

# Wound Care

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C A N A D A

THE OFFICIAL PUBLICATION OF THE CANADIAN ASSOCIATION OF WOUND CARE

**The Potential  
of Twitter**  
as a Tool for  
Improving Practice

**Wound Sleuth:**  
What's  
causing this  
woman's skin  
breakdown?

**Overcoming  
Barriers to  
the Delivery  
of Advanced  
Therapies**

Borrowing an Idea from  
**Interior Design**  
to Improve Patient  
Self-management

Canadian Association  
of Wound Care



Association canadienne  
du soin des plaies

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

The CAWC was formed in 1995, and its official meeting is the CAWC annual conference held in Canada each year. The association's efforts are focused on four key areas: education, research, advocacy and awareness, partnerships.

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# Communication Tools to Improve Clinical Practice and Patient Self-management

The one thing NOT lacking in the world today is information. Everywhere we turn we are bombarded with the latest news stories, cutest puppy videos and best tips ever! With so much quantity and such variations of quality, it can be tough to make sense of it all. In this issue, we focus on communication tools. The idea behind these tools is to enable you and your patients to cut through the clutter and get to what you need quickly and effectively.

The article entitled “Interior Design: Optimize Your Environment for Healing or Preventing Skin Breakdown” provides printable info sheets for your patients who have a wound or who are at risk for developing a wound. These quick-read documents aim to pare down into key messages the sometimes overwhelming amount of information patients receive when they visit their health-care professional. Each sheet—one for each

wound type—focuses on the one or two most important “design rules” for healing or preventing a wound. You can use these sheets when you talk with your patients about their conditions, and your patients can use them as reminders when they get home.

The second excerpt we’re featuring from “An Overview of Advanced Therapies in the Management of Diabetic Neuropathic Foot Ulcers,” a supplement of the previous issue of *Wound Care Canada* (2015, Vol. 13 No. 2), is a tool of a different kind. It is an article entitled “Barriers to the Delivery of Advanced Therapies,” and you may find it useful as a way to start discussions with your colleagues to address issues you all face. It might also be helpful for illustrating to your supervisor that the issues outlined in the excerpt are common challenges that must be addressed in order to support excellence in care delivery.

Social media tools are used

by more and more clinicians every year to connect with each other, create online communities and disseminate information. “Twitter: How to set up and leverage micro-blogging to disseminate #evidence and build a community of practice” on page 30 offers readers an interesting overview and how-to on one of the most used—and often misunderstood—social media platforms. Although Twitter posts are restricted to 140 characters, a lot of pertinent information can be contained in each one. If you haven’t yet created a Twitter account for yourself or your work group, I’d recommend it. By making smart “follow” choices, you’ll expand your network and be able to share information with people who have the same interests you do.

If you enjoy reading this issue, please share it with your colleagues (ironic, I know). 🙌

— Sue Rosenthal, Editor



HELPING  
YOU GET  
BACK TO  
THE THINGS  
THAT  
**MATTER  
MOST**



**Kendall™ AMD  
Antimicrobial  
Dressings  
with PHMB**

Effective,  
affordable  
wound care  
treatment options.





# The CAWC: A New Vision to Meet the Needs of Canadians

By Greg Archibald, MD, CCFP, FCFP, President, CAWC

**O**n the heels of a very successful annual conference that saw the widest variety of health-care professionals yet, I am very pleased to let you know we are continuing to grow and change to meet your needs and advance the cause of wound prevention and care in all sectors of society in Canada.

While the CAWC has always been a leader in educating Canadian health-care professionals, through our conference, online modules and onsite workshops, we are much more than that!

evidence-based information for the public, government decision-makers—and of course our core audience of frontline clinicians—and disseminate it in the most appropriate forms for each of our audiences. Through this approach we will work with our partners to move wound prevention and care higher up the health-care agenda, right across the country.

To reflect this expanded approach, we have revised the CAWC's Vision and Mission statements.

## Moving the Vision and Mission into Action

While our organization is already strong and will continue along our strategic path, our message will have more impact if we all band together and speak with one voice. To that end we have created the CAWC Ambassador program, which will provide anyone interested in furthering the cause of wound care in

Canada with key messages and tools to get the word out. Please visit [our YouTube channel](#) to see a short video on the program and information on how to get involved. We hope you'll join us.

## A Strong New Year

2016 promises to be a dynamic year at the CAWC. Please check your email inboxes regularly for more on our educational programs, advocacy campaigns, research initiatives and online resources. 🍀



Over the past two years in particular we have taken advantage of our multiple information dissemination channels for mobilizing knowledge in many forms and we will continue to capitalize on new technology to expand our reach.

An abundance of information is not useful, however, if it is not based on the latest evidence and relevant to our stakeholders' needs. Therefore, our new research and advocacy arms will combine their efforts with our education group to create

**The CAWC: *The knowledge mobilization organization in wound prevention and care.***



# INTERIOR DESIGN:

## Optimize Your Environment for Healing or Preventing Skin Breakdown

By Heather L. Orsted, RN, BN, ET, MSc and Sue Rosenthal, BA, MA

*INTERIOR DESIGN is a concept that is useful for both clinicians and their patients to consider when discussing health-related decisions. It refers to the idea that every decision a person makes about their life activities plays a role in their general health status and specific health problems.*

**W**hile the idea is not new, the term *interior design* is one that resonates with many people today. The "interior" aspect refers to not only the inner body but also the environment in which the body exists (home, car, workplace). "Design" implies intention, as in "it was done that way by design" as opposed to "by accident." The goal of interior design is to encourage individuals to understand the impact of each of their decisions and to help them move toward actions that will result in positive health changes. Through an understanding of interior design, we all can be empowered to become architects of our own health.

Unfortunately, we are bombarded with vast amounts of health-related information from TV,



the Internet and health-care providers. It can be difficult to make sense of it all. For a person with a complex condition, the number of life-altering changes can become overwhelming and cause paralysis of action, where an individual might then shut down and do nothing because they don't know where to begin. Even the most well-meaning clinician or educator can provide too much information.

### **Keep Things Simple**

Whether you are on the giving or receiving end of information, it is important to remember that too much information can be just as detrimental as no information at all. The key focus of education should be on the one or two things that are manageable and that will make the most change.

This concept applies to wound prevention and management as much as it does to any other aspect of health-related "interior design."

This brief outline focuses on the ONE thing (minimum) a person at risk or with a wound can do to make the biggest positive difference in preventing or treating a wound. It has been written from a patient-focused perspective and can be used by clinicians to help their patients become actively involved in their own "interior design." 🖐️

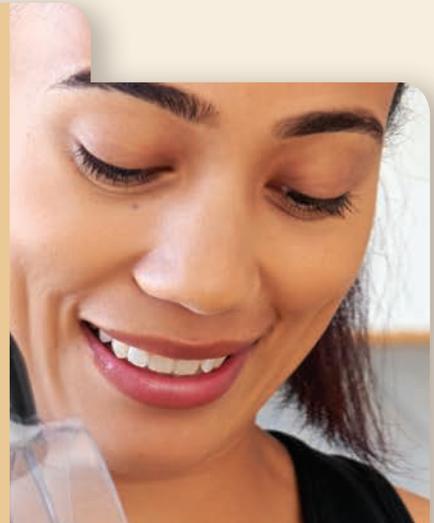
**Heather L. Orsted** is Director of Education and Professional Development for the Canadian Association of Wound Care.

**Sue Rosenthal** is Director of Knowledge Mobilization for the Canadian Association of Wound Care and editor of Wound Care Canada.

## For all types of wounds

### Optimize the Environment

Do you want to know the key to healing a skin ulcer or preventing skin breakdown? While it is ALWAYS up to the body to heal the skin ulcer or wound, there may be factors that interfere with this process. Therefore your job is to create the best possible environment so your body can do what it needs to close the wound or prevent a wound from forming if you are at risk for skin breakdown. This is not always an easy task and may require the support and guidance of the most appropriate and knowledgeable health-care professional available.



#### KEY DESIGN RULE:

**The body cannot heal a wound until whatever has caused it is removed NO MATTER WHAT ELSE YOU DO OR DO NOT DO!**

By focusing on interior design, we hope to help you simplify the process of wound prevention and treatment. Interior design considers the choices each one of us makes that affect our bodies from the inside out—to either enhance wellness or detract from it. Sometimes you can do it yourself (DIY) when it's in the form of lifestyle choices. Sometimes it's small changes you can make, sometimes it's continuing to do what you're already doing or becoming aware of something you are not doing that you need to do! Sometimes DIY is not enough and you will need help. It is not just appropriate but imperative to call in a professional such as your doctor, dietitian or other specialized health-care professional when DIY fixes won't make enough of a difference. As in other design models it is also important to be aware of the introduction of new models and trends that may impact your health, so keep in touch with your health-care providers on a regular basis.

