

Position Paper

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Wound Care in Ontario – Call for Collaborative Action

Opportunity to Improve Patient Care and Reduce Overall Health System Costs

Ontario is in the midst of significant transformation for both health care delivery and supply chain centralization. As this transformation unfolds, **wound care is an area of opportunity to address a number of long standing issues that have negatively impacted patients and valuable health system resources.**

Introduction

Most people think about wounds as small cuts or scrapes causing a break in the skin. What is less well known are **complex wounds** such as diabetic ulcers, pressure injuries or wounds resulting from surgical interventions. When these types of wounds become chronic and/or fail to heal properly, they can be life-threatening, costly, burdensome to the health care system and most importantly, have devastating consequences for patients.

There are **long standing issues in wound care** preventing evidence-based treatment options from being fully utilized that could improve the healing trajectory and possibly prevent complex wounds from becoming more complex and/or chronic. These issues are:

- **Narrow Decision Making Criteria for Selection of Products**
- **Fragmented Approach to Care**
- **Gaps in Data and Outcomes Measurement**

The impact of these issues not only contributes to poor patient outcomes, but also results in a very significant financial burden on the health system.

MAGNITUDE OF THE PROBLEM

**WOUND CARE IN ONTARIO COSTS AT LEAST
\$1.5 BILLION ANNUALLY IN DIRECT COSTS¹**

50% of all nursing visits in the community involve wound care¹

26% of people in an acute or non-acute setting have a pressure injury¹

A diabetic foot ulcer resulting in amputation has an average hospital stay of **70 days²**

1/3 of all amputations in Ontario are performed because of a diabetic foot wound²



70% of pressure injuries³ and **50-85%** of diabetic foot ulcers are preventable⁴

Medtech Canada, the national association representing the medical technology industry, supports this call for action. In order to improve wound care, clinical and financial outcomes, we are recommending government, health care providers, clinicians and industry collaborate and focus their effort in three areas.

#1 Ensure consistent, integrated care across the continuum

#2 Improve quality of wound care data for tracking and evaluation

#3 Shift to a value-based health care approach for wound care

WOUND CARE IN ONTARIO – LONG-STANDING ISSUES

Narrow Decision Making Criteria for Selection of

Products: Health care providers can encounter barriers in being able to provide optimal treatment options due to the perception of high **price** as opposed to clinical assessment and execution based on **cost** and **value**. For example, a particular wound care product may have a higher purchase price which could prohibit or limit its use regardless of its proven ability to reduce length of stay, the number and expense of provider interactions or the need for additional treatment.

Fragmented Approach to Care: Each sector in the continuum of care (acute, rehab, long term care, community, home) has had a different approach to the management of wound care and product selection, making it difficult to organize care around the patient. This fragmentation creates the possibility of confusion, waste and clinicians lacking access to the right wound care

products for the right patient at the right time. A further challenge may occur when a patient is transitioned out of an acute or rehab setting and then, pending coverage for home care treatment and supplies, may be forced to pay out-of-pocket for wound care products which can be a financial hardship.

Gaps in Data & Outcomes Measurement: Inconsistency and timeliness of accurate data across the system is a barrier to tracking, benchmarking and measuring operational and patient outcomes; this is critical to be able to shift towards a focus on overall value and detailed understanding of total costs as opposed to acquisition price. The last cross-Canada estimates date back to 2004.⁵ Without prevalence and incidence data among different types of wounds, it is very difficult to build a business case for funding and programs to improve the quality of wound care practice and to be able to measure results.

According to Wounds Canada, a non-profit organization dedicated to the advancement of wound prevention and care in Canada, the most cost-effective and lowest personal impact hierarchy for wound care should be to:⁶

1. Prevent all preventable wounds.
2. Prevent all existing wounds from becoming complex and/or chronic.
3. Move all chronic wounds onto a healing trajectory.
4. Improve and maintain a good quality of life for patients with unhealable wounds.

