

Wound Care

SPRING 2017
VOL. 15 NO. 1



C A N A D A

THE OFFICIAL PUBLICATION OF WOUNDS CANADA

**Using the WPMC for
Creating a Professional
Development Process**

**Education and
Communication:
Words Matter**

**Standardizing Education
and Credentialing in
Advanced Wound Practice:**

Is it time?

**The Changing Face of
Patient
Education**

What does **2018** have in store?



Mark your calendars now!

Join us for the best learning and networking experience available in wound care:



Winnipeg 2018

**Spring
Conference**

MAY 11-12, 2018
WINNIPEG, MB

Wounds Canada
2018 Spring Conference
Winnipeg, Manitoba
May 11-12, 2018
RBC Convention Centre



London 2018

**Fall
Conference**

NOV. 8-11, 2018
LONDON, ON

Wounds Canada
2018 Fall Conference
London, Ontario
November 8-11, 2018
London Convention Centre

Contents

- 4** News
- 8** Using the Wound Prevention and Management Cycle to Create a Professional Development Process
By Heather L. Orsted 
- 15** Canadian Education Programs in Wound Management
- 18** Wound Credentialing in Canada
By Sherry Morrell, Karen E. Campbell, Valerie Winberg, Dave Walton, Pamela E. Houghton 
- 28** Education and Communication: Words Matter
By Sue Rosenthal 
- 32** The Changing Face of Patient Education: Taking Charge of One's Own Learning
By Barry Rosenthal
- 34** Self-management Support Perspectives from Two Sides
By Kathryn MacDonald
- 38** How Many Wounds? Wounds Canada Research Committee Study to Determine Availability, Accuracy and Gaps in Existing Data on Prevalence and Incidence of Wounds in Canada
By Michael Stacey, Nicola Waters, Pamela E. Houghton
- 40** A Pre-test/Post-test/Follow-up Test Teaching Tool
By Carol Ott 



Volume 15, Number 1 · Spring 2017
ISSN 1708-6884

Editor Sue Rosenthal

Editorial Assistants

Katie Bassett
Marina Mekael
wcceditor@woundscanada.ca

Art Director Robert Ketchen
wccproduction@woundscanada.ca

Editorial Advisory Board

Maryse Beaumier, MSc, RN, PhD(c)
Patricia M. Coutts, RN, IIWCC
Chester Ho, MD
Pamela Houghton, BScPT, PhD
David H. Keast, MSc, MD, FCFP
Janet Kuhnke, BSN, MS, ET

Clinical Advisor

Cathy Burrows, RN, BScN, MSCCH

Advertising Sales

416-485-2292 · info@woundscanada.ca

Wound Care Canada is published by Wounds Canada (Canadian Association of Wound Care). Canada's first publication devoted entirely to wound care, *Wound Care Canada* addresses the needs of clinicians, patients, caregivers and industry.

All editorial material published in *Wound Care Canada* represents the opinions of the writers and not necessarily those of Wounds Canada.

Discussions, views and recommendations as to medical procedures, choice of treatments, dosage or

other medically specific matters are the responsibility of the writers. No responsibility is assumed by the publisher or publishing partners for any information, advice, errors or omissions contained herein.

The inclusion of advertising and sponsored material in *Wound Care Canada* does not constitute a guarantee or endorsement of any kind by Wounds Canada.

All rights reserved. Contents may not be reproduced without written permission of the Canadian Association of Wound Care. © 2017.

Wounds Canada (www.woundscanada.ca) 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.

Wounds Canada was formed in 1995 as the Canadian Association of Wound Care. The association's efforts are focused on four key areas: education, research, advocacy and awareness, and partnerships.

Wounds Canada Board of Directors

President Morty Eisenberg, MD
Past President Greg Archibald, MD

Janice de Boer, RN
Jolene Heil, RN
Barbie Murray, RN
Deirdre O'Sullivan-Drombolis, BScPT
Anna Slivinski, RD
Andrew Springer, DCh
Nicola Waters, RN

Chairman Emeritus R. Gary Sibbald, MD

CEO Mariam Botros, DCh, IIWCC

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, get on the list by sending an email to info@woundscanada.ca. It's free!





News in Wound Care

Advocacy: Coverage for Offloading Devices in Ontario

Wounds Canada works hard behind the scenes to advance wound prevention and care across the country. One of the issues we've been advocating for is full coverage for offloading devices for persons with diabetic foot ulcers, to prevent amputations. We've started in Ontario and will be expanding our efforts across the country. On February



21, 2017, Wounds Canada Executive Director Mariam Botros joined the Registered Nurses' Association of Ontario (RNAO) and Diabetes Canada at Queen's Park to confirm that a coverage change will be forthcoming. As a result of the work by Wounds Canada, the RNAO, the Canadian Association for Enterostomal Therapy (CAET) and other interested stakeholders, the government confirmed they will make an official announcement in favour of full funding in May. Stay tuned!

Wounds Canada Events

Wounds Canada is running two conferences this year! These conferences are aimed at health-care professionals looking to improve their knowledge and skills, connect with colleagues who share sim-

ilar challenges and participate in the largest skin and wound events of the year.

Spring Conference

Wounds Canada's spring conference, "Exploring Evidence in Wound Care," is scheduled for May 12–13, 2017, in Kamloops, BC, at Thompson Rivers University Conference Centre. The conference will include information and tips for caring for all kinds of wounds, based on the new Wound Prevention and Management Cycle, and will feature local and national speakers. To see the agenda and to register for the conference, visit www.woundscanada.ca/health-care-professional/education-health-care-professional/regional-conference.



Kamloops 2017

**Spring
Conference**

MAY 12–13, 2017
KAMLOOPS, BC

Fall Conference

Wounds Canada's fall conference is scheduled for November 16–19, 2017, in Mississauga, Ontario, at the International Centre.

Wounds Canada's fall conference is a four-day continuing education event designed to support health-care professionals who work with patients with wounds or who are at risk for developing wounds. To see the agenda and to register for the conference, visit www.woundscanada.ca/health-care-professional/education-health-care-professional/fall-conference.



Mississauga 2017

**Fall
Conference**

NOV. 16–19, 2017
MISSISSAUGA, ON

Onsite Workshops

Changing Practice through Applied Knowledge Workshop

This year, Wounds Canada is offering the two-day Changing Practice through Applied Knowledge workshop prior to each of our conferences. This workshop was recently updated to align with Wounds Canada's newly published Best Practice Recommendations articles (see below for more information). The case-based course focuses on



helping learners apply their knowledge to real-life situations that are common in their practice.

In Kamloops, this workshop will run May 10–11, 2017; in Mississauga, November 14–15, 2017. To register for one of these workshops, visit www.woundscanada.ca/health-care-professional/education-health-care-professional/advanced-education#more-about-changing-practice-through-applied-knowledge.

Special Note

If you would like to attend both the two-day workshop AND the corresponding conference (called the "Boot Camp"), there is a special price offered when you combine your registration. Visit the links below and refer to the description of "Option 3" to register for the Boot Camp option.

Kamloops: www.woundscanada.ca/health-care-professional/education-health-care-professional/regional-conference

Mississauga: <https://woundscanada.ca/health-care-professional/education-health-care-professional/fall-conference>

Peripheral Arterial Disease Workshop

On April 21, 2017, Wounds Canada offered a brand new one-day workshop focused on peripheral arterial disease (PAD).

Tailored to physicians, cardiologists, specialists and internists, this workshop provided attendees with the latest strategies to identify and treat PAD using a patient-centred, evidence-based model.

This workshop was presented by Giuseppe Papia, MD, Robyn Evans, MD, and Barbie Murray, CNS.



Best Practice Recommendations Articles

Starting in 2016, Wounds Canada began a complete review and update of all the previously published Best Practice Recommendations (BPR) articles. The first six papers are now complete and can be found on the Wounds Canada website, at <https://woundscanada.ca/health-care-professional/education-health-care-professional/advanced-education/12-healthcare-professional/110-supplements>.

Wounds Canada is excited to report that there has been an overwhelmingly positive response to these new articles. In total, the papers have been downloaded almost 14,000 times since their staggered release in January and February of this year. Have you downloaded your copies yet?

Continuing through 2017,



Wounds Canada is undertaking four additional topics:

- Physiology of Chronic Lower-leg Edema
- Peripheral Arterial Ulcers
- Venous Leg Ulcers
- Burns

These four new articles will continue to follow the process outlined in the Wound Prevention and Management Cycle to guide the clinician through the application of best practice.

From Our Partners in Wound Care

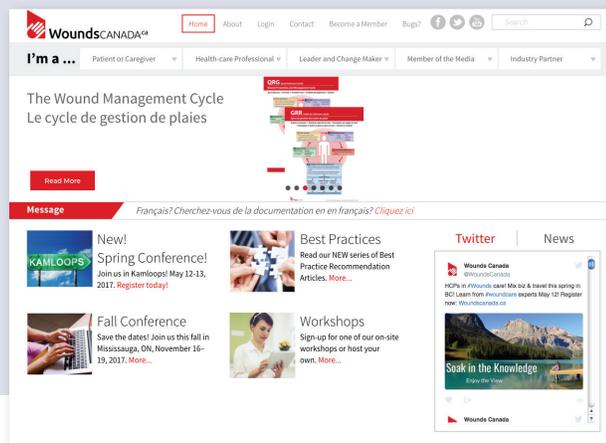
Regroupement Québécois en Soins de Plaies (RQSP)

The Regroupement Québécois en Soins de Plaies (RQSP) hosted a successful event on March 17 and 18, in Quebec City. Over 350 delegates, 23 exhibitors and 13 speakers, as well as a patient, gathered to exchange knowledge and collaborate to improve wound



www.WoundsCanada.ca

The new Wounds Canada website was launched in January. It features the new name, face and branding. This completely redesigned site allows for quicker and easier navigation, more content and improved functionality. Over time, it will grow to have much more information for all our audiences, including patients, health-care professionals, media, industry partners and government decision makers. Visit our new website now, at www.woundscanada.ca.



Wounds Canada

Starting in 2017, the Canadian Association of Wound Care began using its new name, Wounds Canada, instead of “CAWC.” This new branding will be seen on all promotional information and educational materials and on the new website.



care in Quebec. Some of the topics discussed were pilonidal sinus, osteoradionecrosis, skin tears, interpretation of the wound swab, Wounds Canada’s Wound Prevention and Management Cycle, and the role of occupational therapists. As well, the RQSP introduced the new Chantal Labrecque Grant, which was presented to Maryse Beaumier, PhD candidate in Biomedical Sciences, to support her project on the development of a tool to assess the probability of an arterial insufficiency in a lower limb wound.



Next year’s conference will be March 16 and 17 in Trois-Rivières, Québec. Information: www.rqsp.ca.

Coming Up

Interested in wound, ostomy and continence specialized care? The 36th National Conference of the Canadian Association for Enterostomal Therapy (CAET), in partnership with the Southwest Regional Wound Care Program, will take place May 25–28, 2017, at the London Convention Centre in London, Ontario. The conference theme is “Patient-Centred Care – Growing Stronger Together,” and it will be relevant to specialized wound, ostomy and continence care education. For further information, visit www.caet.ca and click on “Conference.”



Wounds Canada Around the Country

Wounds Canada is an active participant in wound-related events across Canada. In March alone, we had booths at the Regroupement Québécois en Soins de Plaies (RQSP) conference in Quebec City, QC, and in St. Catharines, ON, at the Wounds Niagara event. In both locations, we had a draw for a great prize! Congratulations to our prize winners Isabelle Deshaies in Quebec City and Gail Knight in St. Catharines.

In Quebec, Wounds Canada/Plaies Canada was there showing off our new look. As well, our Wound Prevention and Management Cycle (WPMC) was in

the spotlight at Louise Forest-Lalande's session, during which she discussed the new cycle and the evolution of wound management. Thanks to

Louise and a few other volunteers, we now have a French version of the WPMC.

In Niagara, we talked to attendees at the booth about the educational programs and resources Wounds Canada offers, the new BPRs and the fall conference in Mississauga, as many of the delegates are only a short drive away.

In May, we'll be in London, ON, at the CAET conference, and in June, in Winnipeg, MB, and Edmonton and Calgary, AB. Hope to see you there!



Stay connected!



Get on the Wounds Canada mailing list!

To receive notifications, information, invitations and more, send an email to info@woundscanada.ca.

Follow us on social media!