We've taken the latest best practice evidence and pared it down to the most essential design rules for various wounds. While the processes may not always be easy, the results will be worth it if you are at risk for developing a wound or already have one.

#### CAUTION

**On occasion there may be more than one cause for the presence an ulcer or for being at risk for one, such as pressure and arterial disease. In this case the DIY approach can be very challenging. Using a pro or a team of pros is definitely the best way to go!**



## Venous Leg Ulcer

**What it is:** Chronic venous hypertension (high blood pressure) results in a build-up of fluid in the legs, called edema, which can sometimes lead to changes in the skin and cause it to break down. When trauma, such as a knock on the coffee table, on a leg with venous hypertension results in a wound, it is called a venous leg ulcer. If the venous hypertension is not corrected, the leg ulcer may be difficult or impossible to heal.

Blood flow from the lower leg back up to the heart is called venous blood return, and it uses something called the “calf-muscle pump” to move blood upward against gravity. Valves in the veins prevent the blood from flowing back down. Poor venous blood return causes swelling of the legs and if the skin is traumatized, it results in poor wound healing.

### DESIGN RULE:

**Improve venous blood return to your heart by exercising your calf-muscle pump and by wearing appropriate compression therapy to support the valves in your veins.**

**DIY:** Exercise is important for activating the calf-muscle pump and getting blood flowing back up your leg to the heart where it can get the oxygen it needs. You need to walk, dance, run or move your ankle (by pointing your toes and then bringing them up toward your nose) while watching TV or sitting at your desk. Whatever you do, **GET THAT CALF-MUSCLE PUMP WORKING!** There might be something else going on that you need to know: if the veins in your legs have valves that don't work properly, blood will not be able to make it back up to the heart. Compression stockings that apply enough pressure to your legs to close the valves allow the blood to flow back up to the heart and preventing swelling in the lower legs. Compression stockings may require a prescription and are available in health supply stores. The key to keeping the extra fluid out of your legs? **WEAR YOUR COMPRESSION STOCKINGS AT ALL TIMES EXCEPT IN BED.**

**Call in a pro:** You may not be aware that you are not moving your calf muscle enough to make the pump work properly and may need to seek the assistance of a physical therapist. As well, before any compression stockings are fitted you need to ensure that the swelling is reduced, so you may require compression wraps initially. In any case, you need to talk to your health-care professional to make sure compression is appropriate for you and then be professionally fitted. Compression therapy should be used with caution or not at all if you have arterial disease.



## Arterial Foot or Leg Ulcer

**What it is:** Arterial foot and leg ulcers are related to decreased blood flow in the arteries caused by blockages that can interfere with the oxygen supply to the skin, causing skin breakdown.

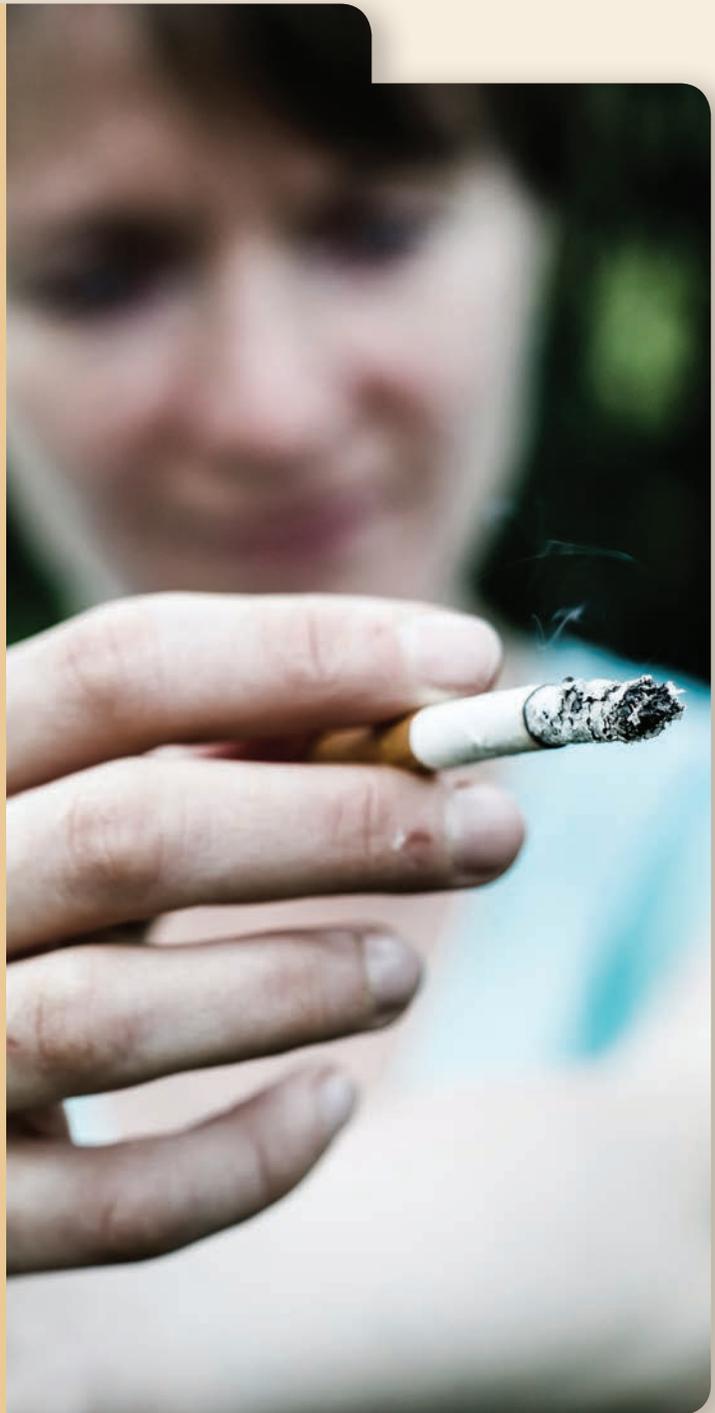
Arterial disease causes calf pain with exercise; pain decreases when exercise stops.

**DESIGN RULE:**  
**Arterial blood flow to the legs must be improved or restored.**

**DIY:** Arterial blood flow to the legs may be so poor that even a minor

injury to the foot or leg may not heal. If the amount of arterial blood getting to the legs is significantly reduced it may actually cause a wound, most often to the toe tips. You may be able to improve or even restore arterial blood flow by doing one or all of the following: **QUIT SMOKING, LOWER YOUR CHOLESTEROL, EXERCISE AS TOLERATED.** Exercise such as walking to the point of pain five to six times a day can increase the small arteries and increase blood to your leg. If these methods are ineffective, you may need to make an appointment with your doctor.

**Call in a pro:** If you haven't been able to improve arterial blood flow enough on your own, see your family doctor to discuss medications or get referrals to dietitians, vascular surgeons and quit-smoking programs.



## Incontinence Associated Dermatitis (IAD)

**What it is:** Incontinence associated dermatitis (IAD) can occur when urine or stool stays on the skin, leading to skin irritation and breakdown and sometimes yeast infections.