Collaborative Action to Improve Clinical and Financial Outcomes Three Focus Areas

#1 Ensure consistent, integrated care across the continuum

#2 Improve quality of wound care data for tracking and evaluation

#3 Shift to a value-based health care approach for wound care

1 ENSURE CONSISTENT INTEGRATED CARE ACROSS THE CONTINUUM

Evidence-based wound care needs to be integrated, consistent and equitably accessible to all patients.

Multiple wound care treatment pathways exist and multidisciplinary teams (e.g., nurses, physicians, surgeons, chiropractors) across the continuum need education and training to be aligned with best practice. The pandemic has further added to the challenges of ensuring consistent care given high turnover rates and health human resource staffing shortages in all care settings.

Lessons can be learned from other countries such as the United Kingdom, Spain, Netherlands and Sweden about advances in standard of care technology and implementing best practice.⁷

Adoption of best practice could reduce wound care costs in home care by 40-50%.⁸

2 IMPROVE QUALITY OF WOUND CARE DATA FOR TRACKING AND EVALUATION

The best decisions to improve patient care and reduce overall health care system costs require robust, accurate data. Having data is also critically important to support benchmarking for value-based health care.

Improving the quality of wound care data will require alignment on a common framework for what and how data will be collected. Without that effort, challenges will continue with being able to track and evaluate wound care outcomes. To illustrate the current reality, research to publish the economic burden of illness associated with diabetic foot ulcers in Canada required four databases to be linked from the Canadian Institute for Health Information with extrapolations still required due to data gaps: Discharge Abstract Database (DAD) for provincial data on acute care admissions; National Ambulatory Care Reporting System (NACRS) for emergency visits; same day surgery (NACRS for Ontario; DAD for rest of Canada); Home Care Reporting System (HCRS) for home care in Ontario only; Continuing Care Reporting System (CCRS) for LTC in Ontario only.

Recommendations

- Align and implement wound care pathways across the care continuum (acute, rehab, long term care, community, home) according to best practices and standards;
- Ensure that multidisciplinary teams include wound care experts;
- Increase wound-related education for health care providers, patients and families;
- Leverage lessons learned from other jurisdictions about advances in standard of care technology and implementing best practice;
- Engage with industry to further assess lessons learned from other jurisdictions and best practice for integrating consistent care across the continuum.

Recommendations

- Conduct an environmental scan and gap analysis to assess existing sources of data that could provide an accurate and ongoing estimate of the prevalence and incidence of wounds (by type) in Ontario;
- Engage wound care experts to review the gap analysis and establish core metrics to track and evaluate success with wound healing e.g., incidence and prevalence rate, wound staging (#, %), time to heal, readmission rates;
- Create wound care measurement tools to measure and analyze results;
- Establish a process including a centralized system for wound care experts to measure and analyze metrics to then be able to review and adjust care as needed based on results;
- Engage with industry in a knowledge exchange to assess data, gaps, and opportunities for industry to provide solutions.

3 SHIFT TO A VALUE-BASED HEALTH CARE APPROACH FOR WOUND CARE

Historically the business interactions between industry and health care providers, or their procurement organizations, have been very transactional, specification-oriented and focused predominantly on product acquisition price. As the model of care for wound care progresses and as outcomes and prevalence data are more available, as discussed above, the health care system can aim to employ a value-based health care approach to business relationships with the industry. Value-based health care approaches would leverage population needs and solve problems as opposed to meeting base product specifications i.e., moving beyond acquisition price and short-term savings to focus on quality, total cost and outcomes.

Collaboration is essential. Traditionally, the supplier community has had very limited participation before any formal purchasing process begins and a “solution” may have been identified without their input; value-based methodologies focus on robust and diverse stakeholder and market engagement prior to the actual purchasing process.