Wounds Canada:

Facebook: www.facebook.com/woundscanada

Twitter: [@woundscanada](https://twitter.com/woundscanada)

Diabetic Foot Canada:

Facebook: www.facebook.com/DiabeticFootCanada

Twitter: [@DiabeticFootCa](https://twitter.com/DiabeticFootCa)



Using the Wound Prevention and Management Cycle to Create a Professional Development Process

By Heather L. Orsted, RN, BN, ET, MSc

*“A leader is one that knows the way, shows the way and goes the way.”
— John C. Maxwell, author on leadership*

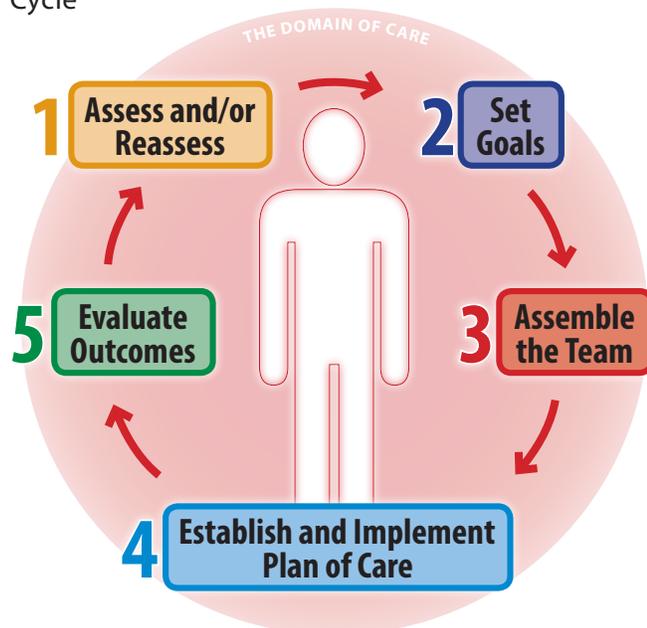
The Wounds Canada Wound Prevention and Management Cycle (WPMC)¹ (Figure 1), like other process tools, has multiple uses. In this article, the tool is used to assist readers who want to become effective wound care leaders, individuals who have the knowledge, skills and attitude to develop expertise in others and ensure the implementation of best practice in their health-care settings.

Step 1:

Assess and/or reassess your current skills as a wound leader.

Wound leaders require more than a weekend wound care course—though that’s a good place to start, as it lets you know if this is or could be your passion. But to be a wound leader, you need advanced training, usually a graduate program. Do you know where you stand? Do you have the advanced skills you will need to develop others?

Figure 1. Wound Prevention and Management Cycle



*“Leadership and learning are indispensable to each other.”
— John F. Kennedy, former U.S. president*

*“There are no mistakes in life, just lessons.”
— Robin Sharma, writer and leadership speaker*

Do you have the in-depth knowledge required to overcome the barriers to best practice that you and the rest of your team will face?

Effective wound leaders need training and skills to be able to delegate, support change, empower and build consensus, support policy, deliver education, develop programs and communicate effectively both in person and through publications.



Step 2:

Set goals to plan for your future and keep ahead of the curve.

How do you want to grow over the next five years? Ten years? Do you have strategic goals and objectives? Have you set both short-term and long-term goals? Have you articulated them to others?

Professional development goals, like all goals, need to meet the SMART criteria (**S**pecific, **M**easurable, **A**chievable, **R**ealistic, **T**ime-based) to be effective. They may involve taking courses, developing mentoring relationships, working in multiple care settings or initiating change in your current setting.

Step 3:

Assemble a team to support and sustain best practice in a clinical setting.

I once said, “The blood on the wall is mine,” when, as a newly minted wound leader, I lamented banging my head against the wall over the futility of practice change. Then I discovered Kitson.

Kitson et al.² described three factors that influence the uptake of evidence into practice:

- The evidence is scientifically robust (research, clinical experience, client preferences).
- The context is receptive to change (person, environment or clinical setting).
- The change process is appropriately facilitated (characteristics, role and style of facilitator).

In other words, if you want to implement change successfully, you must do the following:

1. Ensure the need for your proposed policy or procedure is backed by the evidence. Be prepared to explain your evidence-supported rationale for making a change.
2. Get the support you will need to implement and then sustain the change you are trying to make. This support will need to come in two forms: a management team to support the leader in practice, policy and program development, and a clinical team to deliver best practice to the population. Both are equally important.

*“Alone we can do so little,
together we can do so much.”*

—Helen Keller, author, activist, lecturer

3. Identify and use the most effective members of your team to facilitate the implementation of the change. Ensure that the team is integrated, meaning it is multidisciplinary on the professional side and includes the patient, family and other supporters on the non-professional side.

In other words, don't try to do it without support!

Step 4:

Establish and implement coaching and mentoring strategies to develop your team.

Coaching and mentoring are two approaches wound leaders can use to develop individuals and teams. When creating a plan, effective leaders often use a mix of these two, depending on the needs of the learner and the availability of more experienced individuals who can serve as mentors and coaches. The leader does not necessarily have to fulfill either role.

What's the difference between the two approaches? Coaching is usually more short-term than mentoring, and has a more task-oriented, immediate focus. Coaching is useful for

“Coaching is the universal language of change and learning.”
— Cable News Network (CNN)

“The delicate balance of mentoring someone is not creating them in your own image, but giving them the opportunity to create themselves.”
— Steven Spielberg, film director, producer, screenwriter

skills development and specific improvements. Mentoring generally takes place over a longer period of time, sometimes even over an entire career, and is centred more on long-term, career-type goals (see the case study on this page for specific examples of each).

Case Study:

Development of a SWAT (Skin and Wound Assessment and Treatment) Team in Calgary

The development of a SWAT team in Calgary illustrates the change process using the implementation of a system-wide plan that incorporated team-based care, ongoing professional development and policy change.

In 1994 I began working in a home-care setting that was large in area and population. I was responsible at any given time for about 400 clients with wounds. As the one person with advanced wound care knowledge and skill, I did my best to keep up and put out fires, but I quickly assessed that one person could only do so much (Step 1). A team was what was needed, and I set this as a priority goal (Step 2) to move forward.

When I initially proposed the development of a wound care team, the concept was rejected. After a change in upper management, the proposal was resubmitted and this time it received strong agency support. The SWAT team was created.

In March 1996 the 25-member multidisciplinary SWAT team of registered nurses (RNs), physiotherapists (PTs) and occupational therapists (OTs) was formed (Step 3) and they began a self-paced journey through 10 structured, evidenced-based learning modules (Step 4) based on our mission, vision and values.

I built these modules on the evidence identified by the two newly released Agency for Health Care Policy and Research (AHCPR) clinical practice guidelines.^{3,4} Referred to by our team as the “purple books,” they were among the first of their kind, and, though they were based on the treatment of pressure wounds, the content and references related to wounds in general.⁵ In time, the textbooks by Krasner et al.^{6,7} became our major resource, and we accumulated an extensive reading library. The team also attended two to three hours of in-service training every month to discuss practice issues.

I had been using Benner as a model to develop my wound care novices, but within a couple of years, I realized I no longer had novice learners and needed to revisit my approach (Step 5) to allow them to advance their learning.⁸ As they continued to develop professionally, many of them attended and presented at national and international conferences. Some became leaders in their own right, obtaining advanced education and moving into leadership roles themselves.

Additional team support was provided by the family physician and other medical staff involved in care, social workers, a dietitian, and, as required and by referral, other health-care professionals. This team also availed themselves of the great support from local vendors who provided garments, shoe fits and home-support services.



Interestingly, over time I rarely saw a client without members of the team in attendance. Often we had the client, caregiver, family, nurse, and members of the SWAT team in the home. My goal was to ensure everyone was learning and developing skills in a safe, patient-centred environment designed to meet the needs of our clients, and this was something I evaluated regularly, both formally and informally (ongoing Step 5).

Coaching and Mentoring

Staff development through coaching:

The SWAT team program had milestones that needed to be met, from knowledge and skill development to learning and change in practice. To reach the milestones, it was important that coaching be part of the professional development mix. To effectively coach in order to drive performance, we needed strong performance parameters that were supported by equally strong policies and procedures.

Staff development through mentoring:

Mentoring was quite different, in that some team members chose to move forward beyond what was expected of them within the parameters of their position. Looking for and encouraging that spark for learning is a big part of being a mentor.

I came to see the team environment as an incubator, with many on the team developing leadership skills themselves as they moved from novice to expert over the years. Mentoring proved to be the strongest driver toward sustainability of the program, in that the mentored staff became lead-

ers supporting the ongoing development of the SWAT team program.

The RNs were the only members to approve advanced dressings, OTs were the only members to do pressure mapping and the PTs addressed vascular flow through Doppler assessments. So to discourage isolated practices and encourage full team involvement and mutual coaching, teams were required to visit the clients together.

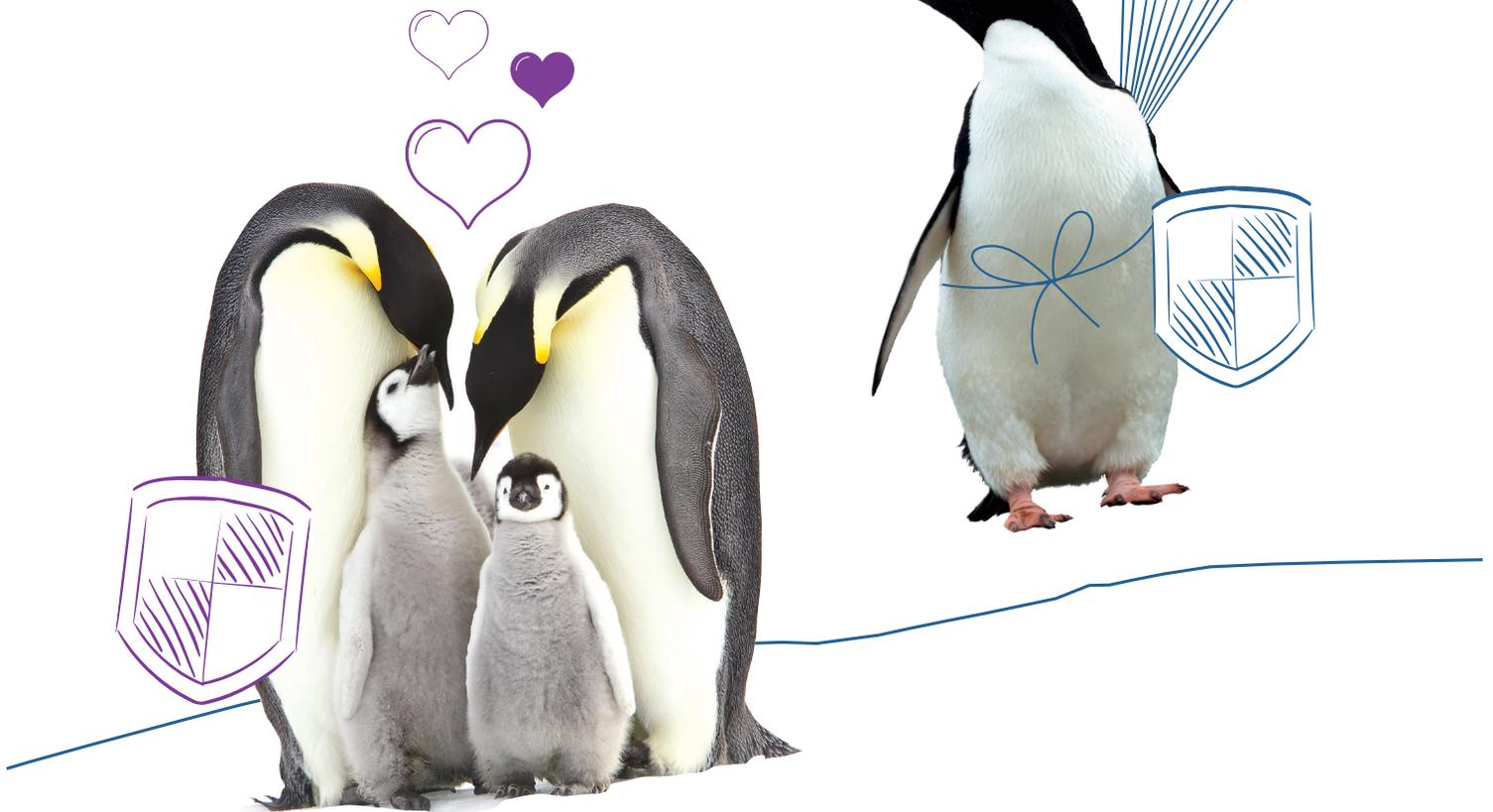
Skin's Guardians

AQUACEL[®]Foam

FoamLite[™]
ConvaTec

Meet the latest member of the ConvaTec Foam dressing family

- For low to non-exuding wounds
- Thin, soft silicone dressing
- Soft and conformable*



Skin's Guardians
PROTECT. DEFEND. NURTURE

Dedicated to the every day

* In Vitro Performance Characteristics of Foam Lite ConvaTec WHRI 4680 MS132.
25/04/16 Data on File, ConvaTec Inc.