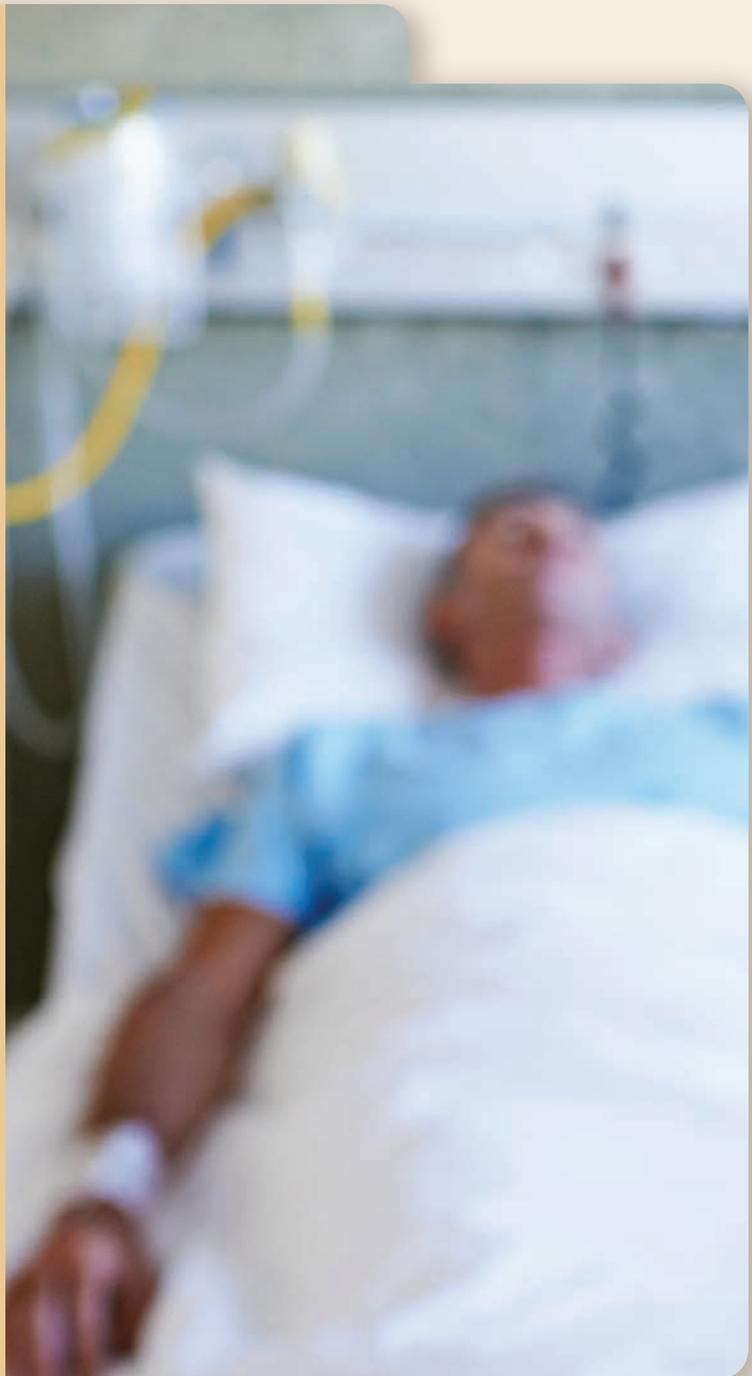
**DESIGN RULE:**

**Eliminate incontinence issues, if possible, or protect areas at risk for urine or stool irritation by using a barrier cream.**

**DIY:** A barrier cream, such as a zinc cream, can protect skin from this irritation, but the best management strategy is to **RESOLVE THE INCONTINENCE** (the inability to control urination or defecation).

Babies and elderly people with dementia are at highest risk for IAD. In most of these cases, it is up to someone else to help them with their “interior design.”

**Call in a pro:** Your family doctor can assist with referrals to the appropriate health-care professionals for the management of incontinence and can recommend treatment for any existing yeast infections.



## Neuropathic/Diabetic Foot Ulcer

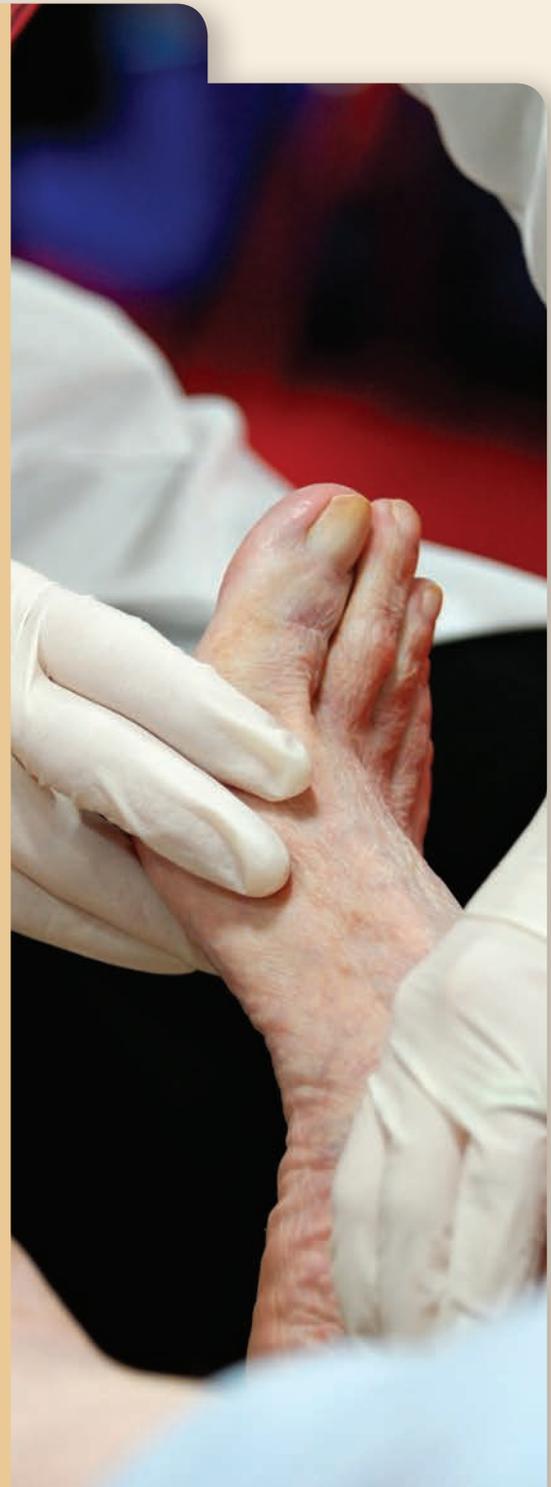
**What it is:** A neuropathic/diabetic foot ulcer is a wound usually caused by a shoe that doesn't fit properly or an injury of some kind that may result when the feet are not protected or cared for properly. What makes these wounds different from many other wounds is that the person who has the wound often can't feel pain or other sensations in their feet. They may not even be aware they have damage, even though it can often be quite severe.

### DESIGN RULE:

**Be aware of neuropathy and ensure you have the right shoes and professional foot care.**

**DIY:** If you have diabetes you probably already know it is very important to manage your blood glucose levels. However, let's focus on your feet for a minute. Diabetic foot ulcers related to neuropathy result from inappropriate pressure on your feet. Shoes that don't fit properly or have become worn down are often the cause of this pressure. The pressure can then result in a build-up of skin, called callus, over bony areas. This callus build-up can actually lead to skin ulcers if not professionally managed, especially where the bone is under pressure, such as on the ball of your foot. You can prevent this type of foot ulcer by ensuring your shoes fit and are cushioned properly. If you already have a foot ulcer you need to **REMOVE THE PRESSURE** from the ulcer site. How? **STAY OFF YOUR FOOT OR GET SPECIAL SHOES** made especially for reducing pressure. Staying off your foot might be difficult but it is worth it to heal your ulcer.

**Call in a pro:** You may need to make an appointment with a professional such as a podiatrist or orthotist to get advice on what type of footwear is right for you. If callus build-up or an ulcer is present, you may require professional help and lifestyle adaptations to reduce or eliminate pressure on the foot.



If you have diabetes you may have what's known as peripheral neuropathy, meaning you may have limited ability to feel your feet and not even know it. The lack of sensation, or feeling, in your feet affects your ability to feel if your shoes fit properly or if you have an injury to your foot that needs attention.

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

To learn more, contact a Mölnlycke Health Care representative  
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## Intertrigo

**What it is:** Intertrigo is an irritation of the skin caused by skin rubbing on skin in a damp, warm environment that can lead to skin breakdown and possible infection.



The most common locations for intertrigo are under the breasts, in the groin and in the skin folds of overweight individuals.

### DESIGN RULE:

**Lose weight and keep skin folds from rubbing against each other. Keep problem areas clean and dry.**

**DIY:** The most common areas where intertrigo occurs are places where skin folds onto itself such as under the breasts, under the arms, stomach folds and in the groin area. Intertrigo can be treated when you **REMOVE THE ENVIRONMENT** (damp and warm) **THAT CAUSES IT**. Wear breathable clothing made of natural fibres such as cotton rather than acrylics and polyesters. Antimicrobial fabrics may also be used to place between skin folds.

**Call in a pro:** Yeast infections are common with intertrigo, and an antifungal medication can be prescribed by your family doctor. You may also need a supportive weight-loss program to guide you to an ideal body weight. If you've already lost a lot weight and skin folds are the result, you may need to visit a plastic surgeon to discuss removal of the excess skin.



# It's Time You Give It a Try!



## GIVE US 2 WEEKS

Day by day we believe you'll  
see wound improvement  
worth talking about

### Case 1



Day 1

Diabetic foot ulcer measuring 3 cm x 3 cm with 100% necrotic tissue. Silver sulfadiazine cream was applied as the first topical treatment on admission.



Day 16

After 4 applications of MEDIHONEY®, the wound is 3 cm x 3 cm with 30% yellow stringy slough and granulation tissue.

### Case 2



Day 1:

2.5 cm x 2.5 cm wound with 75% slough in patient with chronic venous insufficiency, hypertension and high cholesterol. MEDIHONEY® Gel was applied.



Day 14:

Complete wound closure.

