement for a patient to document a consult. Documentation protocols that address direct consultant-to-patient/caregiver interactions need to be in place, as often the patient's physical chart is in a remote location.

Consultation apps should be based on validated tools—such as the Bates-Jensen Wound Assessment Tool (BWAT)—that strengthen the quality of data for any potential research. Practically speaking, this entails the input of the wound parameters—as assessed by the frontline staff—into the remote application. These assessment data are typically accompanied by digital images of the wound. However, introducing BWAT assessments carried out by the frontline staff for input into the wound consultation app may entail additional training, even for the most experienced of care providers.

A study that compared a bedside BWAT assessment of a pressure ulcer by a certified wound nurse with the assessment of a digital photo of the same wound by a panel of experts resulted in only fair to moderate levels of agreement.[22] This is largely the result of the inability to assess certain tactile wound assessment parameters remotely, such as induration or the adherence of slough. The Photographic Wound Assessment Tool revised version (revPWAT) provides an alternative for wound assessments done by the remote consultant based on digital photos of the wound.[23] This tool was made specifically to visually assess the status of a wound based on a digital image and has been found by Canadian authors Thompson, et al. to be both valid and reliable compared with bedside assessments.[23] The revPWAT is performed by the remote consultant, as opposed to having assessment data entered by the frontline staff. It should be noted, however, that the revPWAT only assesses the visual parameters of the wound and does not include such critical assessment points such as wound pain, odour, exudate and peripheral edema.[23]

Documentation: What you need to know

- Remote consultation documentation policies and protocols need to be in place.
- Both remote consultant and frontline staff should document consultation if no remote consultation app is used.
- Verbal advice should be followed up with retrievable documentation.
- Written recommendations should be sent to the advice recipient and primary healthcare provider.
- Emails should be converted to PDFs and filed with the patient chart.
- Use validated tools:
  - BWAT: a 13-parameter assessment done at the bedside to accompany digital photos
  - revPWAT: an 8-parameter assessment done by remote consultants based on photos only

Note: Wound pain is not addressed with the BWAT or the PWAT.

"Integrating consent procedures into existing patient admission processes can avoid duplication and confusion and decrease workload."

Any verbal interactions by the consultant done with either the patient, care provider or another professional should be followed up with a retrievable document,[20] preferably with a copy sent to the advice recipient as well as their primary professional care provider. At a minimum, the report should include a summary of the findings, clinical impressions (diagnosis/differential diagnosis for physicians) and recommendations.[20] Emails can be converted to portable document format files (PDFs) and kept as part of the permanent documentation in a secure location electronically or in hard copy, depending on institutional policy.

Equipment and Data Security

Security policies need to address the equipment used in telehealth consultations and the data generated. Hasham[13] recommended that the following measures should apply:

- Access to the equipment is restricted and protected with high-level passwords, biometric data, cards or tokens.
- Access to equipment is tracked.
- Equipment is securely locked when not in use.
- All data transmission is encrypted.
- All servers are kept behind firewalls.
- Virus and intrusion protection is built into the system.
- Redundancy is built into the system.
- A back-up plan is available in case of equipment failure.

Jurisdictional and Collaborative Practice Considerations

According to the Canadian Nurses Association (CNA), "provincial and territorial nursing regulatory bodies in Canada have determined that nurses engaged in telehealth are considered to be practising in the province or territory in which they are located and currently registered, regardless of where the client is located".[17] A recently conducted informal scan done by one of the authors (SH) revealed that some provincial nursing colleges have yet to establish regulations and policies with regard to telehealth practices. Given the CNA guidance, the remote nurse consultant is professionally accountable and liable in the jurisdiction from where the nurse is conducting the consultation.[17] Put simply, it is as if the remote patient is visiting the nurse in her/his location and not the reverse. Nevertheless, it is strongly advisable to review the regulations in the patient's jurisdiction[13] with particular attention to provincially dictated controlled and delegated acts relevant to wound care. Telehealth conducted with international patients adds a layer of complexity to the issue of jurisdiction about which there is a gap in the literature.

Ensuring Buy-in

Uptake of new remote consultation services is facilitated by:

- Formal staff orientation, training and ongoing development
- An expectation that computer literacy is not universal
- Backfilling of staff during training
- A stable workforce
- Wound care as a high percentage of caseload
- A relatively stable patient pool

"It is strongly advisable to review the regulations in the patient's jurisdiction with particular attention to provincially dictated controlled and delegated acts relevant to wound care."

Regulation of collaborative consultations can become more complicated as licensure for each of the multi-disciplinary health-care providers is managed by their individual provincial professional colleges. The Federation of Medical Regulatory Authorities of Canada has offered guidance to the provincial physician colleges, informing them that the jurisdiction for a tele-

Areas of Consideration

- Technology
- Duty of Care
- Consent
- Health Information Protection
- Documentation
- Equipment and Data Security
- Jurisdiction Issues
- Legal Liability
- Provider Adoption
- Training and Engagement

medicine consult should be the location of the patient (contrary to that of the CNA); however, some colleges have made a different decision. For example, the College of Physicians and Surgeons of Alberta deems the location of a telehealth consult to be the location of the *patient*, while the College of Physicians and Surgeons of New Brunswick stipulates that the consult takes place in the location of the *physician*. Where jurisdictional issues have not been specifically addressed by the professional college, it is advisable to seek clarification of the licensure issues and request that the appropriate authorities commit to their position in writing.[13] In addition, arrangements for payment need to be addressed, if not covered in the provincial fee schedule.[13]

An additional consideration is that the technology solution supporting the consult may be from an entirely different jurisdiction, perhaps governed by ecommerce laws or by a contract. Clearly navigating the jurisdictional challenges of multi-jurisdictional, multi-disciplinary, collaborative, technology-supported consultations can be difficult.