®/™ indicates a trademark of ConvaTec Inc. AQUACEL[®] FOAM is a registered trademark of ConvaTec Inc.
Foam Lite[™] ConvaTec is a trademark of ConvaTec.
© ConvaTec Inc. 2016. AP-016495-MM



Step 5:

Evaluate outcomes to determine if leadership has been effective in supporting learning.

After moving through the WPMC steps, evaluate your outcomes to determine if they have met the goals you set in Step 2. If not, go back and reassess, revisit your goals and revise the plan as necessary.

Becoming a wound leader can be both rewarding and frustrating, but it's something that is worth doing. And rest assured that having a process to help you through it will reduce the frustration and increase the rewards. 📌

Heather L. Orsted is Director of Education and Professional Development for Wounds Canada.

References

1. Orsted HL, Keast D, Forest-Lalande L, Megie MF, Kunhke J, et al. Best practice recommendations for the prevention and management of wounds. In: Foundations of Best Practice for Skin and Wound Management. A supplement of Wound Care Canada; 2017. Available from: www.woundscanada.ca/docman/public/health-care-professional/bpr-workshop/165-wc-bpr-prevention-and-management-of-wounds/file.
2. Kitson A, Harvey G, McCormack B. Enabling the implementation of evidence-based practice: A conceptual framework. *Quality in Health Care*. 1998;7:149–158.
3. Bergstrom N, Allman R, et al. Pressure ulcers in adults: Prediction and prevention. Clinical practice guideline number 3. US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research; 1992.
4. Bergstrom N, Allman R, et al. Treatment of pressure ulcers. Clinical practice guideline number 15. US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research; 1994.
5. Orsted H, Attrell E. Making clinical practice guidelines work: The experience of one home healthcare agency. *Ostomy/Wound Management*. 1999;45(9):48–54,56; quiz 58.
6. Krasner DL, Kane D, (eds.). *Chronic Wound Care: The Essentials. A Clinical Source Book for Healthcare Professionals (2nd Edition)*. Wayne, PA: HMP Communications; 1997.
7. Krasner DL, Sibbald G, Rodeheaver GT, (eds.). *Chronic Wound Care: The Essentials. A Clinical Source Book for Healthcare Professionals (3rd Edition)*. Wayne, PA: HMP Communications; 2001.
8. Benner PE. *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley Publishing Company; 1984.

Do you have
PEP?



Wounds Canada can deliver

PEP Talk: Diabetes, Healthy Feet and You to your region

Wounds Canada'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@woundscanada.ca.

What's all the buzz about?



The CAWC is now **Wounds Canada**. Along with our new look is a fresh new website that caters to health-care professionals, patients, leaders in health care and our industry partners.

Visit www.woundscanada.ca to see why we have had over 20,000 downloads since January. Here are some popular sections:

- Online education
- Onsite learning
- Resource libraries
- Screening tools
- Advocacy efforts
- Patient resources
- Clinic directory
- Partnership opportunities

www.woundscanada.ca



Wounds Canada is the leading wound-related knowledge mobilization organization in Canada.



Canadian Education Programs in Wound Management



The standard initial education most health providers receive regarding wound prevention and management is generally not sufficient to address key issues in the field. Therefore, ongoing professional development is essential for all clinicians practising in this complex area. Across Canada, various organizations provide wound education for different levels of practitioner, from novice to expert, in the form of courses, single- and multi-day events, and degrees. Below is a sample some professional development programs currently available.

Wounds Canada

Wounds Canada (WC) recently developed a national wound education framework to enhance the knowledge, skills, judgement, leadership and research abilities of a range of stakeholders in the area of wound prevention and care, including frontline practitioners (doctors, nurses, allied health professionals), policy makers, members of the media, patients and caregivers. Clinician education ranges from novice through expert. An evidence-informed and integrated team approach forms the foundation of all education programs.

Current onsite workshops available for health professionals include the following:

- Changing Practice Through Applied Knowledge (two days; novice health-care professionals [HCPs])
- Advances for the Management of Diabetic Foot Complications (one day; HCPs with intermediate-level wound knowledge)

- Peripheral Arterial Disease (PAD) (one day; primary care and specialist MDs)
- Hands-on skills-building workshops held in conjunction with each WC fall conference and other non-WC conferences around the country (two to three hours; HCPs at all levels)

A **suite of online courses** is in development and will be announced soon.

The **annual spring and fall conferences** offer a total of six days of learning. Attendees to both events have up to 100 sessions to choose from on a variety of topics.

For individuals interested in self-directed learning, the **Wounds Canada website** (www.woundscanada.ca) provides clinicians, patients and decision makers with downloadable resources—including some in multiple languages—that will fulfill their educational needs.

For more information, contact Crystal McCallum, Manager, Education, at crystal.mccallum@woundscanada.ca.

Canadian Association for Enterostomal Therapy (CAET)

The CAET offers specialized online courses and programs in the tri-specialty of wound, ostomy and continence care.

ET Nurse Education Program (ETNEP)

This is a year-long (or slightly longer) program for baccalaureate-prepared registered nurses with a minimum of two years of clinical experience. Upon successful completion, the individual will be recognized as a specialist in the tri-specialty of enterostomal therapy nursing. There are two entries dates per year: September and January. It is offered in French and English. Content is online, and clinical placements are onsite.

Acceptance into the ETNEP program is competitive. Priority may be given to applicants with a guaranteed ET nursing job that is dependent upon graduation from the ETNEP program.

Knowledge to Practice Competency Builders: Spotlight on Best Practice Skin and Wound Management Across the Spectrum

The CAET Bow Valley Spotlight Program is a series of online skin and wound management theory courses offered by CAET in collaboration with Bow Valley College, Calgary, Alberta. Aimed at generalist nurses, the program includes 12 weeks of online theory and an optional

two-day skills lab at Bow Valley College. For more information, explore the CAET Academy website at www.caetacademy.ca. Contact Virginia McNaughton, Director, CAET Academy, director@caetacademy.ca, to discuss your application.

International Interprofessional Wound Care Course (IIWCC-CAN)

The IIWCC provides a comprehensive educational experience to develop wound care specialists and to translate their knowledge into practice. The course takes nine months to complete and is offered in partnership with the University of Toronto. The IIWCC consists of the following:

- two four-day residential weekends (in Toronto)
- 14 self-study modules (nine required: five faculty-chosen and four student-chosen)
- a selective project related to course content that translates new knowledge into the workplace; this is presented to a classmate along with a short written report.

The IIWCC is designed for wound care practitioners with some prior education and experience.

Physicians, nurses and allied health professionals in the wound care field are welcome.

The program offers the following benefits for participants:

- information and skills needed to become integrated, effective

members of interprofessional teams

- discussion of common skin and wound care topics
- hands-on learning at residential weekends with a direct patient day to work in teams
- opportunity to connect with key international opinion leaders
- opportunity to network with colleagues
- University of Toronto Certificate of Completion for family physicians and specialists, CME credits for School of Graduate Studies qualifying students, a course credit toward the Master of Science in Community Health (MScCH) Program at University of Toronto

For more information, visit www.woundpedia.com or email iiwccmodules@gmail.com.

Registered Nurses' Association of Ontario

The Registered Nurses' Association of Ontario (RNAO) offers an annual week-long educational event every February in Niagara Falls, Ontario, called Minding the Gap: Wound Care Institute. The institute is tailored to nurses and health-care providers who are interested in wound care best practices. The mission is to reduce the physiological, psychological and fiscal burden of wounds throughout Ontario.

There are two streams: clinical and program planning. The clinical stream focuses on strategies to support wound prevention,

assessment and management to build clinical capacity in wound care.

Often participants in the clinical stream continue on to the planning stream, which focuses on implementing wound care best practices, monitoring knowledge uptake and sustaining change to build clinical and leadership capacity in wound care.

The program is an excellent professional development opportunity for novice and experienced professionals who work in any health-care setting. Participants have the opportunity to learn from wound care experts from various disciplines—including nursing, nutrition and chiropody—gain hands-on skills in wound care and network with colleagues in the field.

For more information please visit <http://rnao.ca/events>.

Master of Clinical Science in Wound Healing, Western University (MCISc-WH)

The MCISc Program in Wound Healing was established in 2007 to concurrently develop advanced clinical practice and research skills in the specialized field of wound care. Beginning each September, it is a one-year, course-based graduate program. This interprofessional program is delivered via interactive online learning modules combined with three onsite one-to three-week residency periods (total six weeks), during which lectures and clinical skills labs occur on Western University's campus. Students must successfully complete 100 clinical mentorship hours, pass a final comprehensive clinical skills exam and complete a research project.

Using an innovative web-based

platform, the program taps into the expertise of more than 40 renowned faculty members located around the world and representing 10 professions/disciplines. After 10 successful years, 122 future leaders of wound care have graduated with a master's degree in wound healing. Exit surveys reveal a 96.5 per cent completion rate and a 98.5 per cent satisfaction rating, and 76 per cent of students change or acquire new jobs or positions after graduating.

Eligible are experienced clinicians (minimum two years post graduate) licensed to practise in a field related to wound care (RN, OT, PT, MD, D.Chir). Applications must be submitted online before May 1 via www.westernu.ca/fhs/pt. Enrollment is limited to 20 per year.

For more information, contact Cheryl at charding@uwo.ca.

Do you have a taste for Knowledge?

Attend the largest wound conference in Canada

This will be a four-day multi-disciplinary continuing education event designed to support health-care professionals who work with patients with wounds or who are at risk for developing wounds. Find out more: www.woundscanada.ca.

Mississauga, ON • November 16–19, 2017



Mississauga 2017

Fall Conference

Wound Credentialling in Canada

By Sherry Morrell, RN (EC) MN, NP-PHC, MCISc (WH), PhD candidate;
Karen E. Campbell, RN, PhD; Valerie Winberg, RN(EC), MN, NP-PHC, ENC(C);
Dave Walton, PT, PhD, FCAMPT; Pamela E. Houghton, PT, PhD

It is time to create a standardized education program and credentialling system that recognizes advanced practice in wound care in Canada. Credentials have become widely recognized as social currency used for knowledge translation, and they serve to identify one's acquisition of knowledge and skills. They have become a means for employers and consumers to measure or rate the competency of professionals across disciplines.

There is currently a lack of standardization across Canada regarding who is considered the appropriate health-care provider for wound identification and management. Certification programs are already available to recognize many other specialties, but wound care is not

among them. As Masturzo et al. stated, "It would appear reasonable to ask why wound care is different."¹ Recognition of advanced practice via certification not only improves patient care^{2,3} but also identifies to others working in health care that advanced knowledge, skill and judgment are required to work effectively in wound care.⁴

This article will explore a readiness to define wound care as a distinct and necessary area of practice. We will review the current health-care practices in that area. We will explain how a credentialling process designed to standardize an advanced education program will help establish wound care with a unique identity. The need for wound credentialling will be evaluated based on costs and outcomes.

Relevant terms, including *certified*, *competent*, *expert*, and *specialist*, will be reviewed to aid in the selection of an appropriate credentialling title. Information from various sources will include the Internet, Google Scholar, professional organizations and databases (CINAHL, Medline, ProQuest, Up-to-date, Scopus and PubMed).

How many wounds?