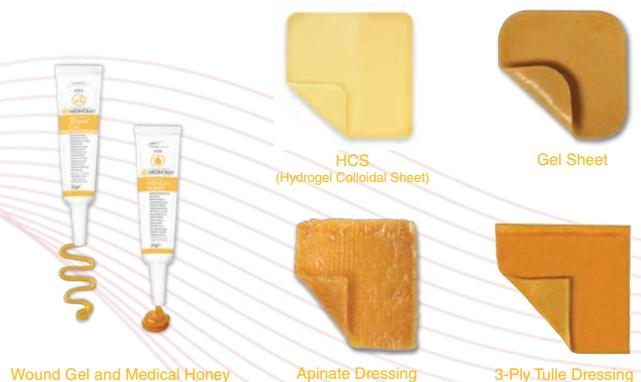
**MEDIHONEY® promotes more than just autolytic debridement. Its high osmolarity and low pH works for you 24/7 to help progress the wound to healing.**

Studies show that MEDIHONEY® with Active *Leptospermum* Honey:

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**To trial MEDIHONEY®, contact your Derma Sciences representative today.**

Questions? Call us at 1-800-387-5302 or email us at [customerservice@dermasciences.com](mailto:customerservice@dermasciences.com)



1. Gethin G, Cowman S. Manuka honey vs. hydrogel - a prospective, open label, multicentre, randomised controlled trial to compare desloughing efficacy and healing outcomes venous ulcers. J of Clinical Nursing 2008;18(3):466-474. 2. Acton C, Dunwoody G. The use of medical grade honey in clinical practice. British J Nursing 2008;17(20): S38-S44. 3. Regulski M. A novel wound care dressing for chronic venous leg ulcerations. Podiatry Management 2008; Nov/Dec:235-246. 4. Simon A, Sofka K, Wiszniewsky G, Blaser G, Bode U, Fleischhack G. Wound care with MEDIHONEY® in pediatric hematology-oncology. Supportive Care in Cancer 2006;14(1): 91-7. 5. Gethin G, Cowman S. Case series of use of Manuka honey in leg ulceration. International Wound Journal 2005;2(1):10-15. 6. Gethin G, Cowman S. The impact of Manuka honey dressings on the surface pH of chronic wounds. International Wound Journal 2008;5:185-194. 7. Gethin G. Understanding the significance of surface pH in chronic wounds. Wounds UK 2007;3 (30): 52-54. Disclaimer: Results may vary. Photos represent one patient's outcome. For more examples of clinical case outcomes using MEDIHONEY®, visit our website. PHOTOS COURTESY OF: DR. RENE AMAYA, MD, CECILIA GRAY, RN, MSN, CNS, CWON, FATIMA ISHII, RN, BS, CWON, JENNIFER A GARDNER PT, DPT, MHA, CWS AND TARA MURPHY RN, BSN.

## Pressure Ulcer

**What it is:** A pressure ulcer is a wound caused by . . . you guessed it: pressure! Pressure reduces or stops blood flow to an area, causing tissue to break down and the skin to open. In some cases the wound can go right down to the bone. This is especially common over areas where the bone is close to the surface, such as at the base of the spine, on the hips and over the ankles.

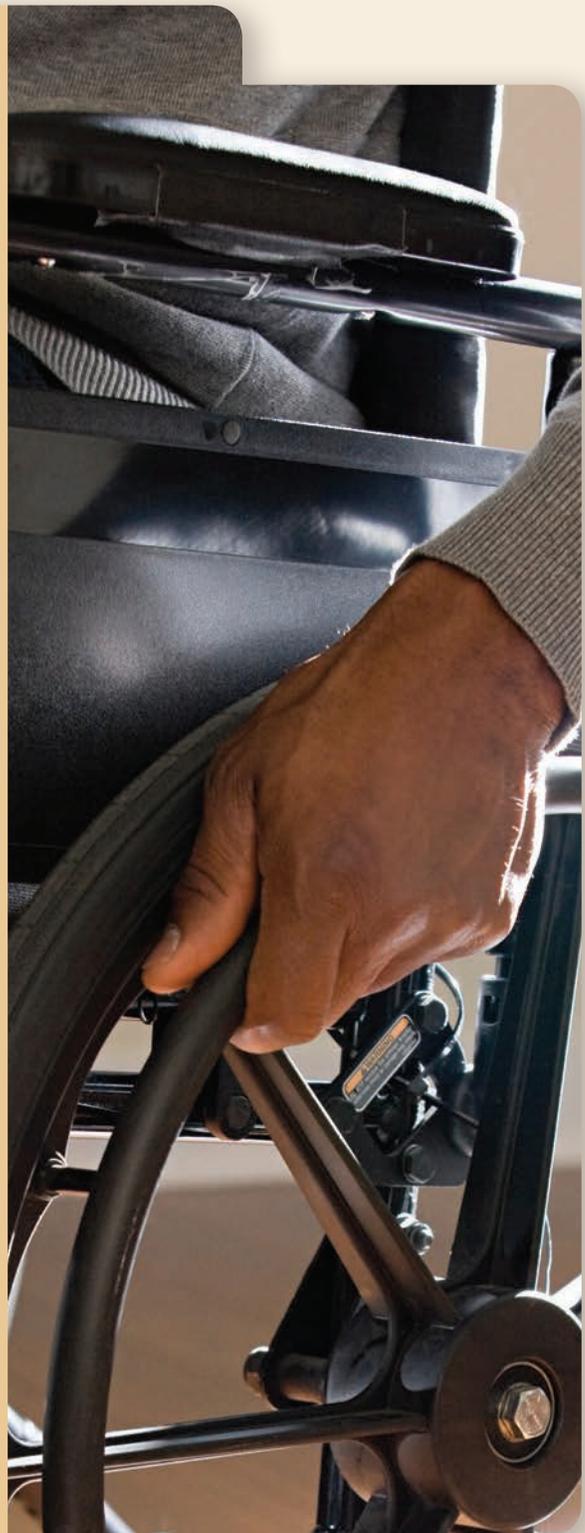
### DESIGN RULE:

**Be aware of and remove or reduce pressure from bony areas.**

**DIY:** Removing pressure is key. This means you must **MOVE REGULARLY**, even if the movements are small (and sometimes that's all it takes). If you have issues that affect your ability to move it is also important that **EVERY SURFACE** you sit or lie on is designed to keep the pressure off. This includes your wheelchair and bed and even your sofa, kitchen chair and car seat.

Certain medications you are on, injuries to nerves caused by trauma, or diseases such as multiple sclerosis may limit your ability to feel some sensations such as pain or other types of discomfort. If you can't feel the discomfort that usually comes with reduced blood flow, you are less likely to move to get the pressure off the area.

**Call in a pro:** You may need to consult a physical therapist or occupational therapist who can help you choose the right surfaces to sleep or sit on. There are many types of specially designed furniture pieces available. If you have a pressure ulcer that persists or you are unsure of the care required you may need to call in a wound care specialist.



## Skin Tear

**What it is:** A skin tear usually occurs when fragile skin bumps against a hard surface, causing the top layers of skin to be moved and torn from the surrounding skin.

**DESIGN RULE:**

**Prevent injuries to the skin by creating a protective environment in both your clothing and your surroundings.**

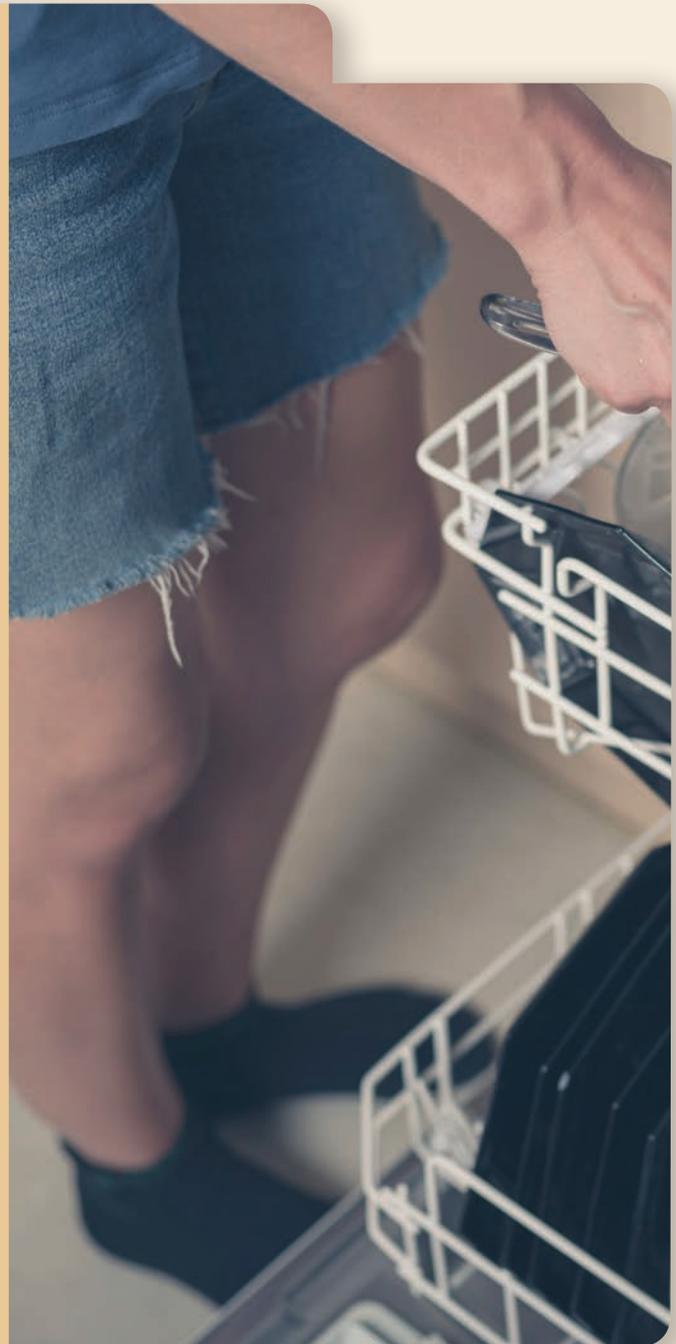
**DIY:** Long sleeves and long pants give some protection, but you may need to **PAD BONY AREAS**. Common and easy to obtain, soccer shin pads can be worn under pants and provide an extra layer between you and the

As people age they tend to have thinner skin and therefore are at risk of getting skin tears. The cause is usually minor trauma such as hitting a shin on a coffee table or an open dishwasher door.

coffee table. You may also need to **REDUCE** the number of potential **INJURY-CAUSING ITEMS** from your living space, so say goodbye to the hard wooden coffee table!