Another example of complexity in remote consultation collaborative practice comes from the increasing use in wound care of unregulated care providers (UCPs), also known as health-care aids or personal support workers (PSWs). As an example, in Ontario, care for wounds located below the dermis or in a mucous membrane is considered a controlled act for UCPs. A controlled act requires that care be delegated from a regulated health professional. A registered nurse who delegates wound care to a UCP or family member is expected to have first-hand knowledge of the care provider's competence.[24] The registered nurse also has a duty to ensure that the UCP understands his/her responsibilities in performing the procedure, has support and assistance in the provision of care and knows to whom the outcome of care should be communicated. These requirements put an extra burden of duty on a remote nurse consultant wishing to delegate to a UCP. Health care is regulated provincially, and legislation related to the delegation of wound care to UCPs may vary in other jurisdictions.

Legal Liability

Most lawsuits against nurses stem from a failure in communication, in particular with other health-care providers, in delegation and supervision and in patient teaching and discharge.[25] Remote consultation can help or hinder communication. An evidence-informed assessment protocol with mandatory completion of all fields by the assessor ensures the inclusion of all relevant information needed for nursing diagnosis, evaluation and care planning.[26] Conversely, if a digital photo alone is transmitted to a consultant with limited information, it may not be sufficient to relay pertinent clinical assessment information, and unsafe recommendations could ensue. The American Telemedicine Association recommends that documentation language for the remote consultant

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[1] Patricia Conwell R.N., B.S., C.W.C.N., Lisa Mikulski R.N., B.S.N., Mark Tramontozzi M.D., F.A.C.S. A Comparison of Two Antimicrobial Dressings, A Randomized Prospective Trial Comparing PVA Foam with Two Organic Pigments to a Silver Based Wound Dressing

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providing recommendations should include the phrase "based on the images and history provided, my impression is as follows . . . ."[18]

Telehealth consultations are becoming more integrated into the routine delivery of healthcare operations. In Ontario alone, over 200,000 telehealth consultations took place in 2011–2012, and increasing rates are expected.[10] The standard of care should be the same whether the patient is seen in person or through telehealth technologies.[14,18] As telehealth services become increasingly prevalent, the provision of such services is becoming in itself part of the standard of care. In the U.S., lawsuits have been filed against those who *did not* offer telehealth services, based on the claim of harm arising from the lack of provision of a widely available technology.[27]

Many remote consultation applications are protocol driven. In cases where the nurse's judgment conflicts with consultation protocols, and the nurse decides to override the protocol, the nurse is accountable for his/her decision and any subsequent actions.[14] This applies to both the nurse consultant and the recipient of the recommendations.

Provider Adoption

In order to facilitate a successful introduction of telehealth services, organizations should ensure that there is technical and staff readiness, as well as a risk-mitigation strategy in place.[18] One barrier to the successful adoption of telehealth services is an approach that is not integrated into existing care.[20] Integrating telehealth documentation with existing charting avoids time-consuming duplication and is one strategy that can assure a successful uptake of telehealth services.[7,15] The addition of integrated mandatory reporting into the telehealth application is ideal. In many exemplary cases, the provision of remote consultation services has been fully integrated into inpatient clinics.[10]

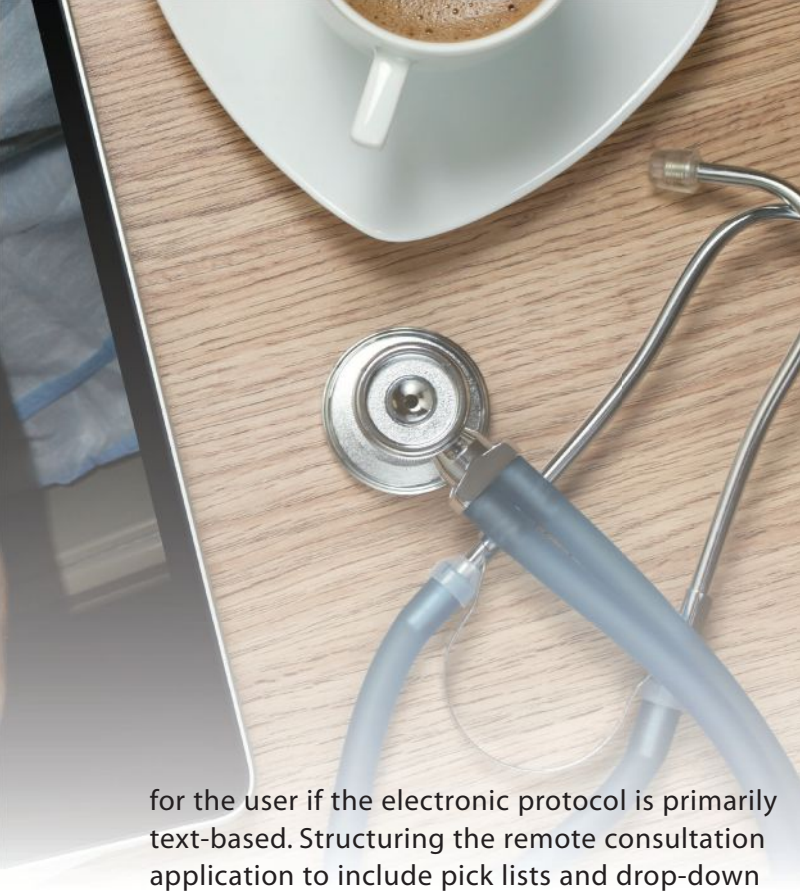
A balance of information needs to be struck when developing any type of telehealth application: be it a faxed assessment form with digital photo or a fully interactional web-enabled tele-

health service. There is a potential for unsafe patient care if the information sent to the consultant is incomplete or inaccurate;[15] however, the ability to rapidly complete an electronic wound assessment is beneficial for user uptake.[7]

"Integrating telehealth documentation with existing charting avoids time-consuming duplication."

Training and Engagement

Health professionals who employ telehealth services must have the necessary orientation, training and ongoing development to ensure competency and safe care.[18] Telehealth practice may not be suitable for entry-level nurses.[15] Organizations newly adopting the use of tablets and computers for telehealth consultation can experience educational challenges related to technology. Computer literacy of nursing staff is not universal, and extra time and formal training may need to be devoted to learning even the most user-friendly applications.[11,14] Entering wound assessment information into an electronic device will be time consuming



for the user if the electronic protocol is primarily text-based. Structuring the remote consultation application to include pick lists and drop-down menus is advisable.