A recent report released by the Canadian Institute of Health⁵ was the first attempt to estimate the prevalence of patients registered in various health-care institutions (hospitals, long-term care, community care and others) across Canada. This report suggested that an average of 4 percent of inpatient



acute care, 7 percent of home care, 10 percent of long-term care and 28 percent of complex continuing-care patients receiving health care in Canada have “compromised wounds.”⁵ The report also made clear that this estimate, derived from current documentation within administrative databases, grossly underestimates the actual number of patients affected by open wounds. Other estimates in the literature suggest the actual prevalence of various types of chronic wounds is closer to 26 percent,⁶ 8 percent⁷ and 23 percent.⁸ A key strategy to convince health-care decision makers that there is a need for an advanced practice in wound care is to make clear that compromised wounds are a co-condition of many common disease con-

ditions such as cardiovascular disease, cancer and diabetes. In addition, 1.7 percent of patients admitted to hospital after traumatic injuries or undergoing surgical procedures (e.g., joint replacements) will develop pressure ulcers or surgical site infections that require advanced wound care.⁵

Lack of Best Practice-based Care

Providers in the health-care system should be accountable for ensuring individuals receive cost-effective quality care reflective of best practice.⁹ Unfortunately, wound management is not always reflective of best practice. For example, the lack of universally adopted standards in the management

of persons living with diabetic foot ulcers leads to unnecessary costs and amputations. More than 345,000 Canadians with diabetes will develop a preventable foot ulcer.¹⁰ Eighty-five percent of amputations are secondary to non-healing diabetic ulcers, which may have been prevented by appropriate footwear and adequate foot care.¹¹ Offloading has been shown to produce faster healing, but it is seen in less than 6 percent of diabetic patients.¹² The cost of diabetic foot amputation is 10 to 40 times greater than the cost of prevention.⁵

In the case of venous leg ulcers, research compiled by the Cochrane review panel¹³ shows that the use of compression improves the healing rate. This treatment is strong-

ly recommended by several national and international best practice guidelines and recommendations (Registered Nurses' Association of Ontario [RNAO], Wounds Canada [Canadian Association of Wound Care], Australian Wound Management Association [AWMA], New Zealand Wound Care Society and Wounds UK). However, the Ontario Local Health Integration Network caseload reviews from 2010 through 2011¹⁴ reported only 23 percent of patients with venous ulcers were receiving compression. There are many more examples of recommended best practices for evidence-informed wound assessments and treatments that are not incorporated by clinicians. Clearly, there is great opportunity and need to improve wound care practices in Canadian health-care systems. Further, we believe better integration of advanced practice wound care clinicians who can provide these evidence-informed therapies is critical to lead the necessary changes.

The Costs

The current cost of managing wounds, including treatments, medications, interventions and dressings, creates a financial burden to health-care systems.⁵ Annual combined (institutional and home-based) wound care costs are estimated in Canada's health system to be around \$3.9 billion.¹⁵ The cost of delivering wound care is plagued by health-care delivery

gaps that include lack of care co-ordination across health-care sectors and inequities in accessing specialized expertise, equipment and supplies.¹⁶ An increasingly older population increases the potential for wounds secondary to chronic diseases.¹⁷⁻¹⁹ The associated costs will represent an increasing burden over time.^{8,17} As life expectancy increases, and with the average age of the Canadian population projected to rapidly increase, so will the incidence and prevalence of chronic wounds. A recent report by the Wound Care Alliance suggests that, given current estimates of the cost of caring for chronic wounds together with projected changes to Canadian demographics, the proportion of health-care dollars spent on wound care will rise to 30 percent by the year 2020.²⁰

The cost of chronic wound management goes beyond financial considerations. The human/personal costs include pain,^{5,14,21} infection,²² prolonged hospitalization,^{23,24} altered quality of life,^{23,25} depression,²⁴ anxiety, financial burden and increased mortality.⁵ Cost, quality and patient safety concerns reflect the necessity for standardizing wound care practices.

Wound Care Awareness and Interest

In Canada, ensuring that quality care is delivered to Canadians using the skills and opportunities of health-care providers is the responsibility of each prov-

ince or territory. The Premier of Ontario, Kathleen Wynne, in her manifesto entitled "2014 Mandate Letter: Health and Long-Term Care,"²¹ listed priorities for health care, including "championing the delivery of quality coordinated care to patients by making the best use of the skills and capacity of all our health-care providers." This mandate provides us with an opportunity to examine the current process of wound management and suggests new strategies that provide optimal, evidenced-based wound care, not only for residents in Ontario but for other areas of Canada as well.

Support for a credentialing process that recognizes advanced practice skills in the area of wound care is evident in Ontario. The Ontario Wound Care Interest Group (OntWIG), an interest group affiliated with the RNAO, has been endeavouring since 2007 to increase awareness and engage stakeholders, policy makers and politicians in recognizing the challenges in providing evidence-based wound care across the province. In 2013, the annual symposium of OntWIG entitled "From Vision to Action"²⁶ highlighted the need to identify the processes that would be required to develop credentialing wound care education as an initial step toward improving practice standards and standardizing wound care across the province of Ontario. An OntWIG interdisciplinary working group was formed in

2014 with the mandate to identify the current state of wound education/certification for all regulated health professionals, to identify the processes involved with wound care certification programs in other locations and countries and to make recommendations for the development of a process that would recognize advanced education in the wound care field.²⁷ This group outlined next steps for developing a formalized designation in Ontario. Steps include establishing an interprofessional framework, developing policy statements, outlining scope of practice and establishing partnerships with professional organizations.²⁸ The work of OntWIG demonstrates a readiness to examine and advocate for changes that would support the designation for clinicians who choose to do advanced practice in wound management in Ontario. OntWIG has worked in partnership with Health Quality Ontario (HQO) to

develop standards for wound care in Ontario. These newly developed guidelines were featured at OntWIG's 7th annual symposium in April 2017. We feel these advancements by OntWIG and HQO would be of interest to other groups working on similar initiatives across Canada.

Currently there are wound care initiatives in provinces around the country. Some, but not all, of the provincial examples include British Columbia, Quebec and, as previously mentioned, Ontario. In British Columbia, a province-wide Nursing Skin and Wound Committee was established in 2008. This committee included representation from regional skin and wound committees from various health authorities (publicly funded health-service providers). The goal of this committee was to develop resources to standardize the wound care provided throughout the province.²⁹ Their mandate has

been to develop practices for wound management reflecting cost-effective evidenced-based research in areas of prevention/treatment and risk-management evaluation indicators.^{28,29} The regulatory body for registered nurses working in British Columbia—the College of Nurses of British Columbia—defines the scope of practice specific to wound care. The regulation states “registered nurses may carry out wound care without an order . . . cleansing, irrigating, probing, debriding, packing, dressing and suturing a laceration.”³⁰

Quebec's association for wound care, the Regroupement Québécois en Soins de Plaies (RQSP),³¹ aims to promote practices in the area of wound care across the province. Their mission is to optimize wound care by providing standardization of practices, tools and documentation. The regulatory body for nurses in Quebec is the Ordre des infirmières et infirmiers du



Québec (OIIQ).³² This governing body authorizes “reserved activities,” which enable nurses to take a proactive approach to wound healing. One reserved activity provides autonomy to nurses by allowing them to determine the treatment plan for wounds and skin alterations. In 2016, the OIIQ recognized a new category: prescription nurse. Once a nurse receives education in wound care from recognized university-level programs, they can order laboratory tests (prealbumin, albumin and wound culture), and products, medicines and dressings (not specified) related to the treatment of wounds and skin alterations.

These examples demonstrate that several provincial bodies

Evidence that Advanced Wound Care Clinicians Improve Clinical Outcomes

The future of wound care needs to reflect wound management that is based on sound empirical evidence embedded within the social context of the individual (e.g., available resources, cultural norms).³³ Evidence has demonstrated improved wound outcomes with the implementation of best practice guidelines.^{34–37} Baich et al. noted improvements in wound healing when a provider with advanced wound care knowledge was involved directly or in consultation.³⁸ This finding was based on a review of literature that determined the value

supported having ET nurses employed in the home-care sector—demonstrating improved healing times, wound closure rates, reduced emergency room visits and support for the home-care nurses.³⁸

A study by Zulkowski and Ayello examined whether wound care certification and education affected nursing knowledge regarding pressure ulcers.⁴⁰ Their study compared knowledge among U.S.-based registered nurses certified in wound care, nurses with specialty certification outside wound care and nurses without specialty certification. The participants’ basic knowledge was tested using a validated tool (Pieper Pressure Ulcer Knowledge Tool).⁴¹ Testing included prevention, staging and general wound knowledge. Results demonstrated nurses certified in wound care achieved a standardized mean score of 89 percent, while those with no certification had a significantly lower mean score of 76.5 percent ($p < 0.05$). There was no clinically significant difference between the knowledge of nurses with certification in other areas (outside wound care) and nurses without certification. Certification in itself provided no added benefit; certification in wound healing resulted in higher mean scores.

These two studies highlight emerging evidence to support the role of advanced practice clinicians in wound care. While preliminary findings suggest clinical outcomes can



are grappling with the same issues. Therefore, there is an opportunity, for efficiency’s sake, to come together and create a national approach that would create a strong, unified voice to benefit all. Nurses may provide the majority of bedside nursing, but a national approach needs to reflect the interdisciplinary aspect of wound care.

of having enterostomal therapy (ET) nurses in the home-care sector. The article inclusion criteria included: report of the research study, focus on ET nursing and focus on wound care provided in the home. Multiple electronic databases (all indexed years), hand-searched articles and a Google search resulted in eight articles. These articles

be improved when the care is led by a knowledgeable clinician with advanced practice skills and judgement specific to wound care, obviously more research is needed. Research showing that better, more cost-effective wound care is possible will be critical in influencing health-care decision makers. We will need to convince key stakeholders that hiring these highly qualified wound care clinicians will be worth the financial investment.

A Title Makes a Difference

Many titles are used in the literature to describe an individual with advanced knowledge and clinical skills. The variation makes it difficult to establish an appropriate single, all-encompassing title for the advanced wound care practitioner.

Establishing a title is an important component of “branding,” to help both the public and agencies recognize individuals with a wound care designation based on their advanced knowledge and skills. Defining the most common terms currently in use will provide a basis of understanding for the selection of an appropriate title.

Appendix A contains an overview of various definitions and examples found in literature. The term *expert* requires experience but no guarantee of knowledge. *Competency* relates to acquiring basic knowledge and skills. *Certification* can sometimes be misleading, as there is no clear

distinction between attendance/participation certificates and certification based on advanced knowledge and skills. Based on the definitions in Appendix A on page 27, both *certification* and *specialist* reflect an advanced level of clinical knowledge and skills based on formalized education.

The term *specialist* denotes that the individual has attained knowledge and clinical skills required for practising at an advanced level within their field.³ They have gone through a rigorous credentialing process reflective of formalized evidenced-based learning.⁴² The title *specialist* is held in high regard, partly because title protection is sanctioned under regulatory bodies. The College of Physicians and Surgeons has a list of more than 60 specialist roles in the field of medicine, which can then further be broken down into specialized ages and categories, but wound management is not included in this seemingly exhaustive list. The Canadian Nurses Association (CNA) has developed certification pro-

grams for 19 specialty areas of nursing practice. The College of Registered Nurses of British Columbia enables nurses to get approved certification in areas of contraception management, sexually transmitted infections, remote nursing and RN first call.⁴³ The College of Nurses of Ontario grants specialty certification and title protection to registered nurses in the extended class (nurse practitioners).⁴⁴ The College of Physiotherapists of Ontario⁴⁵ requires registrants to apply for permission prior to using the title *specialist*; currently, orthopedic/manual therapy is recognized. Occupational therapy has no process for specialization, preventing applicants from declaring specialization in their field.⁴² Developing a process for specialization status will be an extremely challenging task. This may take many years and result in a delay in providing an interdisciplinary approach to wound care. For this reason, the title *specialist* would hinder, rather than progress wound credentialing processes across Canada.





Where do we go from here?

Establishing a standardized credentialling process across Canada is one of the key pieces needed to address the many significant issues associated with wound care. There should also be other concurrent processes in place to achieve the desired outcomes.

Wound credentialling is much more than a practice issue; it is a policy issue. Organizational policy is required to identify who can hold the titles. Provincial policy is required to provide funding to hire the appropriate providers. Educational policy is required to provide credentialling. National policy is required for standardization across Canada. Regulatory policy through the Regulated Health Professions Act and regulatory bodies is required to obtain specialty recognition for individuals seeking to attain credentialling in wound care.

Cost, quality and patient safety concerns reflect the necessity for standardizing wound

management. The enhanced wound care practices provided by specialized individuals will ultimately result in lower overall wound care costs based on proactive, researched-based approaches to wound healing.

Summary

It is time to create a standardized education program and credentialling system that recognizes advanced practice in wound care in Canada. A cascade effect related to chronic wounds is costing Canadian health-care systems at least \$3.9 billion per year.^{15,46} Quality in health care requires a look beyond individual certification courses or programs to develop an interprofessional process for improvement.⁴⁷ There is an opportunity to review and transform current health-care practices.