**Call in a pro:** Health-care professionals, such as

nurses and occupational therapists, will support the prevention of skin tears through skin hygiene and hydration, responsible bathing, good nutrition, appropriate clothing and the removal of environmental risk factors.



# Achieving Accelerated Healing in a Community Setting

An Interview with Jane Hampton, MSc, RN



*The treatment of non-healing wounds accounts for a high proportion of wound care costs. Advanced technologies, such as negative pressure wound therapy (NPWT), could be cost-effective if they result in faster healing. We asked Jane Hampton about her recently published study on the cost-effectiveness of PICO® NPWT in treating hard-to-heal wounds.*

**Q** Your article entitled “Providing cost-effective treatment of hard-to-heal wounds in the community through use of NPWT” in the *British Journal of Community Nursing*, (Vol 20, No 6, Suppl *Community Wound Care*, June 2015) suggests healing times can be shortened with NPWT. Can you tell us a little about that?

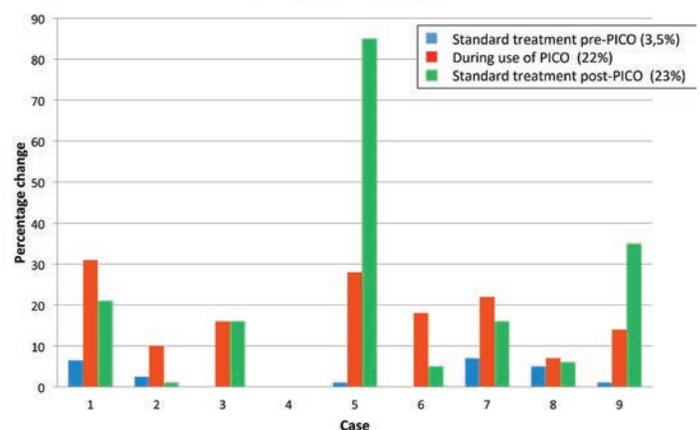
**A** PICO was used on 9 chronic wounds that were slow-healing or non-healing. The wounds had been present for on average 6 months, with an average weekly healing rate of only 3.5%. The use of NPWT achieved an accelerated average weekly healing rate of 21%. Using NPWT for two weeks appeared to kick-start the healing process, resulting in a reduced wound size that would have taken an estimated 10 weeks to achieve with standard treatment. Six wounds went on to heal during the study. The time taken to complete healing was between 10 and 23 weeks faster than expected when based on the healing rates prior to the use of NPWT.

**Q** What happened when the NPWT was stopped? Did the wounds continue to heal? At what rate?

**A** After NPWT was stopped 7 wounds continued to heal at a faster rate than prior to the use of NPWT, with an overall average weekly size reduction of 23%. This is a high weekly rate and, 4 weeks after NPWT was stopped, one wound had healed and a second was almost healed. The average weekly healing rate for the remaining wounds was 11%—still considerably faster than the rate prior to the use of NPWT.

Three wounds did not heal during the study. These patients had had their wounds longer than 12 months and there were multiple co-morbidities that impacted on the potential to heal. While NPWT was in use these three wounds reduced in size more quickly than under standard treatment, but the weekly reduction was less than 10%. After NPWT was stopped the healing rate reverted to that seen prior to NPWT.

**Weekly reduction in wound size (%)**  
Standard treatment vs. PICO

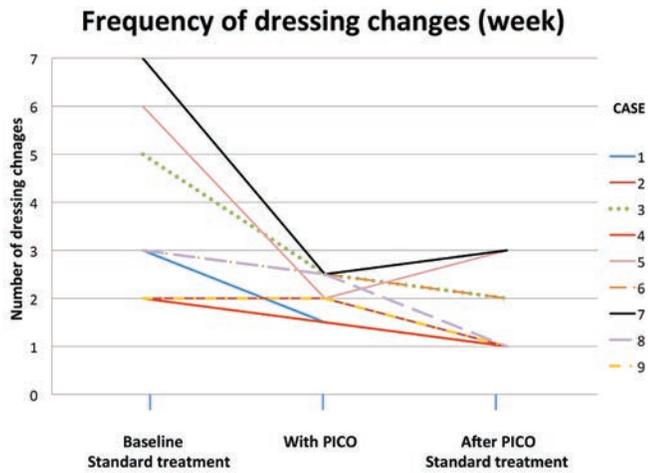


**Q** NPWT is relatively expensive. How can clinicians justify the use of such a treatment vs. standard treatment?

**A** The weekly treatment costs associated with using NPWT were on average 1.6 times higher than the expenses associated with standard treatment when comparing the nursing time and wound care products used at each dressing change. This means that 2 weeks of using NPWT cost the equivalent of 3.2 weeks of standard treatment, an additional expense equivalent to 1.2 weeks. This was shown to be cost effective due to both the short-term and long-term effects on healing rate.

The highest proportion of wound care costs are associated with nurse time, so **a change in the frequency of dressing changes can have a greater impact on overall expenses than which products are used.** After NPWT was stopped the resultant smaller wounds and reduced exudate required fewer dressing changes each week. Therefore, **dressings were now changed on average 1.8 times a week as opposed to an average of 4 times a week prior to using NPWT.**

*continued . . .*



The ongoing weekly treatment costs after stopping NPWT were a third cheaper than costs prior to using NPWT. That is, the expenses associated with one week of pre-NPWT treatment was now providing 3 weeks of treatment post-NPWT. This actually means that **the first 5 weeks of treatment in the study**—2 weeks with NPWT plus the following 3 weeks post-NPWT—**cost the equivalent of 4 weeks of standard treatment** at pre-NPWT costs. This demonstrates a cost saving in the immediate course of treatment.

**In the long term the wounds treated with NPWT healed on average 13 weeks earlier than predicated.** The faster healing and resultant shortened total treatment period gave considerable cost savings in both nursing time and wound care products and demonstrates that NPWT can be cost effective.

Previous studies have shown that the wounds that cost the most to treat are those that have existed longer than 6 months, irrespective of their size. If we can heal wounds faster and reduce total treatment periods, health-care providers could achieve considerable savings.

**Q What recommendations would you make to clinicians and other decisions makers about the use of NPWT? Is NPWT for everyone?**

**A** Just as with all wound care products NPWT is probably not appropriate for all patients. In this study the effect of NPWT was less dramatic on wounds that had been present longer than 1 year.

My recommendations would be:

- Short-term (2–3 weeks) targeted use of NPWT on slow-healing wounds. Further research is required to investigate whether longer term use of NPWT remains cost effective and clinically effective on wounds that are initially less responsive to NPWT.
- The early identification of wounds at risk of becoming slow-healing with a resultant use of NPWT early on in the course of treatment in order to prevent delayed healing.
- The availability of NPWT as a standard wound care product in the community setting.

**Q How would you summarize the results of your study?**

**A** The use of NPWT appeared to kick-start the healing process in slow/non-healing wounds. There was a quicker reduction in wound size than that achieved with standard treatments while NPWT was in use, and this accelerated healing continued after NPWT was stopped. The wounds that went on to heal did so considerably quicker than expected. **The reduced frequency of dressing changes and the shortened total treatment periods resulted in considerable cost savings, demonstrating that NPWT can be a cost-effective treatment choice for slow/non-healing wounds.**

**Photos:** Pressure ulcer on hip. Cared for in the community for two months prior to start of PICO.



PICO start: 37.5 cm<sup>2</sup>



After 14 days: 20.5 cm<sup>2</sup>



Four weeks post-PICO: 10.1 cm<sup>2</sup>

At Smith & Nephew, we are passionate about reducing both the human and economic costs of chronic wounds. For more on wounds and to view a presentation by Jane Hampton, please visit [www.smith-nephew.com/education/categories/wound-management/](http://www.smith-nephew.com/education/categories/wound-management/), a free resource for wound care clinicians, doctors and administrators.