Best practice remote consultation supports mentoring and empowerment of frontline care providers and informal caregivers. Télé-assistance en soins de plaies (telehealth wound assistance) at the University of Sherbrooke is an excellent example of this type of consultant-to-nurse coaching relationship.[9] Telehealth is used to empower frontline staff and ensure the continuity of care. Experts at larger care and referral centres can demonstrate complex dressing procedures to providers in real time in the patient's home town, resulting in increased confidence in the care.[10]

Staff engagement in the change of process is critical to successful implementation of a remote wound consultation service.[6,11,14] Other factors cited as contributing to the success include a stable workforce, wound care as a high percentage of the caseload, a relatively stable patient pool and backfilling of staff during training.[11]

Concluding Thoughts

The regulation of human behaviour takes place through a complex interaction among four modalities of regulation: law, markets, social norms and architecture.[28] In the case of remote wound care delivery, the regulatory framework that includes reimbursement and licensure is trailing behind patient and caregiver support for technology-assisted remote consultations. In a world immersed in instant and extensive communication facilitated by a plethora of innovative technologies, health-care delivery is failing societal expectations.

There is increasing disparity between health services available to residents of rural and urban areas. Patients are becoming more knowledgeable about health care and are demanding more involvement in their own care as well as increased accountability from providers and institutions traditionally involved in care delivery. Technology has the potential to allow patients and providers to narrow geographic and socio-economic barriers to health care. As well, the increasing cost and complexity of health care are compelling health-care providers to adopt cost-effective means of providing high-quality patient care. Remote wound consultation supported by telehealth technologies and evidence-based protocols presents new opportunities to provide high-quality care to Canadians. It is hoped that the publication of this article will galvanize the wound care community in Canada to address some of the issues that remain unclear or inconsistent for remote wound consultants.

Elise Rodd *is an enterostomal therapy (ET) nurse known nationally for her skills in telehealth service development and delivery. She has had extensive experience providing education and remote nurse-to-nurse clinical support in the federal, provincial and private community sectors in BC, Manitoba, Saskatchewan, Quebec and Ontario since 2007. She is the clinical lead for CHAYA and an independent ET consultant.*

Sabrina Hasham *is the founder of CHAYA, a service that facilitates remote consultations and personalized education for patients and frontline caregivers. Her client list includes the Ontario Telemedicine Network, KO Telemedicine, Health Canada, Alberta Cancer Board, McKesson, Canada Health Infoway, CIBC, Citibank, Transamerica Insurance and the Canadian Space Agency.*

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Wound Sleuth

By Rob Miller, MD, FRCP Dermatologist
and Cathy Burrows, RN, BScN, MScCH (Wound Prevention and Care)

History

A 50-year-old female presents with a severely deformed left foot and ulceration (see photo 1) that is heavily exudating. The wound has been chronic for the past two years. She is a non-smoker, has type 2 diabetes, is married and is active in her community.

Q What is the cause of this deformity and ulceration?

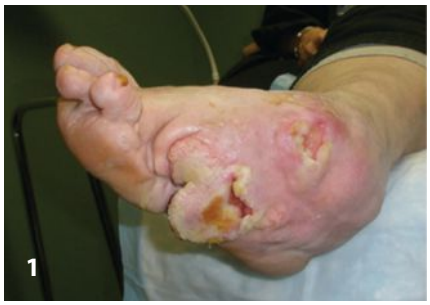
A Charcot Marie Tooth Disease (CMT). CMT is one of the most common inherited neurological disorders, affecting approximately 1 in 2,500 people in the United States. CMT is named for the three physicians who first identified it in 1886: Jean-Martin Charcot; Pierre Marie of Paris, France, and Howard Henry Tooth of Cambridge, England. CMT affects both motor and sensory nerves. A typical feature includes weakness of the foot and lower leg muscles, which may result in foot drop and a high-stepped gait. Foot deformities, such as high arches and hammer toes are also characteristic due to weakness in the small muscles in the feet. In addition, the lower legs may take on an "inverted champagne bottle" appearance due to the loss of muscle bulk.

Source: The National Institute of Neurological Disorders and Stroke: Fact Sheet. Available online at www.ninds.nih.gov/disorders/charcot_marie_tooth/detail_charcot_marie_tooth.htm.

Q What is the treatment?

A There is no cure for CMT, but physical therapy, occupational therapy, braces and other orthopedic devices as well as orthopedic surgery can help patients manage the condition. In this case the patient was assessed by a pedorthist, and a wound care shoe was applied to accommodate pressure relief with the dressings. Once the wound had healed (see photo 2) a custom shoe was built (see photo 3). Wound management consisted of regular surgical debridement, cadexomer iodine to manage bioburden and an alginate dressing to maintain drainage. Dressing changes were done by community nurses three times per week.

***Rob Miller** is a dermatologist and **Cathy Burrows** is an independent wound care consultant, both in Halifax.*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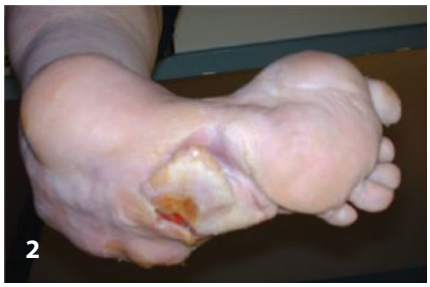
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Further Reading

For more on Charcot deformity, please see the following:

- Charcot-Marie-Tooth Disease www.patient.co.uk/doctor/charcot-marie-tooth-disease
- What Is Charcot-Marie-Tooth (CMT)? www.cmtausa.org/index.php?option=com_content&view=article&id=70&Itemid=159

