

Recommendations for Adoption: Diabetic Foot Ulcer

Recommendations to enable widespread adoption of this quality standard

About this Document

This document summarizes recommendations at local practice and system-wide levels to support the adoption of the quality standard on diabetic foot ulcers.

At the local and regional levels, health care providers and organizations in all settings where applicable, local health integration networks (LHINs), and other health system partners across the province are encouraged to use the quality standard as a resource for quality improvement by assessing the care that is currently being provided against the evidence-based care outlined in the quality standard.

While many organizations and providers may be offering the care described in the quality standard, the statements, related measures, and adoption supports are designed to help organizations determine where there are opportunities to focus their improvement efforts. The [Getting Started Guide](#) outlines the process for using this quality standard as a resource to deliver high-quality care.

An important next step will be to action the recommendations included in this document. In some situations, this may require a more detailed plan, new resources, or to leverage or expand existing programs. At the same time, many aspects of the quality standard represent care that can and should be made available today.

A monitoring and evaluation strategy is included in the final section, with suggested measures to monitor and track progress. Health Quality Ontario's Quality Standards Committee will review these regularly, including the actions needed to support implementation.

The Quality Standard on Diabetic Foot Ulcers

This quality standard focuses on care for people who have developed or are at risk of developing a diabetic foot ulcer. The scope of the standard covers all settings, including primary care, long-term care, and acute care. It also provides guidance on optimal care when a person transitions between these settings—for example, when someone is discharged from a

hospital to their home or a long-term care home. It is one of three quality standards related to wound care; the other two are for pressure injuries and venous leg ulcers.

Click [here](#) to access the quality standard.

The Recommendations for Adoption

The approach to developing these recommendations was guided by the principle of using the quality standards to promote practice improvement among health care professionals.^{1,2,3}

Click [here](#) to download the detailed process and methods guide for the development of quality standards and recommendations for adoption.

The recommendations for adoption were developed after a review of the available evidence and a scan of existing programs, as well as extensive consultation with the Wound Care Quality Standard Advisory Committee, key stakeholders, and organizations that work in this area; public comment on the quality standard; a series of structured interviews with clinicians; and a survey sent to clinicians across the province. (Engagement details specific to the development of these recommendations are provided in [Appendix A](#).) These recommendations aim to bridge the gaps between current care and the care outlined in the quality statements.

RECOMMENDATIONS FOR ADOPTION CONTINUED

These consultations highlighted some common themes: limited access to offloading devices, variability in access to wound care services across the province, inadequate and inconsistent measurement of and reporting on wound outcomes, a lack of focus on prevention strategies and patient outcomes, and the need for ongoing education and mentorship opportunities for clinicians.

A number of equity issues have been identified related to this quality standard topic:

- Disparity in the quality of services among jurisdictions and sites across the province, putting First Nations, Inuit, and northern and rural populations at a significant disadvantage.
- Variability in access to specialist services among jurisdictions and sites across the province.
- Some groups are more at risk for developing wounds (e.g., individuals with limited or impaired mobility, individuals with neurological disease or injury, individuals with diabetes, older adults).

These issues should be taken into consideration to ensure specific adoption strategies do not reinforce current states of inequity and inequality, but rather, where possible, contribute to improvements or highlight areas of opportunity for equity and equality.

The adoption recommendations are organized as follows:

- Integrating the quality standard into practice
 - Quality improvement
 - Access to care
 - Coordination of care
- Education and training
- Policy and system planning

Three time frames for adoption are referenced: Immediate means within 1 year; medium-term refers to 1 to 3 years; and long-term is 3 or more years.

Note that the organizations, programs, and initiatives referenced in this document are examples for consideration, and do not reflect all the organizations, programs, and initiatives doing work in this area across the province.

[Appendix B](#) includes a list of these same recommendations aligned to specific organizations and groups.

¹ French SD, Green SE, O'Connor DA, et al. *Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework*. Implementation Sci. 2012;7:38.