Recommendations

- Mechanisms should be put in place to ensure ongoing engagement with suppliers to regularly understand new clinical development, improved technologies and to monitor real time product performance;
- Decisions on wound care solutions should be based on evidence that they will improve the healing trajectory and prevent wounds from becoming complex and/or chronic thereby improving patient outcomes and saving the system money;
- Clinical experts are essential to identify specific needs and ensure that appropriate outcomes are measured as part of the value-based care approach;
- Any assessment should include opportunities to improve operational outcomes e.g., better inventory management and less wastage by offering the right product at the right time for the right patient;
- If solutions are being procured, key elements to be factored include:
 - Engaging suppliers and all stakeholders early in the process to assist with validating problem statements and identifying potential outcomes which could be measured;
 - Ideally procurement results should allow for clinical choice and the varied impact of wound care products to the clinician and overall system.

ABOUT MEDTECH CANADA

Medtech Canada is the national association representing the medical technology industry in Canada. Our association advocates for achieving patient access to leading edge, innovative technology solutions that provide valuable outcomes. Our members are committed to providing safe and innovative medical technologies that enhance the quality of patient care, improve patient access to health care, and help enable the sustainability of our health care system. The medical technology industry in Canada employs over 35,000 Canadians in approximately 1,500 facilities across the country.

APPENDIX - ABOUT WOUNDS

In Canada, 30 to 50% of all health care involves a wound.⁹ While even healing wounds can require significant health resources, the majority of resources are associated with treating compromised wounds.

Compromised wounds can include chronic wounds such as diabetic foot ulcers (DFU), pressure injuries or wounds that result from surgical interventions that do not heal as expected. In these cases, there is a very high risk of serious health care issues which can have profound personal, clinical and health care system implications.

- **Personal** – compromised wounds can have a significant impact on the health and quality of life of individuals and

Diabetic Foot Ulcers

Diabetic foot ulcers (DFUs) are one of the most common complications of diabetes. Of the 1.6 million Ontarians with diabetes, an estimated 225,000 to 375,000 will suffer from a diabetic foot ulcer during their lifetime (15-25%).¹⁰

- Every 4 hours someone in Ontario has a lower limb amputated because of a diabetic foot ulcer.¹¹
- Mean duration time for a diabetic foot ulcer home care case is 238 days at an average cost per case of \$9,934 including \$5,209 for home care services (staff wages and benefits).¹²
- A person's five-year mortality rate is 50% post-amputation due to a foot ulceration, surpassing mortality rates associated with Hodgkin's disease, breast cancer or prostate cancer.¹³
- **The lifetime net modeled cost to treat a chronic diabetic foot ulcer is \$619,300.**¹⁴

their families. In many cases, these types of wounds cause serious pain, loss of function and mobility, depression, distress and anxiety, embarrassment and social isolation, financial burden, prolonged hospital stays and chronic morbidity or even death.

- **Clinical** – caring for wounds is labour intensive, requires a team effort, with care needing to be aligned and provided across the health care system including hospital, rehabilitation, home care and long-term care.
- **Health care system costs** – overall costs for treatment increase substantially with compromised wounds due to lengthy and/or frequent repeated hospitalizations.

Pressure Injuries

Pressure Injuries (bed sores) happen when there is constant pressure applied on the surface of the skin and can also be costly and challenging to treat. The elderly is particularly vulnerable to these types of wounds which often happen over a bony part of the body (e.g., tailbone and hips) due to fragile skin and prolonged periods of sitting or lying in bed.

- The lowest cost for treating a deep-tissue injury is \$2,450 per month, while an uncomplicated Stage 3 or 4 is \$3,616 per month.³
- In cases where the injury is complicated by osteomyelitis the cost can soar to \$12,648 per month.³
- COVID-19 resulted in a horrific situation for Ontario long term care residents with pressure injuries reaching a stage 4 (most severe) due to:
 - Staff not being provided with the proper training to prevent and manage wounds.
 - Inadequate access to appropriate skin and wound care supplies.
 - Inadequate access to wound care experts.¹⁵

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