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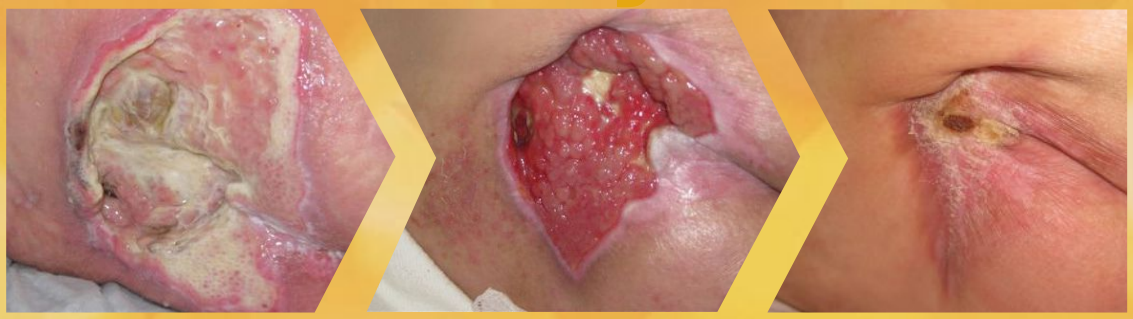

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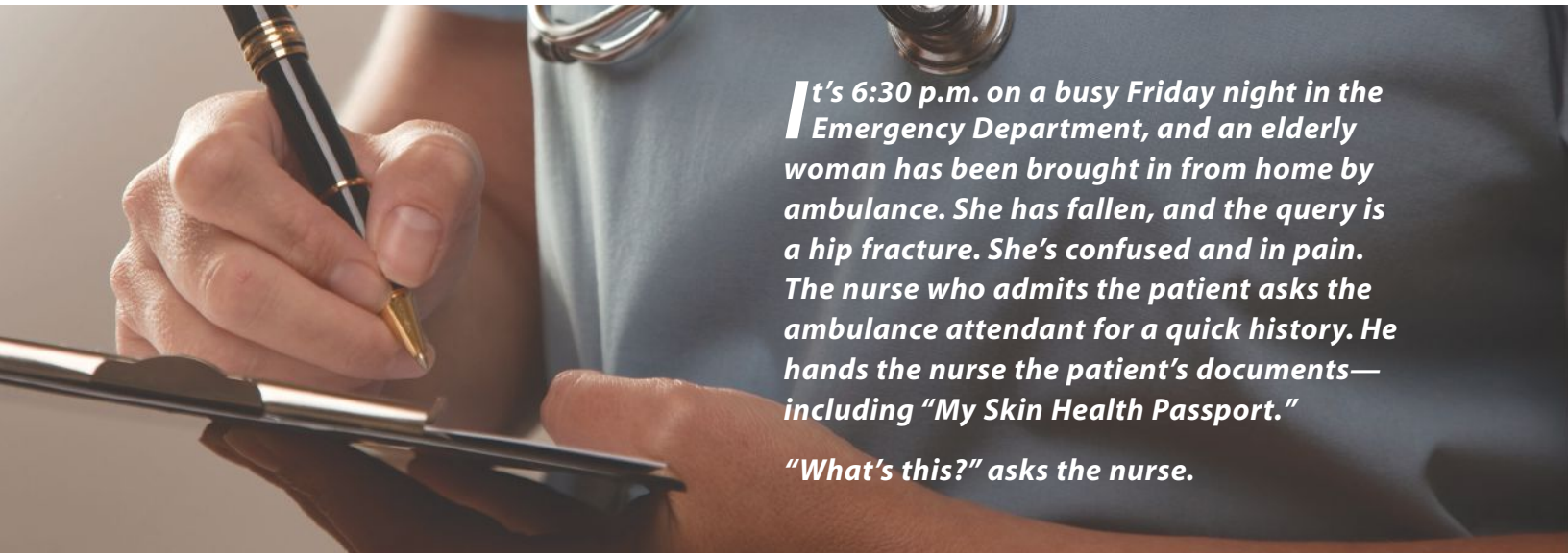
1. Acton C, Dunwoody G. The use of medical grade honey in clinical practice. British J Nursing 2008;17(20): S38-S44. 2. Dunford C. The use of honey-derived dressings to promote effective wound management. *Professional Nurse* 2005; 20(8):35-383. 3. Chaiken, N. Pressure ulceration and the use of Active Leptospermum honey for debridement and healing. *Ostomy Wound Management* 2010;56(5), 12-14. 4. Regulski M. A novel wound care dressing for chronic leg ulceration. *Podiatry Management* 2008:27(9):235-246. 5. Simón, M, Smith,K, Uptegrow,K. Use of active leptospermum honey to aide and promote autolytic debridement and wound healing in challenging chronic wounds. Symposium of Advanced Wound Care 2014. 6. Gethin G, Cowman S. Changes in pH of chronic wounds when honey dressing is used. In: Wounds UK Conference Proceedings; 13–15 November 2006. Wounds UK, Aberdeen. 7. Milne SD, Connolly P. The influence of different dressings on the pH of the wound environment. *J Wound Care.* 2014 Feb;23(2):53-4, 56-7. 8. Leveen H, Falk G, Borek B, Diaz C, Lyneld Y, Wynkoop B, Mabunda GA et al. Chemical acidication of wounds. An adjuvant to healing and the unfavourable action of alkalinity and ammonia. *Annals of Surgery.* 1973. 178(6): 745-50. Disclaimer: Results may vary. Photos represent one patient's outcome. For more examples of clinical case outcomes using MEDIHONEY® visit our website. PHOTOS COURTESY OF NANCY CHAIKEN, ANP-C, CWOCN.

My Skin Health Passport: Introducing a Way to Prevent Avoidable Wounds

By Rosemary Kohr, RN, BA(Arts Plastiques), BScN, MScN, PhD
and Andrea Trainor, BSc, MSc(A), RN, IIWCC
(Co-leads of the Wound Care Community of Practice, Seniors Health Knowledge Network)



It's 6:30 p.m. on a busy Friday night in the Emergency Department, and an elderly woman has been brought in from home by ambulance. She has fallen, and the query is a hip fracture. She's confused and in pain. The nurse who admits the patient asks the ambulance attendant for a quick history. He hands the nurse the patient's documents—including "My Skin Health Passport."