² Bero LA, Grilli R., Grimshaw JM, Harvey E, Oxman AD, Thomson M. (1998). *Closing the gap between research and practice: An overview of systematic reviews of interventions to promote the implementation of research findings*. BMJ. 1998;315:465-68.

³ National Implementation Research Network. Implementation drivers [Internet]. Chapel Hill, NC: FPG Child Development Institute, University of North Carolina [cited 2017 Feb 8]. Available from: <http://nirn.fpg.unc.edu/learn-implementation/implementation-drivers>.

Integrating the Quality Standard into Practice - *Quality Improvement*

Gap: There is a lack of practical tools to help providers and organizations integrate the quality standard into daily care practice. Use of common tools would help mitigate duplication of information, reduce variations in treatments, and improve transitions in care.

Recommendations	Quality Statements	Action Needed By	Time Frame
Assess the care being provided against the quality standard using Health Quality Ontario's Getting Started Guide and refer to the Action Plan Template as a tool to support quality improvement.	All	Health care providers Health care organizations	Immediate
Develop/adapt a common provincial care pathway for use by each LHIN that reflects LHIN-specific resources and capacity.	All	LHINs Health Shared Services Ontario (HSSO)	Medium-term

Adoption Considerations:

- *Wounds Canada and the Registered Nurses' Association of Ontario offer a suite of readily available assessment tools to support wound care practice.*
- *The Managing Transitions guidance document developed by Ontario Hospital Association can be a resource to support a standardized discharge practice.*

Integrating the Quality Standard into Practice - *Quality Improvement*

Gap: Improved access to wound care data is necessary to better understand how care is delivered and how resources are allocated, and to identify potential efficiencies and savings.

There is also a lack of standardization around data collection, including coding of wound care data.

Recommendations	Quality Statements	Action Needed By	Time Frame
Establish a LHIN-based initiative to track wound care data, ensuring it aligns with the provincial data strategy when it becomes available. Use the recommended indicators of the quality standard on diabetic foot ulcers to benchmark performance among different health care organizations.	All	LHINs HSSO	Medium-term
Make wound care a priority for Quality Improvement Plans to support quality improvement in this area.	All	Health Quality Ontario	Immediate

Adoption Consideration: Health care organizations can consider using point-of-care solutions with decision-support capacity to enable data collection.

Integrating the Quality Standard into Practice - Access to Care

Gap: Wound care treatment can be delayed if medical orders are not given or followed in a timely manner or if health care professionals' full scopes of practice are not leveraged.

Recommendation	Quality Statements	Action Needed By	Time Frame
Update organizational policies to enable qualified health care professionals to work to their full scopes of wound care practice.	7: Wound debridement 8: Local infection management 9: Deep/surrounding tissue infection or systemic infection management 10: Wound moisture management	Health care organizations	Immediate

Adoption Consideration: Health care organizations can continue to leverage order sets and advanced medical directives to expedite wound care treatments.

Integrating the Quality Standard into Practice - Access to Care

Gap: There is inequitable access to wound care services across the LHINs. Access to interprofessional and specialty services is a particular challenge in rural and remote areas due to the scarcity of qualified health care providers.

As well, providers are often unaware of what services are available in their region or which providers can provide certain interventions, such as wound debridement. This may delay care.

Recommendations	Quality Statements	Action Needed By	Time Frame
Identify resources and capacity, including who is qualified to deliver wound care, in each LHIN.	All	LHINs	Medium-term
Raise awareness of wound care resources, including availability of wound care specialists, in each LHIN.	All	LHINs	Medium-term
Increase the use of e-Consult to improve timely access to specialty care and facilitate communication between primary care providers and specialists.	All	LHINs Health care providers Health care organizations	Immediate

Adoption Considerations:

- *The Ontario Telemedicine Network (OTN) telewound pilot project in the Central, Central East, and Hamilton Niagara Haldimand Brant LHINs and the South West Regional Wound Care Program can support adoption of this standard.*
- *The Keewatinook Okimakanak (KO) telemedicine program has been identified as a model of care to support the remote consultations provided to First Nations communities in Northwestern Ontario.*

Integrating the Quality Standard into Practice - *Coordination of Care*

Gap: Existing information systems are still limited to small-scale/regional use. This has made information sharing during care transitions a particular challenge.