Wound management involves more than just changing a wound dressing; it involves conducting a comprehensive assessment and developing an interdisciplinary, evidence-informed treatment plan that addresses the underlying cause(s) of delayed healing. A standardized, advanced, interprofessional education program will help establish wound care as a unique identity. Credentialling provides a mechanism to ensure that certification reflects best practice and recognizes the advanced level of clinical knowledge and skills required for interprofessional wound management. 🇨🇦

References

1. Masturzo A, Beltz WR, Cook R, et al. Wound care certification: The grin without a cat. *Wound Repair Regen.* 2013;21(4):494–497.
2. Salcido R. Beyond certification for wound care practitioners. *Adv Skin Wound Care.* 2007;20(8):424, 426.
3. Canadian Physiotherapy Association. Canadian Physiotherapy Association Clinical Specialty Program Candidate Handbook. July 2011. Available from: www.physiotherapy.ca/getmedia/8ac03f2e-e061-4d6f-974a-3477bd4eb27b/Candidate-Handbook-Final_pr.pdf.aspx.
4. Chartered Society of Physiotherapy. Specialisms and Specialists. August 2001. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=1B0C4D7EB9291F442121190578741CBB?doi=10.1.1.114.2887&rep=rep1&type=pdf>.
5. Canadian Institute for Health Information. Compromised Wounds in Canada. 2013. Available from: https://secure.cihi.ca/free_products/AiB_Compromised_Wounds_EN.pdf.
6. Woodbury MG, Houghton PE. Prevalence of pressure ulcers in Canadian healthcare settings. *Ostomy/Wound Manage.* 2004;50(10):22–28.
7. Hurd T, Posnett J. Point prevalence of wounds in a sample of acute hospitals in Canada. *Int Wound J.* 2009;6(4):287–293.
8. Harrison MB, Graham ID, Lorimer K, Friedberg E, Pierscianowski T, Brandys T. Leg-ulcer care in the community, before and after implementation of an evidence-based service. *Can Med Assoc J.* 2005;172(11):1447–1452.
9. Hollon SD, Arean PA, Craske MG, et al. Development of clinical practice guidelines. *Annu Rev Clin Psychol.* 2014;10:213–241.
10. Canadian Diabetes Association. Cost of diabetes in Ontario. 2015. Available from: www.diabetes.ca/CDA/media/documents/publications-and-newsletters/advocacy-reports/cost-of-diabetes-in-ontario.pdf.
11. Werdin F, Tennenhaus M, Schaller HE, Rennekampff HO. Evidence-based management strategies for treatment of chronic wounds. *Eplasty.* 2009;9:e19.

12. Ciona S, Methot C, Thompson R. Implementing best practice: Introducing total contact casting management into a clinic setting. *Diabet Foot Can.* 2014;2:35–39.
13. O'Meara S, Cullum N, Nelson EA, Dumville Jo C. Compression for venous leg ulcers. *Cochrane Database Syst Rev.* 2012;11:CD000265.
14. Canadian Home Care Association. Accountability in Wound Care: Utilizing Standardized Evidence-based Care. 2013. Available from: www.cdnhomocare.ca/media.php?mid=2852.
15. Canadian Home Care Association. Wound care management in Canada. 2013. Available from: www.cdnhomocare.ca/content.php?doc=263.
16. Ontario Wound Care Interest Group (OntWIG). Fewer wounds, faster healing. Framework for an Ontario wound care strategy. 2012. Available from: http://ontwig.rnao.ca/sites/ontwig/files/Framework_for_an_Ontario_Wound_Management_Strategy_Oct%202012-final_0.pdf.
17. Capasso V, Collins J, Griffith C, Lasala CA, Kilroy S, Martin AT, et al. Outcomes of a clinical nurse specialist-initiated wound care education program: Using the promoting action on research implementation in health services framework. *Clin Nurse Spec.* 2009;23(5):252–257.
18. Lazarus G, Valle M, Malas M, Qazi U, Maruthur NM, Doggett D, et al. Chronic venous leg ulcer treatment: Future research needs. *Wound Repair Regen.* 2014;22(1):34–42.
19. McIsaac C. Managing wound care outcomes. *Ostomy/Wound Manage.* 2005;51(4):54–56, 58, 59.
20. Wound Care Alliance Canada. Standing Committee on Finance (FINA). Pre-budget Consultations: Other Challenges. 2012. Available from: www.parl.gc.ca/Content/HOC/Committee/411/FINA/WebDoc/WD5709773/411_FINA_PBC2012_Briefs/WoundCareAllianceCanadaE.pdf.
21. Wynne, Kathleen. 2014 Mandate Letter: Health and Long-term Care Ontario. Available from: www.ontario.ca/page/2014-mandate-letter-health-and-long-term-care. Accessed December 3, 2015.
22. Swanson T, Keast D, Cooper R, Black J, Angel D, Schultz G, et al. Ten top tips: Identification of wound infection in a chronic wound. *Wounds Int.* 2015;6(2):22–27.
23. Canadian Home Care Association. Wound Care Management in Canada. 2013. Available from: www.cdnhomocare.ca/content.php?doc=263.
24. Canadian Diabetes Association. Diabetes Charter Backgrounder Ontario; June 2015. Available from: www.diabetes.ca/getmedia/73485544-2d42-4fd8-a834-b80b13ed231e/diabetes-charter-backgrounder-on-2016-09.pdf.aspx.
25. Gottrup F, Holstein P, Jorgensen B, Lohmann M, Karlsmar T. A new concept of a multidisciplinary wound healing center and a national expert function of wound healing. *Arch Surg.* 2001;136(7):765–772.
26. Ontario Wound Care Interest Group (OntWIG). From Vision to Action. 2014. Available from: <http://ontwig.rnao.ca/sites/ontwig/files/Ontwig%202014%20Report.pdf>.
27. Ontario Wound Care Interest Group. OntWIG invitation to working groups. May 2015.
28. Ontario Wound Care Interest Group. Policy & Political Action Proceedings Document Leveraging Better Wound Health Policy: Provincial Perspectives and Update on Work of the Ontario Wound Care Interest Group. 2015. Available from: <http://ontwig.rnao.ca/newsletters/2015/12/23/leveraging-better-wound-health-policy-provincial-perspectives-and-update-work#attachments>.
29. Handfield S. Formation of a provincial nursing skin and wound committee. *J Wound Ostomy Continence Nurs.* 2013;40(6):568–571.
30. College of Registered Nurses of British Columbia. Scope of Practice for Registered Nurses. 2015. Available from: www.crncb.ca/Standards/Lists/StandardResources/433ScopeforRegisteredNurses.pdf.
31. Regroupement Québécois en Soins de Plaies (RQSP). Charter & Regulations – Quebec Coalition for Wounds Care – RQSP. Available from: www.rqsp.ca/fr/reglements.
32. Ordre des infirmières et des infirmiers du Québec. Champ d'exercice et activités réservées. January 2016. Available from: www.oiiq.org/pratique-infirmiere/activite-reservees/determiner-le-plan-de-traitement-des-plaies.
33. Gethin G. Defining outcomes in wound care: The need for consensus. *J Wound Care.* 2015;24(2):51–51.
34. Canadian Home Care. Wound Care Management in Canada. 2013 Available from: www.cdnhomocare.ca/content.php?doc=263.
35. McIsaac C. Closing the gap between evidence and action: How outcome measurement informs the implementation of evidence-based wound care practice in home care. *Wounds Compend Clin Res Pract.* 2007;19(11):299–309.
36. Carberry C. Outcomes steering practice: When the ends determine the means. *Int J Nurs Pract.* 1998;4(1):2–8.
37. Grol R, Grimshaw J. From best evidence to best practice: Effective implementation of change in patients' care. *Lancet.* 2003;362(9391):1225–1230.
38. Baich L, Wilson D, Cummings GG. Enterostomal therapy nursing in the Canadian home care sector: What is its value? *J Wound, Ostomy and Continence Nurs.* 2010;37(1):53–64.
39. Lazarus G, Valle M, Malas M, Qazi U, Maruthur NM, Doggett D, et al. Chronic venous leg ulcer treatment: Future research needs. *Wound Repair Regen.* 2014;22(1):34–42.
40. Zulkowski K, Ayello EA, Wexler S. Certification and education: Do they affect pressure ulcer knowledge in nursing? *Adv Skin Wound Care.* 2007;20(1):34–39.
41. Pieper B, Zulkowski K. The Pieper-Zulkowski pressure ulcer knowledge test. *Advances in Skin & Wound Care.* 2014;27(9):413–419.
42. College of Occupational Therapists of Ontario. Occupational Therapist Guide to Title. 2012. Available from: www.coto.org/pdf/GuidetoUseofTitle2012.pdf.
43. College of Registered Nurses of British Columbia. Education & Certification. 2016. Available from: www.crncb.ca/Standards/CertifiedPractice/Pages/CPeducation.aspx.
44. College of Nurses of Ontario. Practice Standard: Nurse Practitioner. Available

from: www.cno.org/globalassets/docs/prac/41038_strdrnec.pdf.

45. College of Physiotherapists of Ontario. The Use of Restricted Titles, Credentials and Specialty Designations. 2012. Available from: www.collegept.org/Assets/registrants%27guideenglish/standards_framework/standards_practice_guides/StandardUseRestrictedTitlesCredentialsSpecialtyDesignations.pdf.
46. Ahearn P. A Canadian health care crisis: Chronic wounds. Media Planet. No.1. June 2012. Available from: http://doc.mediaplanet.com/all_projects/10579.pdf.
47. Huckman RS, Raman A. Medicine's continuous improvement imperative. JAMA. 2015;313(18):1811–1812.
48. Redd ML, Alexander JW. Does certification mean better performance? Nurs Manag. 1997;28(2):45–50.
49. Rappl LM, Fleck C, Hecker D, Wright KD, Fredericks C, Mrdienovich D. Wound care organizations, programs, and certifications: An overview. Ostomy Wound Manag. 2007;53(11):28–39.
50. Skotniczna P. Woundpedia: International Interprofessional Wound Care Course (IIWCC). Available from: <http://woundpedia.com/iiwcc/>.
51. Canadian Nurses Association. CNA Certification Program. 2015. Available from: <http://nurseone.ca/en/certification>.
52. Canadian Nurses Association. Get certified. Alta RN. 2009;65(8):18–19.
53. CAET Academy. ETNEP Program. Available from: <https://caetacademy.ca/etnep-program/>.
54. Horn J. One program's journey to joint commission certification for wound services. J Acute Care Phys Ther. 2012;3(3):242–245.
55. Redd ML, Alexander JW. Does certification mean better performance? Nurs Manage. 1997;28(2):45–50.
56. Shanteau J, Weiss DJ, Thomas RP, Pounds JC. Performance-based assessment of expertise: How to decide if someone is an expert or not. Eur J Oper Res. 2002;(2):253.
57. Shanteau J, Thomas RP, Friel B, Weiss DJ, Pounds JC. Identifying expertise with out a gold standard: Four applications. 2002;11.
58. Bechtel GA, Davidhizar R, Bradshaw MJ. Problem-based learning in a competency-based world. Nurse Educ Today. 1999;19(3):182–187.
59. College of Nurses of Ontario. Competencies for Entry-level Registered Nurse Practice. Available from: www.cno.org/globalassets/docs/reg/41037_entrytopractic_final.pdf.
60. Benner PE. From Novice to Expert: Excellence and Power in Clinical Nursing Practice. Michigan: Prentice Hall; 2001.
61. Loveday T, Wiggins M, Searle B, Festa M, Schell D. The capability of static and dynamic features to distinguish competent from genuinely expert practitioners in pediatric diagnosis. Hum Factors. 2013;55(1):125–137.
62. Weiss DJ, Shanteau J. Empirical assessment of expertise. Hum Factors. 2003;45(1):104–116.
63. Anton H. Certification and measuring competency in physical medicine and rehabilitation in Canada. Arch Phys Med Rehabil. 2015;81(9):1253–1255.

Diabetic Foot Canada e-Journal

is an innovative publication from Wounds Canada and the Registered Nurses' Association of Ontario addressing an interdisciplinary audience of health-care professionals who care for people with diabetes, to support their practice and to improve patient outcomes.

Go to www.diabeticfootcanadajournal.ca to read it online now!

To receive notifications about DFC releases and more, get on the Wounds Canada mailing list by emailing info@woundscanada.ca.