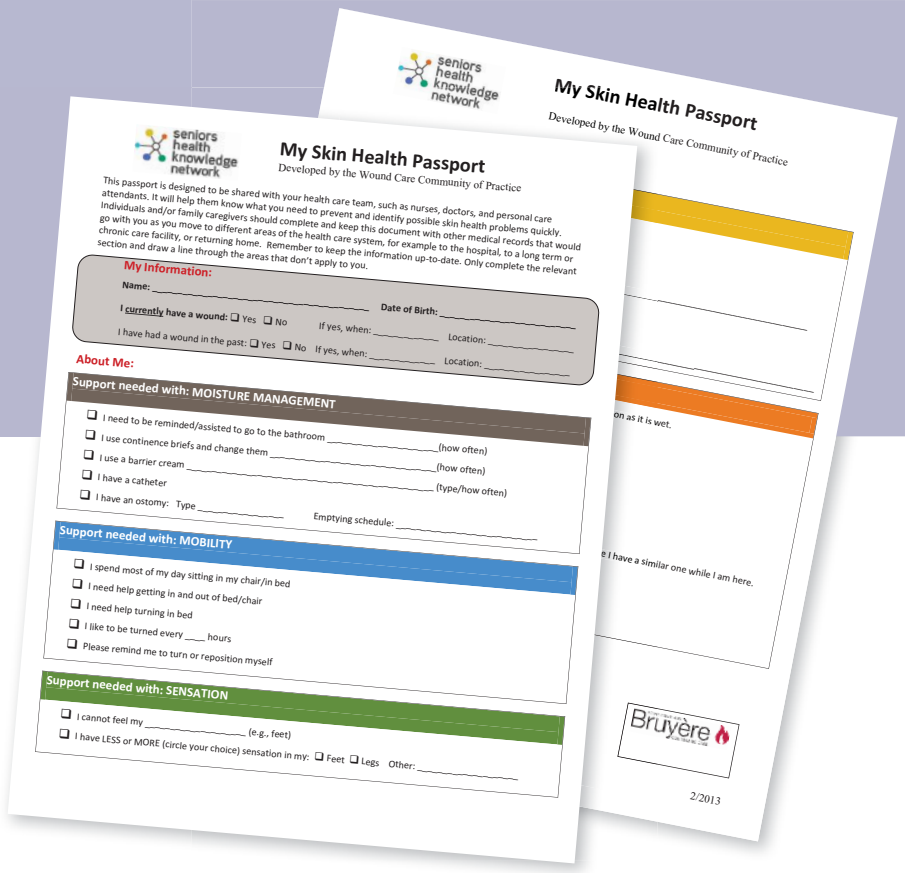
"What's this?" asks the nurse.

The physiologic changes that occur with aging, in addition to chronic conditions such as diabetes, congestive heart disease and peripheral vascular disease, put our elderly population at risk of developing skin breakdown. While there are many effective assessment tools for risk, it can be difficult to ensure that appropriate prevention strategies are put into place in a timely manner—particularly when the health history and condition of the individual are not known, or when limited information is available.

In 2010, the Ontario-based Wound Care Community of

The Skin Health Passport

The Passport is available for download at: http://seniorshealthknowledg-enetwork.com/sites/seniorshealth-knowledgenewwtwork.ca/files/MySkinHealthPassport_2013_0.pdf.



Practice (CoP), through the Seniors Health Knowledge Network (SHKN), with support from the health-care organizations Bruyère and Saint Elizabeth, set about to create a tool that could be used by patients and their families to provide the up-front information often missing in a transfer situation (not just to the Emergency Department) or with a new care provider. A review of the literature and discussions with clinical experts were essential in the development of the tool: My Skin Health Passport. The passport is a tool that allows patients and families to easily provide valuable information to their care providers that will help prevent skin breakdown.

What is it?

My Skin Health Passport is a free downloadable two-page document, available in English or French, that can be accessed at the Seniors Health Knowledge Network website (or by typing "My Skin Health Passport" into a search engine). The tool is designed to be used by individuals and their families to provide relevant information regarding aspects of their health that could impact on the development of skin breakdown if appropriate measures are not put in place.

How can I help my patient/resident/client use My Skin Health Passport?

The tool is self-explanatory, but because it is new, health-care providers are in a position to assist and encourage patients and family members to complete the document and put it with other health-related documents (such as the health card or medication list). By explaining to your patients/family members that this tool will provide information in situations where the care providers may want to ensure interventions are in place to prevent the possibility of skin breakdown, you will help reinforce its purpose and value.

How can I support my colleagues in using this tool?

Providing information and preparing health-care professionals where My Skin Health Passport would be useful will encourage them to ask the patient/family member if they have brought their copy of the passport with them. If not, the tool could be readily available for the family/patient to fill in at the point of care.

The information contained in the passport supports the standard risk assessment tools recognized as evidence-informed for the prevention of skin breakdown. Helping busy clinicians with valuable details about the health needs of the individual, so interventions can be instituted quickly, will do much to ensure that avoidable skin breakdown does not occur in any setting.

Kick-start Stalled Wounds with Laser Therapy

By Fred Kahn, MD, FRCS(C) and Fernanda Saraga, PhD

Despite many advances in conventional wound care, the treatment of complex, persistent lesions continues to be problematic with regard to effective healing. Whether they are aggravated by chronic illnesses, compliance issues or inappropriate wound care practices, many patients continue to suffer from recalcitrant wounds.

What is laser therapy?

Laser therapy—also known as cold laser, low-level laser therapy or photobiomodulation—is an emerging therapeutic approach in which cells or tissues are exposed to low-intensity red and near-infrared light emitted from lasers or light-emitting diodes (LEDs). Laser therapy is a non-invasive, non-toxic approach without documented adverse effects or interactions with pharmaceuticals. It has been approved by Health Canada for a range of musculoskeletal conditions and wounds.

When the light source is placed against the tissue involved, photon particles of light penetrate several centimetres into the area and are absorbed by chromophores in the electron transport chain of the mitochondria. This process results in improved cellular metabolism through increased production of adenosine tri-phosphate (ATP).[1] This primary mechanism of action initiates a cascade of secondary physiological effects, including stimulation of inflammatory mediators and proliferation of key cell types involved in the remodeling process.

Safety and Contraindications

Lasers are classified by wavelength and maximum power output into four classes. Most therapeutic laser devices are in the red to infrared range and are classified as Class 3b (5 – 500 mW), which means that both the patient and the clinician need to wear protective goggles while treatment is being administered. This power output range does not thermally heat the tissue.