# Barriers to the Delivery of Advanced Therapies

By

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*With the support of an unrestricted educational grant from industry partners\* the Canadian Association of Wound Care initiated a review of the literature regarding the use of advanced therapies in the management of diabetic neuropathic ulcers. The goal of the document was to provide an overview of the existing literature, review expert opinion and establish protocols for the use of advanced therapies in the treatment and management of diabetic foot ulcers. The full document has been published as a supplement to Wound Care Canada and Diabetic Foot Canada e-Journal and is available at [www.woundcarecanada.ca/supplements/](http://www.woundcarecanada.ca/supplements/). This article contains a section of the original article, outlining the barriers clinicians face in delivering advanced therapies for the treatment of diabetic foot ulcers. However, many of the barriers apply to the use of advanced therapies for other types of wounds as well, and the suggestions for overcoming the barriers listed may provide useful information for clinicians with patients who have other wound types.*

\* Acelity Canada, Integra Canada ULC and Smith & Nephew



# An Overview of Advanced Therapies in the Management of Diabetic Neuropathic Foot Ulcers

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Canadian Association of Wound Care  
Association canadienne du soin des plaies

It can be difficult to translate the existing randomized controlled trial (RCT) evidence, expert opinion and clinical practice guidelines relating to advanced therapies into everyday practice. This can be because the therapy is new and there is a lack of research that exists, or because the research that does exist has methodological weaknesses. Over time, as more and better research is conducted, advanced therapies may play a more frequent and appropriate role in clinical practice.<sup>1</sup>

While multidisciplinary teams—made up of clinicians, managers, industry representatives, patients and researchers—must advocate for more research to address system and clinician factors, patient-centred concerns and technological

issues, immediate barriers to care must be addressed by the health-care professional.

Listed below are a number of barriers, divided into categories, along with recommendations the health-care team can implement now:

## Systemic Factors

### Barriers

#### Research

- Policies for the funding of therapies often focus mainly on RCTs. It is important to note that other types of wound research is also meaningful and should be considered.
- Knowledge translation research often identifies gaps in clinician knowledge or the ability of the health-care system to deliver care to the appropriate patient—for example, where the existing evidence does not fully explore holistic patient-focused concerns and barriers to care when using advanced therapies.

#### Access to care

- Patient access to advanced therapies varies depending on a number of factors, including:
  - the types of products available in their health jurisdiction
  - the availability of teams or specialists
  - how long patients must wait for an appointment
  - how far they must travel to receive care
  - personal finances and/or coverage by private insurance

### Communication

- Lack of communication between diabetes education centres and wound care clinicians
- Lack of interprofessional teams, communication between team members

### Recommendations

- Research can be improved by:
  - Additional and varied types of research to help address the factors that currently form the systemic barriers to the use of advanced therapies for diabetic foot ulcers (DFUs)
  - New diagnostic tools to support the indications of advanced therapies
- Care and communication can be improved by:
  - Development of and access to interprofessional teams
  - Organizational policies and procedures that support advanced therapy use
  - Effective education of patients and caregivers
  - Effective education for clinicians related to standard wound prevention and care along with the appropriate use of advanced therapies
  - Widespread availability of preventative footwear and offloading devices with no or low fees
  - Formalized communication between diabetes education centres and wound care teams
  - DFU prevention through education with patients, families and communities

All clinicians should advocate in their health regions provincially, territorially and nationally for improved support for the prevention and treatment of DFUs.

## Patient-centred Factors

Patient-centred concerns are paramount when working collaboratively to fully support patients at risk for diabetic foot complications.

### Barriers

- Inadequate focus on prevention of DFUs
- Ineffective patient education
- Lack of care plan adherence
- Lack of awareness regarding the impact of social determinants of health, which may prevent patients from accessing footwear and insulin syringes, medications, healthy foods or achieving appropriate diabetic control with a reasonable A1c

### Recommendations

- Focus on prevention. Prevention of the initial DFU is paramount; communities of practice must evaluate their present DFU prevention programs and critically examine if prevention strategies and education are consistently offered to clients and their families.
- Improve patient education and instruction on daily foot care to prevent DFUs and amputation.<sup>2</sup> Individualized foot education should be offered at every opportunity to empower the patient living with a DFU or at risk for a DFU.



- Treat the direct causes of DFUs.<sup>3</sup>
- Treat the underlying disease processes. Ensure adequate blood supply and optimize local wound care, including consistent wound bed preparation, debridement, management of bacterial control and careful moisture balance.<sup>4</sup>
- Create care plans in partnership with the patient, family and caregivers
- Establish multidisciplinary teams to provide comprehensive, holistic assessments to support patients; team members should represent nursing, rehabilitation, social work,

medicine, chiropody/podiatry, pedorthy, dietary, education and peer-led education.

- Screen regularly for depression, as depression is linked to the patient's ability to learn new information and participate in care planning and care decisions. Provide access to psychological support.<sup>5</sup>

## Clinician Factors

### Barriers

- Inappropriate patient selection and preparation (removal of risks)
- Inadequate product knowledge by the user, both in

how the product works and whether it is available in their health-care jurisdiction

- Lack of interprofessional teams in all settings

### Recommendations

For clinicians to successfully follow and adhere to DFU best practices, a number of elements must be in place:

- Timely and relevant DFU education should be offered regularly to team members.
- Interprofessional teams, in which team members collaborate, communicate and co-operate—with the patient and family remaining as the focus—should be the standard model. Stressing the importance of a team approach, one panel expert stated that to help reduce the confusion around the use of advanced therapies a “collaborative effort to address wound problems” would be a benefit.
- Equipment, tools and technology need to be readily available to assist with diagnosis,

treatment and care planning.

- Clinician education on equipment, tools and technologies should be available.

### Technological Factors

#### Barrier

- Emerging bedside diagnostic tools are not yet in wide-spread use, even though they can help facilitate the appropriate use of technology, thus avoiding inappropriate application of the advanced therapies at a very high cost to the health-care system.

#### Recommendation

- Technology is a fast-growing area that should be monitored by clinicians interested in adding to their decision-making toolkits.

By advocating for more and better research and overcoming existing barriers, the clinician can improve their own toolkit of options for supporting their patients. 🍷

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DECEMBER 2015

# Presentation **DIGEST**

## Amputation: Avoidable or Not?

*This is a brief summary of a presentation given at the annual conference of the Canadian Association of Wound Care, in Toronto, October 30, 2015. It has been produced with the financial support of Medtronic. The presenters were David Armstrong, DPM, MD, PhD, and Perry Mayer, MB, BCh, CCFP.*



**T**he decision to salvage or amputate a diabetic limb is one of the most difficult patients and clinicians face. Determining whether to amputate or not must be made on a case-by-case basis and requires an in-depth evaluation of each individual patient's physical, mental and socio-economic status.

The criteria can be divided into three categories: clinical, patient-focused and systemic. Clinically, peripheral arterial disease and progressing infection are the main reasons for lower extremity amputation, along with clinician ability and priorities. On the patient front, life-style, occupation, age, wishes, attitude, reliability, social support system, access to care and financial resources are

### Dr. Mayer: The Italian Case

A 46-year-old male with diabetes was admitted to hospital with a severe limb-threatening diabetic foot infection (DFI). During 40 days in hospital the only treatment was a simple incision and drainage on admission and thereafter povidone iodine compresses to all wounds. X-rays showed osteomyelitis in the base of 4<sup>th</sup> metatarsophalangeal joint (MTPJ). No vascular studies were done. Infectious disease was consulted and started IV antibiotics. Orthopedics was consulted and recommended below-knee amputation (BKA) to treat the infected diabetic foot. The patient refused amputation despite repeated visits from the orthopedic team.

No further wound care was offered or performed. The only other consult arranged was for psychiatry to assess the patient as the treatment team felt he was not of sound mind because he refused amputation.

After presentation to our centre, vascular supply was assessed as being adequate for healing, glycemic control was optimized, the foot absolutely offloaded and wound aggressively debrided on a bimonthly basis in combination with advanced wound treatment. Within four weeks all wounds were granulated and on a healing trajectory. Wounds were fully healed after 12 weeks. Appropriate shoes and custom orthotics were dispensed and the patient returned to normal activities of daily living.

considerations. Regional/institutional policies may be in place to support or inhibit limb salvage vs. amputation.

The case studies presented here provide insight into some of the factors affecting the decision-making process.

## Dr. Armstrong: A Tale of Two Soles

### Case 1

A 42-year-old Mexican-American man with diabetes presented to the emergency room with a three-day history of left foot swelling, redness and pain associated with nausea, fever and chills. He reported having stepped on a nail one month prior. The patient was initially managed with oral analgesics and antibiotics and referral to a wound care centre for debridement and dressing changes. His condition failed to improve. The patient was a non-smoker with a history of hypertension, and myasthenia gravis. With an intensive regimen of advanced therapy, his wound had complete healing within three months.