Recommendation	Quality Statements	Action Needed By	Time Frame
Through existing initiatives to improve care coordination and effective transitions, ensure the wound care population is a focus. This includes the use of digital technology to transfer required information between providers.	5: Individualized care plan 12: Transitions in care	LHINs	Medium-term

Adoption Consideration:

- *Technology solutions currently in use for patients with complex conditions have been identified within Health Links to support care coordination.*

Education and Training

Gap: Knowledge gaps have been identified in the following key areas of wound care management: wound debridement, infection management, and wound moisture management.

Primary care providers require further education to support appropriate referral and management.

Personal support workers (PSWs) would benefit from basic knowledge about skin care, prevention strategies, and care of the diabetic foot.

Recommendations	Quality Statements	Action Needed By	Time Frame
Provide training for PSWs on wound prevention strategies and early wound identification skills.	7: Wound debridement 8: Local infection management 9: Deep/surrounding tissue infection or systemic infection management 10: Wound moisture management	Health care organizations HSSO Education partners	Immediate
Provide education and mentorship opportunities to support health care professionals in acquiring skills to address knowledge gaps specific to the quality standard.	<i>See above</i>	Health care organizations HSSO Education partners	Immediate
Incorporate this quality standard into health professional curricula, with a focus on developing basic competencies.	<i>See above</i>	Education partners	Immediate

Adoption Considerations:

- *Closing the Gap Healthcare offers an online module focusing on quality improvement for PSWs across Ontario. This has been identified as a resource to support training for PSWs.*
- *Ontario Telemedicine Network's e-learning platform can support the delivery of training and education programs.*

Education and Training

Gap: Patients are often given inconsistent information about their wounds.

There is no centralized repository of information that patients can easily access, and available materials may not always be written in plain language.

Recommendations	Quality Statement	Action Needed By	Time Frame
Provide access to a user-friendly multimedia communications platform where patients and caregivers can obtain information that is aligned with evidence reflected in the quality standard. Ensure education materials include early prevention strategies and tools to support self-identification of risk factors.	2: Patient education and self-management	Patient and caregiver organizations Health care organizations	Immediate
Disseminate the patient care guide for this quality standard.	See above	Health Quality Ontario Patients and caregiver organizations Health care organizations Health care providers	Immediate

Adoption Considerations:

- *Wounds Canada offers multimedia patient/caregiver education materials that support patient education and self-management.*
- *Mobile and point-of-care devices have been identified as technology solutions to support patient education and self-management.*

Policy and System Planning

The recommendations for adoption include those needed at the system level. In accordance with Health Quality Ontario's mandate, set out in the *Excellent Care for All Act*, the board of directors has formally provided the following recommendations about the diabetic foot ulcers quality standard to the Minister of Health and Long-Term Care.

Recommendations	Time Frame
1. Use Health Quality Ontario's health technology assessment recommendation to inform funding decisions related to expanding access to pressure offloading devices.	Immediate
2. Provide adequate education and training opportunities for health care professionals and personal support workers, and develop a quality-assurance mechanism to measure the uptake of education and the effect on patient outcomes.	Immediate
3. Identify appropriate payment models and accountability mechanisms to support quality outcomes for wound care, including a shift in focus to prevention and early identification.	Long-term
4. Develop a provincial wound care data strategy and specify the requirements to measure and report on wound care outcomes, including indicators specific to this quality standard, and document adherence to this quality standard in varied settings to support adoption. Ensure alignment with activities and initiatives in the Digital Health Strategy.	Medium-term

Measurement and Reporting

Health Quality Ontario will develop a monitoring and evaluation plan for these recommendations as part of the broader quality standards evaluation. This plan may require the development of measures and/or a resource plan to support data collection and monitoring. The evaluation will include the following components:

1. Monitor existing databases available through information briefs, Quality Improvement Plans (QIPs), and public reporting. Note identified gaps and areas for improvement. For this standard, the outcome indicators below have been prioritized:
 - Percentage of patients with a new diabetic foot ulcer in a 6-month period (incidence).
 - Percentage of patients with a diabetic foot ulcer in a 6-month period (prevalence).
 - Percentage of patients with a diabetic foot ulcer who had a lower-extremity amputation in a 6-month period.