Laser therapy can be safely administered in patients who have epilepsy, pacemakers, pros-

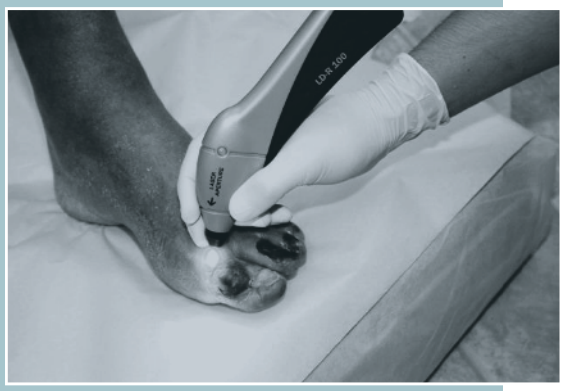
theses, metal plates or implants. While no adverse events have been noted in published clinical research, there are some contraindications according to guidelines recently published in *Physiotherapy Canada* on the use of electrophysical agents by the Canadian Physiotherapy Association[2]. These include directly treating the eyes, the low back or abdomen of pregnant women, regions of known or suspected malignancy and persons with untreated haemorrhagic disorder.

Effects on Wound Healing Phases

Research in the field of laser therapy has shown that it can positively enhance and accelerate the inflammatory, proliferative and remodeling phases of wound healing.[3,4] Laser therapy can modulate prostaglandin levels, enhance the action of macrophages and promote fibroblast proliferation.[3] It has also been shown to enhance the quality and texture of the dermis.[5]

Laser therapy is associated with the regeneration of rich networks of small blood vessels, in close proximity to the epithelial layer (i.e., angiogenesis)[6] thereby improving microcirculation that enhances the oxygenation levels in the wound and surrounding tissue. Chronic ulcers are able to transition to an acute inflammatory state and permit the resolution of the ulcer through re-epithelialization of the wound (see case profile on this page).

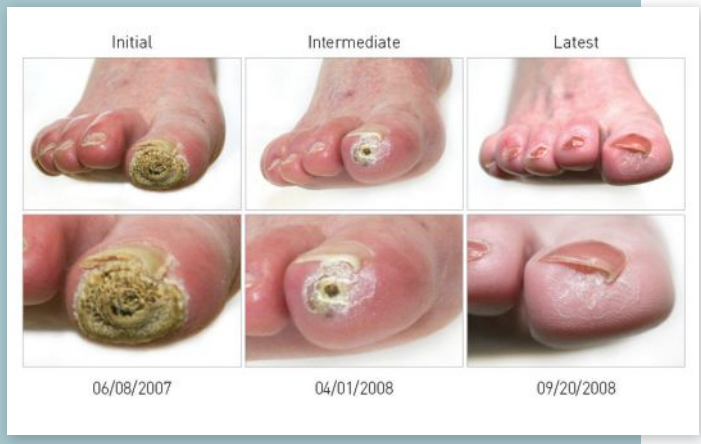
A Case of Pre-gangrenous Ulcer Secondary to Diabetes Mellitus



Medical History: The patient is a 50-year-old female who developed gangrene after several months of conventional wound care, including antibiotics and topical ointments. The patient also received 30 hyperbaric-chamber treatments, but there was minimal improvement in the ulcer. An infectious disease specialist prescribed eight weeks of IV ertapenem 1000 mg. As no substantial improvement was seen in the ulcer, amputation of the right toe was recommended by an orthopedic surgeon.

Physical Examination: Gangrene was noted over the distal phalanx of the right first toe. Edema, cyanosis and tenderness were noted to be affecting all the toes. The entire foot was cold and the joints immobile. There was no tactile sensation in the toes. Pain was present 24/7 and was described as excruciating and intolerable.

Discussion: A course of 40 laser therapy treatments was administered over 10 months. The patient was reassessed every three to four treatments with respect to wound dimensions, temperature of the extremity, tactile sensation and pain level. Complete healing of the forefoot pathology was achieved and amputation of the lower extremity was avoided. Colour, temperature and the range of motion of all joints were returned to normal. The dependent rubor, which was present on the initial visit, was no longer evident, and the patient experienced normal sensation in the foot. Pain levels were completely eliminated over the course of treatment. She continues to do well four years post therapy.



Clinical Research

While most research has been conducted in animal models, there have been a number of clinical studies in humans that have demonstrated improved wound contraction and accelerated healing without adverse effects noted. A few of these studies are highlighted here.

Hopkins et al.[7] showed that in healthy subjects (n = 22), wounds treated with laser therapy contracted at a faster rate than those treated with a sham laser.

Kajagar et al.[8] examined a group of patients with chronic diabetic ulcers (n = 68) and found that after 15 days of treatment the group treated with laser therapy combined with conventional therapy showed an ulcer reduction of 40.24 ± 6.30% compared to the group treated with conventional therapy, which showed a reduction of 11.87 ± 4.28%.

Minatel et al.[9] measured wound closure rates in a group of patients with chronic diabetic leg ulcers (n = 14) over a 90-day period of treatment. They found that the laser-treated group achieved 56% more granulation and 79.2% faster healing by day 30 as compared to the placebo group. By day 90, 58.3% of the laser-treated group showed complete healing, and 75% had achieved 90-100% healing. In contrast, only one placebo-treated ulcer had healed fully and no other ulcer attained > 90% healing.

While there is a growing body of clinical research to support the use of laser therapy for chronic wounds, there is a need for larger clinical trials to confirm efficacy and establish optimal parameters for wavelength, dose and frequency of treatment.

The Extent and Cost of Chronic Wound Care

The Canadian Association of Wound Care (CAWC) estimates the cost of treating a chronic wound at $10,376.[10] This includes the cost of dressings, medications and hospital or community care visits. At a wound clinic in Toronto that regularly performs laser therapy, the cost of treatment ranges from $50 – $100 per visit depending on the extent of the wound and the time needed to treat the area. Chronic wounds can take from 10 to 40 treatments over one to 10 months for complete closure, resulting in an estimated cost of $500 to $4000, a savings of 60 – 95%.