Appendix A

Terms Defined

Title	Description	Example	Advantage	Disadvantage
Certification	<ul style="list-style-type: none"> • meets and maintains standards of practice predetermined by a regulatory body^{1,2} • organization or professional body grants certification based on minimal standard criteria^{1,2} • may require an examination or submission of a portfolio demonstrating knowledge and skill^{48,49} 	<ul style="list-style-type: none"> • College of Nurses of Ontario (CNO) specialty certificates in primary health care, pediatrics or adult care⁴⁴ • International Interprofessional Wound Care Course (IIWCC) certificate of attendance and credit certificate⁵⁰ • Canadian Nurses Association (CNA), certification exams in various subspecialties⁵¹ • Canadian Association of Enterostomal Therapy certification in wound, ostomy and continence care⁵² 	<ul style="list-style-type: none"> • an indicator that the professional is qualified in a specialized area of practice^{53,54} 	<ul style="list-style-type: none"> • the title itself has no guarantees of competency in practice⁵⁵ • certificates awarded based on attendance or years of experience and not reflective of rigorous credentialing^{56,57}
Competency	<ul style="list-style-type: none"> • proficient performing an assigned skill or task based on previously obtained or current knowledge^{2,58} • gained through clinical practice, reflection and opportunities⁴ 	<ul style="list-style-type: none"> • entry-level requirement of undergraduate nursing degree programs⁵⁹ 	<ul style="list-style-type: none"> • organized, efficient, mastering clinical skills, developing a plan based on conscious consideration of the problem⁶⁰ 	<ul style="list-style-type: none"> • experienced but lack the efficiency, speed and flexibility of an expert; ignoring subtle associations noted by experts^{60,61}
Expertise	<ul style="list-style-type: none"> • discriminates, noting subtle differences that others do not and they demonstrate consistency over time^{56,62} • expresses pattern recognition and association at an unconscious level⁶¹ 	<ul style="list-style-type: none"> • social acclamation of expertise involves asking a professional who they consider an expert in the field⁵⁷ 	<ul style="list-style-type: none"> • has a vast amount of experience and the ability to grasp a situation to define the underlying concern⁶⁰ 	<ul style="list-style-type: none"> • often given the title based on years of experience rather than tested knowledge or skills^{4,57,61} • may or may not have certification in the domain in which they are considered an expert⁵⁶
Specialization	<ul style="list-style-type: none"> • demonstrates clinical reasoning reflective of learning, clinical practice and experience⁴ • practising at an advanced clinical level within a specific field⁴ • area of practice recognized by a member organization, allowing development and demonstration of higher levels of knowledge and skills³ 	<ul style="list-style-type: none"> • in medicine, continued in postgraduate education pursuing training in a particular field⁶³ • Clinical Specialty Program for Physiotherapy in Canada³ 	<ul style="list-style-type: none"> • practitioner skilled in a particular domain, beyond minimal program standards⁸ 	<ul style="list-style-type: none"> • establishing specialization may require greater burden to the providers to attain and maintain • developing and maintaining credentialing process – costs, accreditation, testing, quality assurance

Education and Communication:

Words Matter

By Sue Rosenthal, BA, MA

The use of precise, clear words is essential in all communications, but for communicators and educators in health care, this can be a matter of life and death. Without clear communication, mistakes can happen, patients can be unsure of what to do and follow-up can fall through the cracks.

As members of health-care teams, our main function is to communicate. All other activities follow from this. Therefore, our most important responsibility is to paint a clear picture with each communication to reduce confusion and ensure consistency of vision among professionals. We must get it right.

At Wounds Canada, we recently revised several of the best practice recommendation (BPR) articles that originally appeared almost 20 years ago. During the process, we came across terminology that would benefit from an update to improve

clarity and align more closely with the Wounds Canada philosophy of wound prevention and management.

Below are a number of the more high-profile terms that have been either updated in the BPRs or that we felt needed to be defined here to ensure common understanding.

Guideline versus Recommendation

Many people consider guidelines and recommendations to be the same, and, in common usage, there is generally no difference between the two. You will often see “guidelines” that provide “recommendations” for practice. At Wounds Canada, we *do* use the two terms differently. Our BPRs take existing guidelines developed by other organizations and synthesize the information contained in them. The BPRs then extend the content by providing more detailed information on the prac-



tical application of the concepts established by the guidelines and other supporting documents. Though others often refer to the Wounds Canada BPRs as *guidelines*, we refer to them as *recommendations* to distinguish them from the guidelines on which they are based.

Emphasis on Prevention

The updated BPR articles have a stronger emphasis on prevention than the previous iterations. This reflects the importance Wounds Canada places on promoting earlier intervention for high-risk patients *before* wounds occur. Traditionally, the organization had focused on chronic wounds. Over time, however, there has been increasing awareness that to prevent chronic wounds, all wounds, including surgical and minor acute wounds, must be managed properly if the result is to be a normal healing trajectory. In patients

who are at high risk for developing wounds, such as persons with peripheral neuropathy, lower leg edema, and those who are bed- or chair-bound with reduced sensation, the first priority is to implement strategies to prevent wounds from forming in the first place. The second priority is to prevent complications from developing in existing acute wounds, so they do not become chronic. The strong emphasis in the BPRs on the first step of the Wound Prevention and Management Cycle—a thorough and holistic assessment—supports these concepts.

Cycle versus Pathway

Previous versions of the BPRs were based largely on the Preparing the Wound Bed Paradigm, illustrated as a pathway with multiple arms addressing factors a clinician needed to address when treating a person with a chronic wound. As

the public, patients, caregivers and unregulated care providers. It is a label assigned to the “art and science” of the specialty. As a less technical and more “caring” phrase, *wound care* is appropriate for use with all non-professionals. It is especially effective when actively supporting patients who are learning how to care for their own wounds.

Maintenance Wound versus Non-healing or Non-healable Wound

One of the changes that generated lively debate relates to the use of *maintenance* to describe a wound, as in “maintenance wound.” The BPRs recommend that the terminology used to describe wounds be *healing* (wounds that are in the process of actively closing), *non-healing* (wounds that have stalled and are not actively closing) and *non-healable* (wounds that have no potential to heal regardless of any proposed treatment). These labels provide a consistent and parallel description scheme for wounds based on the state they are in, not on the approach to treatment the health team has decided on (as in, “we will ‘maintain’ the wound in its current state”). Our view is that patients and their families, and even clinicians new to wound care, will more easily understand when a team member explains that a wound is a “non-healing wound” or “non-healable wound,” rather than a “maintenance wound.”

Patient Education

For decades the term *patient education* has been used to refer to the necessary “instruction” patients receive when being discharged from one setting to another. With an emphasis in most Canadian regions on early discharge from acute care and self-management, it is essential that patients understand how to care for themselves outside clinical settings. Therefore, clinician sup-

port that encourages and supports well-informed and capable patients has become more important than ever.

Education is generally understood to be an activity where information is transferred from one source to an individual or group of individuals in a formalized setting or format. For people under stress (which often accompanies illness or injury), or on medication that affects comprehension or retention, or with impairments such as poor hearing or vision, or who have been out of formal educational settings for years or decades, this method can be ineffective, even when accompanied by how-to literature. Language differences and a one-size-fits-all approach can also create barriers



to understanding and the ability to implement even a simple self-care plan.

A more effective method is a shift from “education” to “learning,” which puts the emphasis on idea exchange and exposure to and discussion of resources and tools, along with training and practice for specific tasks. Skilled “educators” know the most effective approach is to excite patient curiosity and encourage critical thinking about and commitment to self-care by sitting down with the person and exchanging ideas on what will work for them, in the short and long term. 🇨🇦

Sue Rosenthal is the Director of Knowledge Mobilization for Wounds Canada and Editor of Wound Care Canada.

The Changing Face of Patient Education: Taking Charge of One's Own Learning

By Barry Rosenthal, Professional Development Specialist

Patients of all ages can now put their everyday computer smarts to good use and educate themselves about health and self-management. They are accustomed to using the Internet and generally know how to access resources on the web that address their particular issues; they often come to appointments armed with information downloaded from websites.

The Web

The good news is that there are many sites that supply excellent evidence-informed information as well as support sites where patients can ask questions of knowledgeable clinicians and exchange experience-based strategies with peers who share their condition. Patients should be encouraged to use the resources available to them and take an active role in managing their health and any health-related conditions. By researching and getting a broad picture of their condition and the possibilities and challenges surrounding it, patients can assist with the creation of a plan of care and effectively carry it out.

Facebook and Twitter

Social media, too, provide patients with the opportunity to access the latest research findings,

join support groups and discuss their concerns and successes with like-minded people and health professionals. Patient interest lies not only with the physiological aspects of their condition but also with the psychological, social, financial and quality-of-life issues they may be dealing with.

Among the benefits to this approach are that patients quickly see they are not alone in their struggles and can exchange practical strategies to help them with their daily and longer-term challenges.

The Role of the Clinician

In light of this growing trend, it is essential that patients get the *right* information from these websites and other sources. Clinicians are advised to research appropriate sites and pass the information along to patients. As well, they must critically evaluate and discuss any relevant information patients bring in in a supportive way that furthers the clinician-patient relationship and encourages patient confidence in their ability to self-manage.

There will be patients who think they can find everything they want on the web or believe that a strategy will be appropriate for them just because they've read about it. That leaves the clinician



A Real-life Example

The Diabetic Foot Canada Twitter feed and Facebook page were launched to support clinicians, but quickly patients also became followers and contributors. Varied perspectives strengthened the level of engagement among all participants, and it seems that patients who are active on the feeds have no difficulty accessing or understanding the information presented, even when it is in the form of research articles from peer-reviewed publications.

According to Mariam Botros, CEO of Wounds Canada and moderator of both feeds, “The patients don’t see barriers, and neither should we. These patients are taking charge of their own learning, and clinicians had best keep up.”

with the additional job of managing patient expectations and clarifying the benefits and challenges of any particular strategy.

Conclusion

Patients who conduct research on the web or through social media will undoubtedly have questions, opening the door for health professionals to explore self-management strategies and create a sustainable plan of care. When patients are involved in managing their own health—something worth encouraging them to do—the clinician should see it as an opportunity to direct patients to additional, vetted resources, discuss key issues based on those resources and support patients in helping themselves. 🩹

Wounds Canada Online Resources

Wounds Canada:

Web: <https://woundscanada.ca/>

Facebook: www.facebook.com/woundscanada

Twitter: @woundscanada



Diabetic Foot Canada:

Facebook: www.facebook.com/DiabeticFootCanada

DiabeticFootCanada

Twitter: @DiabeticFootCa



Barry Rosenthal is an independent course developer and instructor specializing in adult learning. His clients include the University of Toronto and Humber College.

Four Tips for Ensuring Safe Use of Online Information

Clinicians have an important role to play in helping patients safely use the health-care information they find online. Here’s how they can help:

1. Actively encourage patients to discuss with them the information they have found
2. Verify the accuracy and credibility of the information
3. Provide context for the information, so patients have a full understanding of it
4. Provide alternative sites for them to explore



Self-management Support Perspectives from Two Sides

By Kathryn MacDonald, RD

This article will offer a few practical suggestions with respect to how clinicians can best support self-management when working with patients. It attempts to answer how clinicians can use their caring, training and compassion to connect with patients and help them deal with ongoing health conditions.

The perspectives discussed are that of a registered dietitian with experience working in the area of diabetes care and chronic disease self-management. The content is based on years of conversations with patients, family members and colleagues in both the clinical setting and community environment. These experiences have provided the greatest learning opportunities in terms of what works and what does not, including the elements required to build trusting relationships and supportive partnerships between clinician and patient.

Self-management refers to the tasks that an individual must undertake to live well with one or more chronic conditions.

Self-management support refers to provision of education and support by health-care professionals to increase patients' skills and confidence in managing their health conditions.¹

Clinician Perspective

Two key skills have proven particularly helpful in supporting patients and families to be the best self-managers they can be.²⁻⁴

First: Ask Questions Before Advising²

"Ask questions first" is easy to suggest but hard to practise at times, as our tendency is to deliver care and move into fixing situations for our patients. Learning to ask open-ended questions and actively listening before advising allow our patient's story to be told. This in turn helps us gauge a patient's level of motivation, the importance they place on taking care of themselves and their level of confidence in taking on self-management tasks. Hearing and appreciating a patient's story can allow us to tailor or match interventions more effectively to our patient's state of readiness to engage in elements of care.

Asking questions, listening carefully to the responses and reflecting back what one believes one has heard are some of the best skills clinicians can have in their toolbox to support self-management.

Ask . . .

"What is most important to you in our visit today?"

"What is getting in your way the most in terms of what you want or need to do?"

Once you have asked the questions, listened and reflected . . .



Ask ...

"I hear what you are saying ... tell me more."

Follow with ...

"How can I be of help?"

This approach communicates to the patient that the clinician is trying to understand and appreciate the patient's situation, which is the way to begin building the trusting relationship essential for supporting patients to become effective self-managers.

Second: Help Patients Set Goals and Devise Achievable Action Plans³⁻⁴

Education and skills training do not guarantee success in self-management. Helping patients devise realistic, attainable goals can increase the chances of success and empower patients to take care of themselves and feel confident in doing so.

Following your initial discussion (above), explore with patients if there is something they would like to do or feel they can do related to their health in the next week or two.

When a patient identifies something they would like to do, ask if they would like help putting together a plan of action. Mutual goal-setting and the development of an action plan driven by the patient help ensure the plan is individualized and meaningful. This is essential for sustaining a successful partnership that can help effectively tackle the overflowing plate of self-management

demands faced by patients with chronic health conditions.

Using the SMART-goal process (**S**pecific, **M**easurable, **A**chievable, **R**ealistic, **T**ime-based), help your patient break their plan down into reasonable steps that answer the questions "what, when, where, how much and how often."