### Case 2

A 46-year-old Mexican-American man with diabetes, hypertension and hyperlipidemia presented

to the emergency department with a two-week history of acute progressive constitutional symptoms as a result of an infected plantar left foot ulcer that had been noted to have increased swelling, drainage and foul odour, along with the more recent development of an area of black, blistering skin. The underlying ulceration had been present for approximately one year and resulted from a skeletal malformation of the foot secondary to longstanding Charcot arthropathy. Despite surgical reconstruction of the foot at the time of initial arch collapse and ulceration, the patient had suffered from chronic, intermittent wound breakdown and repetitive infections requiring hospitalization and IV antibiotics. After considering his options the patient decided to undergo BKA in order to return to work so he could provide for his family.

At first glance these two cases might seem quite similar. Their ages, cultural and ethnic backgrounds were nearly identical. They each had a diabetic foot ulcer complicated by severe infection. From a technical and purely surgical standpoint, limb salvage was quite possible in each patient. However, distinct differences relating to the underlying cause, disease duration, bony involvement and architecture, workplace needs, and socio-economic realities resulted in the divergent decision pathways to move forward with a limb salvage approach in one patient and a below-the-knee amputation in the other.

## What do these cases tell us?

The decision pathways toward amputation or limb salvage depend on a



number of factors that relate to the expertise and attitudes of the health-care professionals involved, the particular circumstances surrounding the patient and/or the policy realities in the health-care setting. Because the five-year post amputation mortality rate is 50%, every effort, including the use of endovascular advances, should be made where possible to implement strategies for salvaging limbs. With statistics indicating that 85% of non-accidental amputations are preventable, there is much room for improvement in the delivery of limb-salvage activities in the health-care sector. ■



Drs. David Armstrong (left) and Perry Mayer

*Presentation Digest* is a production of the Canadian Association of Wound Care (CAWC)—[info@cawc.net](mailto:info@cawc.net).

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# Wound Sleuth

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

## History

This 64-year-old female presented to the clinic with a wound to the medial aspect of the calcaneal area. This wound had been present for two years and was not responding to treatments (see Figure 1).

**Q** What is the cause of this wound?

**A** This patient has an erosive form of lichen planus. This is a condition of unknown etiology (possibly autoimmune) that clinically resembles psoriasis or some forms of eczema. It usually resolves on its own over a period of two to three years, but some cases may be chronic in nature. Frequently there may be mouth lesions characterized by whitish patches on the buccal mucosa. It may also involve other cutaneous areas, in particular the flexor aspects of the wrist as well as the palms and soles.

**Q** How do you treat this?

**A** Lichen planus usually responds quite well to strong topical steroids creams applied two to three times daily. This case showed remarkable improvement over a period of four to six weeks as shown in the photos (Figures 1 and 2).



Figure 1



Figure 2

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

# Twitter:

## How to set up and leverage micro-blogging to disseminate #evidence and build a community of practice

By Bob McDougall, BA, PMP and Elise Rodd, RN, BScN, CETN (C)

**T**here is no doubt that we live in a world where we feel both strapped for time and under pressure to keep up with the latest evidence. We also live in a society where we can access knowledge and glean answers in real-time on smartphones and tablets, literally from the palms of our hands. One of the most widely used information apps is Twitter, a platform for the art and power of a few well-chosen words. For busy health-care professionals who need to keep up with new and emerging evidence in their field of practice, this short-message approach has definite advantages.

Twitter is catching on. It is not only being used to disseminate notifications about the latest evidence, but live streaming Tweet chats are also being held to discuss topics of interest online and at conferences. While many criticize the content on Twitter as being trivial, the Twitter dichotomy can be summed up as follows: “This is what the naysayers fail to understand: it’s just as easy to use Twitter to spread the word about a brilliant 10,000-word New Yorker article as it is to spread the word about your Lucky Charms habit.” — Steven Johnson, author of *The Invention of Air*

With this article, we hope to tweak your interest in the potential of Twitter to find and disseminate evidence, create worldwide communities of practice in your fields of interest and to introduce you to a few basics to get you started.

### Microblogging

Twitter, also referred to as micro-blogging, provides a platform to sum up the essence of a message in 140 characters or less. Registered users can read and post tweets, while non-registered users can only read tweets. Users access Twitter through the website interface,



SMS, or mobile device app on a smartphone or tablet.

Twitter founder Jack Dorsey (@Jack) has explained the origin of the “Twitter” title: “... we came across the word twitter, and it was just perfect. The definition was ‘a short burst of inconsequential information,’ and ‘chirps from birds.’” A perfect name, said Dorsey, because “that’s exactly what the product was.”<sup>1</sup>

## Trending

What’s trending on Twitter? A word, phrase or topic that is mentioned at a greater rate than others is said to be a trending topic. Trending topics become popular either through a concerted effort by users or because of an event that prompts people to talk about a specific topic.

Trends are determined by an algorithm and, by default, are tailored for you based on whom you follow and your location. This algorithm identifies topics that are popular now, rather than those that have been popular for a while or on a daily basis, to help you discover the hottest emerging topics of discussion on Twitter that matter most to you.

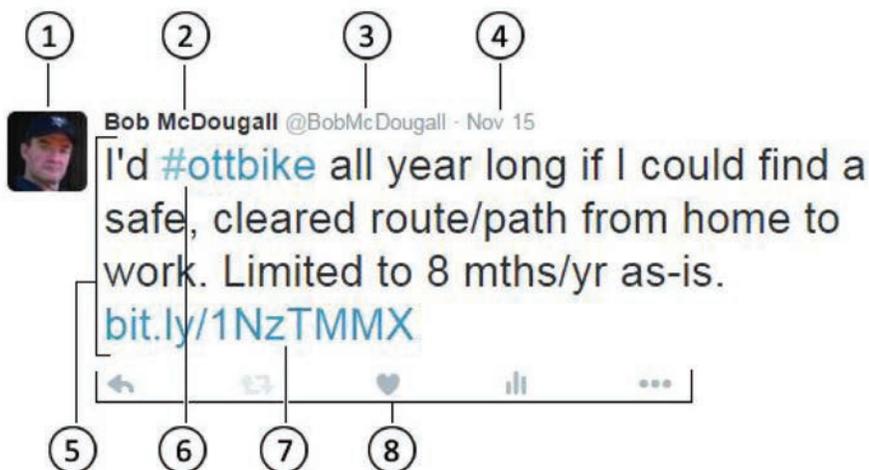
You can choose to see trends that are not tailored for you by selecting a specific trends location on [twitter.com](https://twitter.com). Location

trends identify popular topics among users in a specific geographic location.<sup>2</sup>

## The Anatomy of a Tweet

A tweet may contain photos, videos, links, a quick poll and up to 140 characters of text.

- 1. Profile picture:** The image uploaded to your Twitter profile in Settings. If you still have an egg as your profile picture people may perceive your account as fake. Change it.



2. **Twitter account name:** The name of your account. You can use your real name or some other identification.
3. **Twitter @username:** Your @username is your unique identity on Twitter. Think of it as your Twitter URL, as in: [twitter.com/bobmcdougall](https://twitter.com/bobmcdougall). The @ sign is also used to mention people in tweets, like this: Hello @bobmcdougall! Your account name and username do not need to be the same.
4. **Tweet timestamp/date:** This tells you when the tweet was sent.
5. **Tweet text:** Every tweet fits into a space that is under 140 characters—just the right size for a big idea, a headline or a timely observation.
6. **Hashtags:** A hashtag is any word or phrase with the # symbol immediately in front of it. This symbol turns the word into a link that makes it easier to find and follow a conversation about that topic.
7. **Links:** You can link to other websites, articles, photos and videos within a tweet. Links can be shortened to save space using the Twitter URL shortener or [bit.ly](http://bit.ly).
8. **Tweet actions:** Here you can *reply to*, *retweet*, or *like* a tweet and view tweet activity. On your tweets, you can also access the “more” option, which

allows a user to Share via Direct Message, Copy Link to Tweet, Embed Tweet, Pin to Your Profile Page or Delete the Tweet. In addition to the options on your tweets, on another user’s tweets, you can use the “more” option to Mute, Block or Report.

to allow yourself to be searchable to those with similar interests. Keep your bio information current. Include a link to your website, blog or other social media page in your Twitter bio. When the details of your business or work life change, ensure that your Twitter bio is updated.

### Twitter Bio

Think of your Twitter bio (1, below) as your online business card. People are looking to connect with others who share the same interests. Twitter accounts search results give preference to those users who have a complete name, username and bio on their profile. You are limited to 160 characters. Use hashtags

### Social Media Dashboards

TweetDeck is owned by Twitter and is a social media dashboard application for the management of Twitter accounts. TweetDeck gives the Twitter experience more flexibility by letting you view multiple timelines (viewed as columns) in one easy interface. Like other Twitter applications it interfaces



with the Twitter API (application programming interface) to allow users to send and receive Tweets and view profiles.