Who can administer laser therapy?

While laser therapy can be administered by a number of different health-care practitioners, wound applications should be administered by physicians, nurses or physiotherapists who have had advanced training in wound care.

Training is required on the safe administration of Class 3b lasers. Some manufacturers offer additional training for wound applications focused on the parameters and treatment approach using a particular device.

Conclusion

Laser therapy is a therapeutic technology that not only expedites the inflammatory process but also enhances tissue healing, even with the most challenging lesions. Wounds that are enlarging or unresponsive to prolonged periods of conventional wound care can significantly benefit from laser therapy in terms of neovascularization, epithelialization, granulation and collagen formation at an accelerated rate.

Fred Kahn *is the Medical Director, Meditech Laser Rehabilitation*

Interested in learning more?

THE SCIENCE BEHIND LASER THERAPY:

- Enwemeka CS et al. The efficacy of low-power laser in tissue repair and pain control: A meta-analysis study. Photomed Laser Surg. 2004;22(4):323–329.
- Prindeze NJ, Moffatt LT, Shupp JW. Mechanisms of action for light therapy: A review of molecular interactions. Exp Biol Med (Maywood). 2012;237:1241–1248.

Centre and Wound Care Clinic, Toronto, ON. His email is fkmd@bioflexlaser.com.

***Fernanda Saraga** is a medical writer and scientific consultant with Scientific Insights Consulting Group, Toronto, ON. Her email is fs@scientificinsights.com.*

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Policy Analysis

By Karen Laforet, RN, MCISc, PhD(c)

In the spring 2014 issue of Wound Care Canada, *information on what health policy is, its importance to wound care practice and its role in how societies, individuals and collective behaviour are formed was detailed. This article outlines why policy development, policy analysis and advocacy are important to all health-care professionals.*

The context in which decisions are made is often highly political and driven by the public interest—both macro political issues (provincial and federal mandates) and micro-politics (sectorial interests). That being said, when placed on a priority grid, many health-related policies have low political clout. These may shift at any time and become urgent—consider the rapid policy changes that followed the SARS outbreak. Therefore, it is incumbent on health-care professionals to stay abreast of any public policy that directly or indirectly impacts on people's health.[1]

The Steps

First, it is important to review the principles of policy development and the environmental context within which policy arises prior to undertaking any kind of analysis. Policy development may be summed up in the framework in Table 1.

Policy evaluation is a form of policy analysis that we'll discuss in a moment. Agenda setting and policy formation are not linear. Previously we discussed how health policies are derived from a variety of sources, with two being of specific interest to clinicians: governmental and institutional.[2]

Table 1. Policy development framework[7]

Agenda setting
Policy formation
Decision-making
Policy Implementation
Policy evaluation

Governmental Sources

Governmental sources may be derived from any level: city, county, territory, province or country. Policies that come from governmental sources result from public interest—key topics in the media, within public debates or through political lobbying. The more overlap from these public voices the greater likelihood policy will result. For example, in 2013, childhood

obesity gained the interest of the public, clinical associations and special interest groups. This political agenda push resulted in local, regional and provincial policies regarding vending machines in schools.

Institutional Sources

The second source for health policy is referred to as institutional. This includes organizations such as hospitals, service provider agencies and clinical speciality associations. Generally, policies arising from this source are self-directed since the policy impact is specific to the establishment.[2] The decision to delegate nursing acts to unregulated health-care workers (UHCW) and which acts may be delegated is an example of a specific organization's policy.

The above examples provide insight into the key elements considered when forming policy: financial resources, human resources and services.

Financial Resources

Financial resources (also referred to health-care expenditures) include any and all costs incurred for direct health-care services, direct care provision and indirect care required to provide services and the resources necessary to complete the services.[7] Using the example of UHCW, the cost of regulated vs. unregulated workers might be the key driver for policy development.

Human Resources

Human resources encompass any and all health-care professionals, allied personnel and technicians—anyone who provides a health service. Continuing with the UHCW example: is there a compelling event driving this policy change? A

Policy terms used throughout this article

Policy: A course or principle of action adopted by an organization, workplace or community that includes goals, priorities and how it will allocate resources[1,2]

Policy Analysis: A range of tools and techniques to study established policies, how they were initiated and what their consequences are (outcomes or effects on people)[3]

Health Policy: Any decision, plan or action undertaken by government (economic, environmental, legal or social) that has a direct or indirect impact on people's health (intended or not)[4,5]

Advocacy: A role that works to protect rights, values access to support, interests and equality. A significant portion of the policy process involves advocating for enacting policy that will provide protection and support.[6]

regulated worker shortage might be the focal point.

Services

Health services factor in the full range of tests, monitoring, direct care, surgeries and technological procedures carried out within the health-care milieu. Decision making for policy development may include one or more of these elements and, in the example cited, would most likely include all in the final product.

Policy Evaluation

Once a policy has been formulated and implemented, the task of seeing if it made a difference is where policy evaluation/analysis fits in. The evaluation of policy at any point in the development process has historically been the weakest link. Many policies fail because there has not been an evaluative component.[6] The value of analysis is the information it provides policy-makers on how the policy is working in practice, their effects on economic, environmental and social factors as well as on the policy recipients. As mentioned earlier, policy development is driven by the public interest and as such is heavily weighted by value judgements. In 2012, in response to significant public dissent to growing surgery wait lists and extended emergency wait times, an increased budget deficit and a looming election, the Ontario government implemented the "Action Plan"—a plan that would change health-care funding allocation.[8] These funding changes were designed to improve access to care and provide better quality and value—all with the plan to reduce the province's deficit.[9] This scenario is an example of where the public and political interest escalated a policy (health-care funding changes) from low priority to urgent.

Table 2. Collins Framework for Policy Analysis

Step 1. Define the context Provide background information and policy issue context.
Step 2. State the problem Define the problem; it is crucial for ensuring it is successfully targeted.
Step 3. Search for evidence Assemble evidence to identify key features of the policy issue and how it might be addressed.
Step 4. Consider different policy options Indentify and critically assess alternative policy options.
Step 5. Project the outcomes Project potential outcomes for each alternative policy option.
Step 6. Apply evaluative criteria Evaluate interventions using a standard set of 5 criteria: relevance, progress, efficiency, effectiveness and impact.
Step 7. Weigh the outcomes Measure projected outcomes for each alternative to determine what would be the most effective impact.
Step 8. Make the decision Decide on what policy option to pursue and monitor results.