Using the SMART-goal process and having the patient construct the plan helps the patient become responsible for whether that plan includes the opportunity to identify any barriers that might hinder them, use problem-solving strategies and decide on next steps.

Important in the process is creating a plan for check-in on progress with the action plan. Check-in may be with the clinician, another team member, a family member or a friend. Through the check-in process, clinicians can help patients who are feeling overwhelmed by bolstering their confidence.



**I don't
~~want to~~
feel
scared**



Help change the lives of 11 million Canadians living with diabetes or prediabetes. [Donate at EndDiabetes.ca](https://EndDiabetes.ca)

**~~DIABETES~~
CANADA** | **~~END~~
DIABETES**



When plans are only partially accomplished or not accomplished at all, it is important for the clinician, when possible, to help patients turn negative circumstances into positive ones. The clinician should both identify when a plan has been modified and celebrate successes, no matter how small or different from what was originally intended. The clinician should also make patients aware that an inability to follow through with a plan is not failure but rather an opportunity to learn, modify the plan, gather more resources and try again.

Patient Perspective

Patients experience a loss of control when, often unexpectedly, they are diagnosed with a chronic condition. They may feel guilt in having to put themselves first and overwhelmed by the challenge of securing time for an often long list of self-care tasks. Patients and caregivers may also be dealing with mental and physical fatigue, depending on how much the condition disrupts their lives.

Despite the demands, patients' efforts to self-manage may be demonstrated, sometimes in small steps that are difficult to recognize. Patients are often gathering information during and outside of their visits with health-care providers and seeking to learn new skills. Taking away learning after a visit, devising and working on a plan of action, identifying barriers to carrying out a plan, and problem solving related to barriers are all core skills for patients moving toward effective self-management.⁴⁻⁵

Conclusion

Patients seek to understand and be understood in order to take care of themselves. A clinician who helps implement a supportive self-management process that includes asking questions and active listening, as well as assisting with goal setting and action planning, goes a long way to helping patients maintain their commitment and confidence in their journey of self-management. 🏠

3

Tips for Supporting Self-management

1. Be aware of and offer to connect patients to self-management support programs and groups in their community so they can build their network of support and resources to assist with goal setting, action planning and follow-through.⁴
2. As a clinician, seek training opportunities that support building your skills regarding effective communication and your role in supporting self-management.²⁻³
3. Be aware that the techniques discussed in this article work most of the time but are not appropriate for every patient. Some patients may not be ready to take action and require additional resources for support of care, while others may already be successfully self-managing without formal support.³

Kathryn MacDonald is a Registered Dietitian who is currently working as a Self-Management Program Coordinator in the province of Ontario. Prior to taking on the role as a Self-Management Program Coordinator Kathryn was a Diabetes Outreach Coordinator for a Diabetes Regional Coordination Centre in Ontario.

References

1. Adams K, Greiner AC, Corrigan M (eds.). Report of a summit. The 1st annual crossing the quality chasm summit: A focus on communities. Washington, DC: National Academies Press; 2004.
2. Institute for Healthcare Communications. Choices and Changes – Motivating Healthy Behaviors Training. Available from: <http://healthcarecomm.org/training/continuing-education-workshops/choices-and-changes/>.
3. Centre for Collaboration, Motivation and Innovation. Brief Action Planning. Available from: <http://www.centrecmi.ca/learn/brief-action-planning/>.
4. Lorig K, Gonzalez V, Laurant D. Stanford University Self-management Program – Stanford Patient Education Research Centre. 2012 (revised 2016). Available from: <http://patienteducation.stanford.edu/programs/cdsmp.html>.
5. Anderson B, Funnel M. The Art of Empowerment: Stories and Strategies for Diabetes Educators (2nd edition). American Diabetes Association; 2005.

How Many Wounds?

Wounds Canada Research Committee Study to Determine Availability, Accuracy and Gaps in Existing Data on Prevalence and Incidence of Wounds in Canada

By Michael Stacey, MBBS DS FRACS; Nicola Waters, PhD MSc RN;
Pamela E. Houghton, PT, PhD



The existing published data on the prevalence and incidence of wounds in Canada have been recognized by clinicians in the area of wound practice to have multiple deficiencies. As a result, estimates vary significantly.

The results will ... provide an accurate assessment of prevalence and incidence of wounds in Canada.

Data from the Canadian Institute for Health Information are commonly quoted for the prevalence and incidence of wounds. However, we know there are limitations to these data, since they are derived from databases that underestimate ulcer occurrence and do not differentiate among wound types.

Why is this important?

The lack of accurate data hinders health ministries and regional health authorities in planning resources for managing wounds. It also has an impact on researchers and health-care leaders in making a valid case for funding and programs that aim to improve the quality of wound care practice. In addition, the public remains unaware of the true impact of wounds on their health-care systems, and, as a result, they are less informed than they should be about key issues during election periods.

Objectives

The Research Committee of Wounds Canada is actively addressing this issue and undertaking an initiative with the following objectives:

- To conduct a systematic review to identify all reports and published articles that have estimated the prevalence of any wound type in health-care settings located in Canada and other countries; and from these articles, to determine factors influencing variations in the estimates of wound prevalence such as the methods used for data collection (e.g., chart review versus skin assessment) and compare the prevalence of common types of wounds occurring in Canadian health-care settings with those in other developed nations
- To locate, verify and collate existing sources of data that



would allow an accurate estimate of the prevalence and incidence of wounds in Canada (2000 – present)

- To determine gaps in the Canadian data related to wound etiology, geographical location and health-care setting

From this initial study, the committee will review the feasibility of preparing a grant application for prospective data collection for assessing the prevalence and incidence of wounds in Canada.

Research Plan

The Research Committee has formed a task group to identify and collate existing sources of data regarding the incidence and prevalence of various types of wounds that present in health-care settings across Canada. The number of people with commonly occurring wounds, such as pressure injuries, diabetic foot ulcers and lower extremity wounds, as well as surgical site infections and skin tears, will be estimated. In this way the burden of these

common conditions will be determined and gaps in the data identified. The study will indicate the methodologies used and analyze discrepancies between studies. The results will be synthesized to identify criteria, data collection and analysis methods that may be used to provide an accurate assessment of prevalence and incidence of wounds in Canada.

Output

The Research Committee Task Force will prepare a document for Wounds Canada summarizing the outcomes of this project as well as submit articles

“... a systematic review to identify all reports and published articles that have estimated the prevalence of any wound type in health-care settings located in Canada ...”

to journal publications. Where available, an accurate national estimate of the prevalence of different wound types will be provided to wound care providers and consumers for wide dissemination. 📄

A Pre-test/ Post-test/ Follow-up Test Teaching Tool

By Carol Ott, MD, FRCPC

Medical students and residents generally rotate through wound care clinics for one to three days to learn about wound care. This is often the first and only exposure to this topic they will have in their education.

There are many barriers that can prevent this from being an effective learning experience, including the following:

- Learners come with a variety of backgrounds (for example: different residency programs) and levels of training (medical students, early-year residents and final-year residents). Teachers find it difficult to assess the base knowledge of the learners and teach to an appropriate level in such a short period of time.
- The variety of patients and illnesses that presents in a clinic cannot be controlled, leading to difficulty with standardized experience.
- Time management is a challenge. Lacasse et al. have stated that, “even with protected time, the additional challenges to teaching also exist in this environment, as residents are challenged by time management of patient care, study, and personal issues, making them perhaps less receptive to teaching.”¹

Discussion of this issue with other physicians and learners in the clinic led to ideas for ensuring that the most important clinical learning objectives are met during clinic. These comprise specific points that can impact on a learner’s future clinical practice. For example, we want to ensure that when learners leave the clinic, they are able to handle the following common wound management challenges:

1. Venous ulcers
 - history, physical exam findings, risk factors and treatment
 - necessity to rule out arterial disease before compression
2. Diabetic foot ulcers
 - history, physical exam findings, risk factors and treatment
 - need to assess vascular status
 - offloading/pressure
 - surgical debridement
3. Arterial ulcers
 - history, physical exam findings, risk factors and treatment
 - testing/referrals needed



4. Pressure injuries

- history, physical exam findings, risk factors and treatment
- Offloading issues

The tool developed to ascertain whether certain learning objectives were achieved in the clinical experience was a pre-test/post-test with follow-up test (see Appendix A). It consisted of nine multiple choice questions and five true or false questions. The test was distributed to all medical students and learners who attended clinic over a one-year period. The same test was taken by each learner on three separate occasions.

1. **Pre-test** After the procedure was adequately explained and consent received from the learner, the test was administered. As a result of its being administered at the beginning of the learning experience, the test identified knowledge gaps in both the learner and the teacher. The questions continued to stimulate discussion around patient care throughout the clinical experience.
2. **Post-test** At the end of the experience, the test was repeated in order to evaluate what the learner had absorbed while in clinic.

3. **Follow-up test** Three months later, the same test was emailed via Survey Monkey to be completed again, this time to evaluate retention of the information.

The following steps were completed to evaluate the three-part teaching tool:

1. A version of the tool was created and trialled informally on learners in the wound care clinic over a three-month period. Learners were of a variety of levels and backgrounds. Based on feedback, improvements were made as needed.
2. A version of the tool was given to the seven members and two teachers of the University of Toronto's Master Teacher Program for Physicians. Students of this program are from a variety of backgrounds: general medicine, oncology, allergy and immunology, family medicine, rheumatology and behavioural neurology. Vigorous evaluation of the questions took place—regarding not only content but also style of question. As the members of this class are from many subspecialties, some knew very little about wound care, making them similar to the learners we have in clinic.



In addition, a confidential evaluation form was designed to be filled out after the post-test to capture what the learners thought of their learning experience. They were asked to rank their agreement with each statement on a scale of 1 to 5, with 1 being “strongly disagree” and 5 being “strongly agree.”

The evaluation questions were as follows:

1. I was given adequate time to complete the pre-test on my own today.
2. This pre-test helped me identify areas of knowledge where I was lacking.
3. One of the attending physicians reviewed this pre-test with me in a non-judgemental way.
4. One of the attending physicians reviewed this pre-test with me and ensured that I had the correct answers.
5. The test questions were clear and appropriate for my level of training.
6. The pre-test added to my experience in clinic.
7. I would like to see a teaching tool like this used in other clinics.

Methods

All medical students and residents attending clinic over a one-year period were offered the pre-test as they arrived at either the Women’s College Hospital Wound Care Centre or the Baycrest Hospital Foot and Wound Clinic—both in Toronto, Ontario. The goal was to trial this on 20 medical learners, both residents and medical students. Ethics approval had been granted at both sites. The process was explained and a consent form signed. The learners were told that their results would not be reflected in their performance evaluation and that they could opt out at any time. They were then given time to complete the pre-test.

Throughout the clinical experience, the test was reviewed by the teacher and learner to ensure teaching in areas identified as deficient took place.

To ensure that the objectives of the tool were attained, an evaluation form was created so that the learner could rate their agreement with the statements.