Advanced users can take advantage of TweetDeck's features to get the most of Twitter. TweetDeck's interface consists of a series of customizable columns, which can be set to display your Twitter timeline, mentions, DMs (direct messages), lists, trending topics, favourites, search results, hashtags or all tweets by or to a single user. All columns can be filtered to include or exclude words or users. Tweets can be sent immediately or scheduled for later delivery. It also allows users to manage several Twitter accounts at once. This is helpful if you have a personal account, but also manage one for work or your association. Sign in with your personal Twitter account at [tweetdeck.twitter.com](https://tweetdeck.twitter.com) to get started. Other social media management programs you might want to explore include Hootsuite, Buffer, Everypost and Tiempy, among others.

### Building a Community of Practice: Find-Follow-Interact and Build

Authors have spoken of the power of social media to connect and unite like-minded individuals.<sup>3,4</sup> A recent study of advanced practice nurses in the U.S. showed that 19% were using Twitter.<sup>5</sup> Building a community of like-minded thinkers in Twitter can be seen as having a basic recipe: "Find-Follow-

Interact-Build." But how does one do this?

Known leaders in any field of interest can be found by searching their name preceded by the @ symbol. Most professionals use their real names and include a personal photo for ease of identification. Any account with a blue verified badge  on their Twitter profile is a verified account. Twitter verifies accounts on an ongoing basis to make it easier for users to find who they're looking for. They concentrate on highly sought-after Twitter users in music, acting, fashion, government, politics, religion, journalism, media, sports, business and other key interest areas.

#### Bios

Twitter users include a brief bio that describes their interests or their niche, often preceded by hashtags (see Twitter Bio on page 32). This is indispensable for those seeking to build a community of interest. Scroll through the first page of Tweets of someone you think you might want to follow to gauge whether their tweets and retweets are of interest. To start receiving their tweets on your own feed, simply click the Follow button.

#### Hashtags

Another way to find Twitter users with similar interests is through the use of hashtags (#). Hashtags are used to categorize content. As mentioned, by adding a hashtag to a keyword or phrase, the content becomes searchable to other users.<sup>3,6</sup> By



## Twitter by the Numbers

Since its debut in March 2006 Twitter has grown to include:

**320** million  
monthly active users

**1** billion  
unique visits monthly to sites with embedded tweets

**80%**  
of active users are on mobile

**4,300**  
Twitter employees around the world

**35+**  
Twitter offices around the world

**79%**  
accounts are located outside the United States

**35+**  
languages are supported

\*All numbers approximate as of September 30, 2015. (Company, n.d. Accessed November 19, 2015: <https://about.twitter.com/company>)

finding content related to your area of interest, you can find Twitter users who are creating content on that subject.

### Suggestions from Twitter

Twitter will also suggest other accounts that you may be interested in following. Those suggestions are based on many factors, including your email or phone contacts (if you have chosen to upload them) as well as patterns from your “follow” history. These suggestions for “who to follow” or “people you may know” are generated by an algorithm, which means you may or may not know the accounts or find them relevant or interesting.

### Retweeting, Replying, Questions

Twitter is an interactive tool, and not just based on “send and receive.” Retweeting other users’ content is a simple way to disseminate knowledge through your own community. When retweeting, the option is given to quote a tweet before sending it out. This is an ideal way to add your own opinion or comment to the topic and therefore personalize the content and create greater interaction. Tweet replies also add interaction through conversations, comments and questions to the author. These replies can be private, going only to the originator of the

Suggested Twitter Users by Topic (not an endorsement)	
Wounds	@welsh_wounds @woundconnect @woundsUK @woundsIntl @CochraneWounds @WoundCareCanada
Continenence	@cdnContinenence @ContinenenceMat @AusContinenence @MyPelvicHealth
Diabetes	@dgarmstrong @DiabetesAssoc @DiabeticFootCa
Chronic Disease/ Comorbidities	@eliserodd @ChronicDisease_ @HealLymphedema @GetGutsyBC @CDCgov @PHAC_GC @OstomyCanada @theCDPAC

Tweet. But by adding a period before their username, the reply will be sent out to your followers as well. You can also use Twitter to crowd-source your needs. Perhaps you are looking for ways to find research participants or answers to your clinical questions. Using Twitter is an ideal way to disseminate your questions worldwide. Polls can be created on Twitter as well.

### Content and Approach

Building a community of like-minded users worldwide comes with the collection of those you follow and who follow you back in mutual interest. Twitter research reflects anecdotal observations that often communities of practice have a small percentage of members

who produce the majority of content.<sup>7</sup> These may be the Tweeters who are worth following, as they have an interest and a dedication to this type of evidence dissemination platform. One recent nursing study outlined some key enablers to establishing an online Twitter community of practice. These included a sense of ownership by its members, a dedicated core group who posted regularly and included aspects of sentiment and practice and a shared identity that enabled an understanding of each other’s perspectives.<sup>4</sup> Grajales and colleagues recommend the follow-

ing principles be applied to social media to mitigate risk and engage audiences: “(1) maintain professionalism at all times, (2) be authentic, have fun, and do not be afraid, (3) ask for help, and (4) focus, grab attention, and engage.”<sup>8</sup>

There are other ways in which Twitter can be used to interact in a community of practice. One group of urologists started a professional Twitter journal club, which they found was an exciting way to glean global input.<sup>9</sup> Many conferences are using Twitter as a way of engaging participants and creating interactions between speakers and the audience as well as peer-to-peer interactions. These interactions are typically done by dedicating a screen in the

room to the projection of live tweets during the session. Each session is given its own hashtag. Followers outside of the room can also follow the comments, questions and other interactions during the session. These tweets can be reviewed after the session as well to gather a sense of the proceedings.

## Engaging with the Evidence

Twitter information moves at great speed and, as mentioned, categorizing the information on topics by using tools like TweetDeck is essential for avoiding information overload, especially when you follow hundreds of users on a variety of topics. For this reason, it is also an excellent tool for keeping up with news and emerging evidence in your field of practice.<sup>9</sup> In the course of my work to keep the PHAC Canadian Best Practices website up to date, I would continuously scan my Twitter feed for new content in the area of chronic diseases. Many government agencies worldwide employ Twitter to announce new strategies, guidelines and publications. Ideally, it should be part of any knowledge dissemination strategy.

When reviewing content, you may hit upon topics or articles of interest that you would like to return to at a later time. By “favoriting” a tweet, it is added to a list that you can access on your account. Journals or articles often make it easy to tweet about a given topic by embed-

ding a tweet function into the margin of the article itself. If you are signed in to your Twitter account on another tab, you can tweet about the article with one click, otherwise you will be prompted to sign in to your Twitter account before the feature is enabled.

## Style

When creating content of interest to your followers on a topic, you must employ the art of brevity. Many Twitter users inject elements of their own personality into the 140-character limit by adding humour, a question or an opinion. Desai and colleagues found that the most effective educational Twitter content was informative, included a citation and had a positive sentiment score.<sup>10</sup> Developing this style takes a bit of practice for many. See below for an example of different styles of tweets:

### EXAMPLE 1:

Study shows coffee drinkers less likely to die of certain diseases. <http://bit.ly/100AqJR>

### EXAMPLE 2:

Coffee said to reduce insulin resistance & systemic inflammation? I'm off to make my morning cup now! <http://bit.ly/100AqJR>

## How often?

The more active you are on Twitter, the greater the engagement with your followers, and the more followers will join you. It is recommended to tweet original content at least once a day. Retweeting is a great way to

disseminate information curated by other users in your field of interest.

We invite you to visit the Twitter website on your computer or download the Twitter app onto your smartphone and tablet. Set up an account, be curious and start searching for content. Keeping up with the evidence in your field of interest is an easy way to use a few spare minutes while riding the bus, waiting for your kids or winding down at the end of the day. 🍷

**Bob McDougall** – @bobmcdougall – An early adopter, Bob has been on Twitter since 2008. Bob holds degrees in Urban Planning and Information Technology. As a certified project management professional he has spent the last 18 years in various chronic disease prevention and emergency preparedness roles. An advocate for active transportation and cycling infrastructure, and a worthy recipient of the Queen Elizabeth II Diamond Jubilee medal, you can usually find Bob on his bike.

**Elise Rodd** – @eliserodd – A registered nurse since 1988 and an enterostomal therapy specialist since 2005, Elise is known nationally for her unique skills in telehealth service development and delivery. She has extensive experience as a nurse advisor to international and federal governments, as well as for First Nations and Inuit Health in Ontario. A prolific author, Elise uses multiple platforms for knowledge dissemination, including Twitter.

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## Additional Resources

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