Using a Framework

Since public policy has the potential to impact a person's health either directly or indirectly, policy analysis is a valuable tool. The challenge for clinicians is multi-faceted: analysis may be complex, it is definitely political and it can be very time-consuming depending on what framework is used.[3] Collins has summarized a number of policy analysis methodologies into a simplified framework.[3,10] This step-by-step path in many ways mirrors the critical thinking process used by wound clinicians. The steps are outlined in Table 2.

Depending on the scope and breadth of a policy, not all steps are needed. However, it is important to consider them all during the analysis. There is a direct link between policy, politics

and advocacy; therefore, most wound clinicians need to be more politically astute and active.[11] Put another way, involvement in policy is a natural extension of advocacy—a role clinicians assume every day for patients.[6]

How then does one put this all into practice and in a practical way? In the next issue, Collins's framework for policy analysis will be used to evaluate an organizational policy on wound debridement and provincially specific to Ontario's 2012 Diabetes Strategy. The alignment of policy and advocacy will be discussed using the CAWC's mandate and campaign to shrink the gap for diabetic foot complications in Canada through improved screening, prevention and early treatment.

The challenge to the reader is to use this framework as a means of increasing personal engagement with policy at all levels—locally, provincially and federally.

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A Day in the Life of a Vascular Social Worker

By Penny Durnford, MSW, RSW

I am a social worker on the vascular service at the QEII Health Sciences Centre in Halifax, NS, a tertiary level hospital, which is the referral centre for PEI and Nova Scotia. My department, the Vascular Surgery Service, works with patients who require revascularization for arterial occlusion, aneurysm repair and amputation. Many of our patients live with significant acute and/or chronic pain. Many have experienced loss of function in terms of mobility, ability to care for themselves and ability to fully participate in their social, occupational and community lives.

As a vascular social worker, I work with an interdisciplinary team that includes occupational therapists, physiotherapists, orthotists/prosthetists, pedorthists, nutritionists, spiritual care specialists, nurses, pharmacists, continuing care co-ordinators and physicians. Using a collaborative approach to care, we attempt to help our patients address the financial, social, vocational and emotional issues that can impede healing and increase distress.

Context for Social Work in Wound Care

Wound healing may at first glance seem to call for a very medical approach, but a more holistic path to healing recognizes the connection between physical well-being and the context of the patient's life. For example, the effects of poverty on physical health care are basic, and socio-economic status in particular is strongly related to rates of amputation.[1]

If we can address the areas where our patients are most disadvantaged we can create a climate for healing. This climate includes access to an adequate income; warm, dry shelter; transportation; nutrition; good dentition; appropriate footwear (offloading and protective); medications; safety equipment; vision care; education and social programs.

A holistic approach to wound healing that embraces the full range of patients' needs is considered as standard of practice.

The social worker can help with the psychosocial, social and emotional issues that influence a person's ability to cope with their health issues.

"Socio-economic status is strongly related to rates of amputation."

A Typical Day

The Vascular Care Team conducts rounds every weekday morning for inpatients. We discuss patient progress, goals of care and discharge planning. This helps me to set the priorities for my day.

Outpatient referrals are, for the most part, on an as-needed basis, although I do have scheduled appointments with some long-term patients.

Patients who are referred to social work (by any staff person) may present issues such as lack of money for basic needs, mental health issues (e.g., anxiety or depression), addictions, family stressors or grief and loss issues.

After a face-to-face interview

with the patient and a chart review are completed, we try to work toward a plan of care appropriate to the needs identified. Basic principles of creating a plan of care include:

- Starting where the patient is now
- Identifying the patient as the expert of their own experience
- Facilitating, not directing
- Actively listening in a non-judgmental, respectful way

Because we need to view the patient in the context of their greater environment, interventions span a wide range of areas, including:

- Counselling (supportive, adjustment, motivational, grief and loss): I help people come to terms with losses in functional ability, job loss, layoff (due to disability) and loss of social inclusion.
- Advocating with Income Assistance workers, Veterans' Affairs and branches of community services for special needs to increase the amounts of funding our patients are receiving. The entire team assists with these, as the range of needs requires the skills of OT, PT, nutrition, pharmacy and nursing.
- Funding for patient needs: This involves working with community groups such as the Kinsmen and Easter Seals.
- Assisting with application forms: Employment Insurance (EI), Canada Pension Plan CPP), Old-age Security (OAS), Workers' Compensation, Community Housing, Short-Term Illness (STI) or Long-Term Disability (LTD).
- Helping patients make difficult choices about their health care.

- Facilitating meetings with family, patient and care providers to make sure that all are aware of care plans, goals, needs and expectations.
- Encouraging wellness.

Coping with chronic wounds can create a burden of stress. Patients report a lack of control over their destiny, lost opportunities and loss or postponement of dreams for the future. Patients require hope for healing, solid support and encouragement to be active players in this process.

To assist in these areas, some of my activities include finding resources such as:

- Transportation
- Lodging
- Community resources
- Meals-On-Wheels
- Dial-A-Ride
- Need-A-Lift
- Access-A-Bus
- Hospital parking
- Engagement of family and neighbours to help out

Discharge planning is part of my role, especially with more complex cases.

> *"We need to view the patient in the context of their greater environment."*

Clinical Social Work in a Wound Care Setting

Part of the reason I love my job on the vascular service is that I feel challenged daily. The role of social work can be flexible and can help fill many gaps that could impede effective care delivery.

I enjoy working with patients and families who demonstrate patience, courage and resilience. By collaborating with my other health-care colleagues we help by setting the stage for our patients' healing journey.

Penny Durnford *holds a Master's degree in Social Work from Dalhousie University and is registered with the NSASW. She has been the social worker on the QEII Vascular Service since 1997. She is on the QEII Ethics Committee and is a member of the Canadian Amputee Coalition's Medical Advisory Board.*

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