Figure 1: Training Level and Program of the Learners

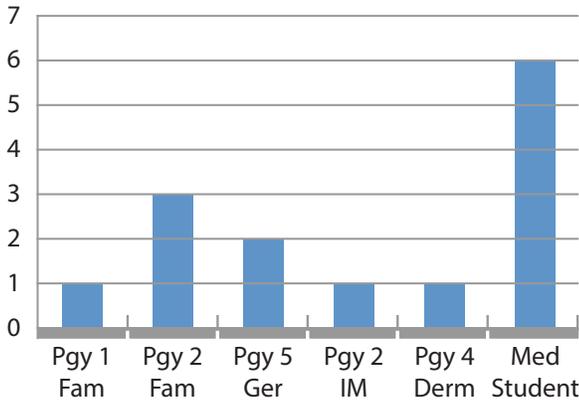


Figure 2: Median Scores

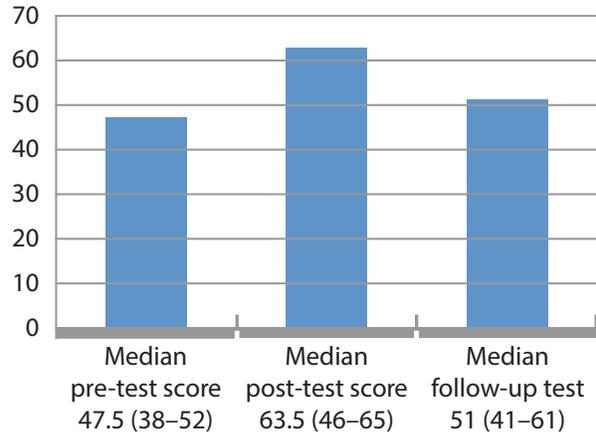
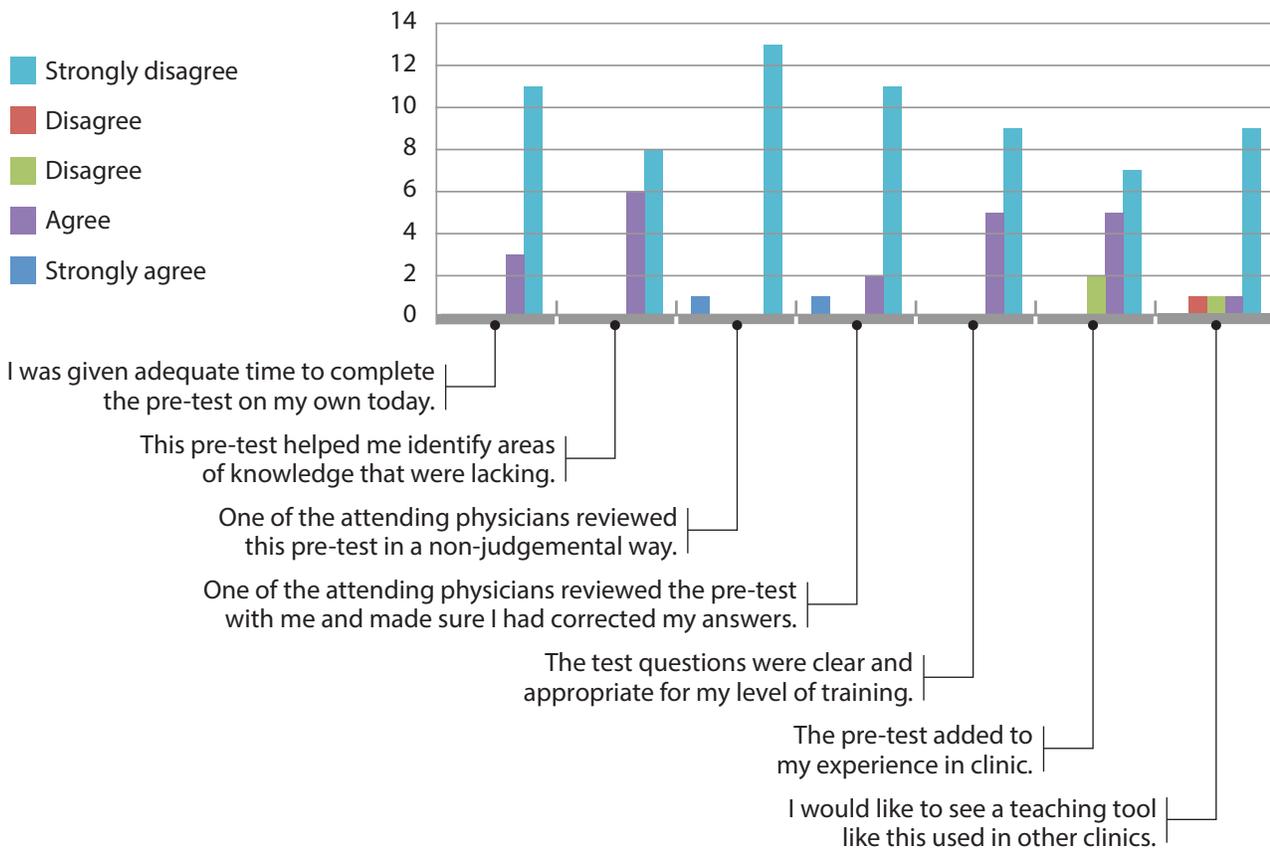


Figure 3: Evaluation by the Learners



At the end of the experience, which was usually a half- or full-day clinic, the learners were asked to complete the test again to evaluate information learned.

Following this, the clinic secretary collected the completed confidential evaluation forms and placed them in an envelope to ensure anonymity,

and I collected them at a later date. The only personal information collected through the evaluation form was learners' education program/level. Their email addresses were obtained separately from all tests and evaluations.

The follow-up test was emailed to the learners three months after their clinical learning experience.

Results

Twenty learners from a variety of programs completed the pre-test and post-test. Eleven of the 20 responded to the online survey despite being sent three to five reminder emails. Fourteen of the 20 filled out the evaluation form, and these 14 provided information on what program and year they were in (see Figure 1).

All 20 learners enrolled in the study filled out both the pre- and post-test. The median score of the pre-test was 47.5 and increased to 63.5 for the post-test. For the follow-up test, the median score was 51 (41–61) (see Figure 2).

The experience was well received by most learners. In the evaluation, they were presented with six statements that reflected the learning objectives of the experience and were asked to rate these on a scale of 1 to 5 (1 being “strongly disagree” and 5 being “strongly agree”) (see Figure 3). The one learner who reported a 1 for the statements 3 and 4 wrote the comment “Pre-test not reviewed, would have been helpful.”

Discussion

In medical education, the self-directed learning theory states that the responsibility of learning is not only on the teacher, but also on the learner.^{1,3} Our hope is that the results of these tests will inspire learners to pursue additional self-directed learning activities. In particular, in wound care, the knowledge base of residents in pressure ulcer identification knowledge is known to lag behind the knowledge base of nurses,⁴ indicating that this area requires improvement.

The learners showed by their increasing marks between the pre-test (47.5) and post-test (63.5) that they were able to improve their knowledge base during the clinical experience. Three to six months later, the scores were less impressive (51) but still above the pre-test baseline. This indicates that some retention of the material occurred, although, because they were asked to answer the questions from memory, it is difficult to say how much. The lack of retention of the material is most likely due to learners moving on to new rotations and focusing on other subjects.



This tool was well received by the learners in clinic. It made it easier to ensure that certain teaching points were addressed whether or not the full range of patients and clinical scenarios were present. It was difficult at times, however, due to patient issues, to ensure that the appropriate amount of time was spent reviewing the answers to test questions. When developing the test, I purposely grouped the questions about different types of ulcers together and divided them into history questions and physical exam findings. This was a useful approach, as we could then review that particular section when an appropriate patient was available.

It was suggested that the learners would want to take home the corrected test and use it for further study. I did not ask in the evaluation if learners wanted to do this. Residents have so many papers that it may not be a reasonable plan. An emailed summary might be more useful.

Conclusion

The pre-test, post-test teaching tool was easily administered in clinic and well received. It ensured that significant topics were covered. The follow-up test was more difficult to administer successfully, as people do not always fill out email surveys. As a pre-test, post-test teaching tool only, it could be tried with learners in other clinics as well.

What's next?

Plans are underway to repeat this study on a larger scale in the Foot and Wound Clinic at Baycrest Health Sciences.

At the Baycrest Wound Care Clinic, we have multiple learners from many health-care disciplines from a variety of schools at various stages of training. Usually they come in for a period of half a day to three days. These learners include nursing students, nurse practitioner students, medical students, family medicine residents, subspecialty medicine residents and master's studies students doing practicums. We currently have a staff of

three—a personal support worker, a nurse and a physician—who do rounds on the wound patients on the wards and evaluate patients in clinic. We can have up to four learners per day with differing educational needs.

We plan on trying the pre-test and post-test in the Baycrest clinic to ascertain what level of knowledge the learners have and ensure we are covering what they need to know. As a quality improvement project, we will follow the results of the tests as well as the follow-up evaluation questionnaire to look for ways to improve our teaching performance.

We will be able to use the results to tailor our education accordingly and satisfy the learners.

Though in future we plan to look at the follow-up test to determine the level of knowledge retention, the focus now is on improving the quality of our teaching during the clinical experience. 📖

***Carol Ott** is a geriatrician working at the Women's College Hospital, Baycrest Hospital and Apotex long-term-care home. At Women's College Hospital, she works in the Wound Care Outpatient clinic. At Baycrest Hospital she does wound care on the inpatients as well as outpatients. She also practices geriatrics in an outpatient clinic.*

References

1. Lacasse M, Lee S, Ghavam-Rassoul A, Batty H. Integrating teaching into the busy resident schedule: A learner-centered approach to raise efficiency (L-CARE) in clinical teaching. University of Laval, Canada, University of Toronto, Canada; 2009; 31:e507–e513.
2. Knowles M. Self-directed Learning. A Guide for Learners and Teachers. Englewood Cliffs, NJ: Cambridge Adult Education; 1975.
3. Kaufman DM. Applying educational theory in practice. *BMJ*. 2003;326(7382):213–216.
4. Levine JM, Ayello EA, Zulkowski KM, Fogel J. Pressure ulcer knowledge in medical residents: An opportunity for improvement. *Adv Skin Wound Care*. 2012;25(3):115–7.
5. Little SH, Menawat SS, Worzniak M, Feters MD. Teaching wound care to family medicine residents on a wound care service. *Advances in Medical Education and Practice*. 2013;4:137–144.

Appendix A

Teaching Tool: Pre-test Questionnaire for Wound Care Clinic

Please answer the questions to the best of your ability. This will help ensure that areas of knowledge gaps are covered in this clinic experience today. Each question has multiple right answers and is designed to lead to discussion.

The most common types of wounds we see in this clinic are venous stasis ulcers, arterial ulcers, pressure ulcers and diabetic foot ulcers. These questions are to test your knowledge of risk factors, findings on history and physical, and treatment of these ailments.

1. Risk factors for venous stasis disease include the following:

- a. Occupation involving standing most of the day
- b. Family history of venous disease
- c. Previous pregnancies
- d. Diabetes
- e. History of DVT
- f. History of venous stripping
- g. Smoking

2. Venous stasis disease presents with the following symptoms and physical exam findings:

- a. Swelling in legs – particularly at the end of the day associated with aching
- b. Hemosiderin deposition
- c. Pain relieved by hanging the foot off the bed
- d. Dry gangrene
- e. Shallow ulcers usually located on the posterior medial malleolus area
- f. Painless ulcers
- g. Varicosities

3. Identify correct statements about compression treatment for venous stasis disease:

- a. As tight as the patient can tolerate
- b. Tighter than option a (above)
- c. Bandaging is for treatment of wounds; stockings are for preventing wounds
- d. Must have toeless compression stockings
- e. The right compression strength is the one that the patient will wear

4. Risk factors for arterial disease include:

- a. Smoking
- b. Diabetes
- c. Occupation involving standing most of day
- d. History of coronary artery disease
- e. Neuropathy
- f. Hypertension
- g. Running
- h. Hypercholesterolemia

5. Peripheral arterial disease presents with symptoms and physical exam findings of:

- a. Pain – relieved by elevating feet
- b. Pain – relieved by putting foot down
- c. Pale foot
- d. Claudication pain
- e. Varicosities
- f. Dependent rubor
- g. Punched-out lesions on the dorsum of the foot
- h. Increased hair and nail growth

6. Treatment for peripheral arterial disease includes:

- a. Pentoxifylline
- b. Bypass
- c. Stripping of arteries
- d. Angioplasty
- e. Smoking cessation
- f. Nitroglycerin patches
- g. Viagra
- h. Maggot therapy

7. Diabetic neuropathic foot ulcers can be associated with:

- a. Peripheral arterial disease
- b. B12 deficiency
- c. Charcot joints
- d. Tingling in feet
- e. Duration of diabetes at least 10 years
- f. Loss of toenails
- g. Fungal infections on feet and between toes

8. Treatment for chronic diabetic neuropathic foot ulcers include:

- a. Treatment with ACEI for prevention
- b. HbA1c target below 9
- c. Change patient to insulin
- d. Consider long-term antibiotic treatment

9. The four main contributing factors to pressure ulcer formation include:

- a. Pressure
- b. Moisture
- c. Incontinence
- d. Friction
- e. Shear
- f. Not being turned every two hours

True or False

- T F** Patients with peripheral neuropathy will benefit from having shoes professionally fitted.
- T F** Smoking cessation is important only in the healing of arterial ulcers.
- T F** If a wound is not decreased by 40 per cent by week 4, it is unlikely to heal by week 12.
- T F** The physician is the most important member of the wound care team.
- T F** Infection is diagnosed by clinical picture, and culturing the wound is unnecessary.





Established in 1995, **Wounds Canada** (Canadian Association of Wound Care) is a non-profit organization dedicated to the advancement of wound prevention and care in Canada. Wounds Canada advocates for a collaborative, interdisciplinary approach to wound management and prevention to improve the health of Canadians.

Your go-to resource for all things wound-related



Our association focuses our efforts in four key areas:

1. Professional education
2. Public advocacy, awareness and education
3. Research
4. Partnerships to support Wounds Canada's goals of improving patient outcomes

Get in touch with us at woundscanada.ca to find out more.