However, the ability to provide data on incidence and prevalence specific to diabetic foot ulcers will be dependent on the data strategy recommendations above.

2. Monitor the uptake of the recommendations for adoption.

A plan to measure the impact of specific recommendations related to clinical care and improvement will be defined (the Re-Aim Framework that includes measurement of Reach, Effectiveness, Adoption, Implementation, and Maintenance provides a useful approach for larger scale improvement interventions that are proposed). This approach could leverage process measures that can be collected from embedded tools, such as order sets.

Health Quality Ontario will recommend that the Ontario Quality Standards Committee receive twice-annual updates on the progress of the recommendations and review any additional measurement that may be needed to assess impact.

Appendix A: Process and Methods for Developing the Recommendations for Adoption

The development of the recommendations for adoption involves extensive consultation with stakeholders across the province from a variety of professional roles and perspectives.

The following organizations and groups were consulted in the development of these recommendations:

- Health Shared Services Ontario (previously the Ontario Association of Community Care Access Centres [OACCAC])
- Registered Nurses' Association of Ontario (RNAO)
- Ontario Wound Care Interest Group (OntWIG)
- Wounds Canada (previously the Canadian Association of Wound Care)
- Ontario Long Term Care Association (OLTCA)
- AdvantAge Ontario (previously the Ontario Association of Non-Profit Homes and Services for Seniors [OAHNSS])—Nursing Advisory Committee
- South West Regional Wound Care Program
- Ontario Telemedicine Network (OTN)

- Ontario Home Care Advisory Committee
- Ministry of Health and Long-Term Care (MOHLTC)
- Provincial Emergency Service Advisory Committee (ESAC)
- LHIN/Health Quality Ontario Clinical Quality Leads

Note: Between January and April 2017, Health Quality Ontario conducted 14 interviews with 15 front-line clinicians across five LHINs (Toronto Central, Erie St. Clair, South West, North West, and North Simcoe Muskoka). This engagement was informed by the Theoretical Domains Framework, which uses 14 domains (knowledge, skills, attitude, etc.) to identify barriers to behavioural change and/or the ability to put the quality standard into practice. Ten registered nurses (one of which serves the First Nations), one registered practical nurse, two physiotherapists, one occupational therapist, one primary care physician, and one surgeon participated in the interviews, the results of which were used to further inform the gaps in knowledge, behaviours, and attitudes related to this standard.

Appendix B: Summary Recommendations for Health Sector Organizations and Other Entities

Health Quality Ontario

Time Frame*

Make wound care a priority for Quality Improvement Plans to support quality improvement in this area.

Immediate

Disseminate the patient care guide for this quality standard.

Immediate

Local Health Integration Networks

Time Frame*

Develop/adapt a common provincial care pathway for use by each LHIN that reflects LHIN-specific resources and capacity.

Medium-term

Establish a LHIN-based initiative to track wound care data, ensuring it aligns with the provincial data strategy when it becomes available. Use the recommended indicators of the quality standard on diabetic foot ulcers to benchmark performance among different health care organizations.

Medium-term

Identify resources and capacity, including who is qualified to deliver wound care, in each LHIN.

Medium-term

Raise awareness of wound care resources, including availability of wound care specialists, in each LHIN.

Medium-term

APPENDIX B CONTINUED

Increase the use of e-Consult to improve timely access to specialty care and facilitate communication between primary care providers and specialists.

Immediate

Through existing initiatives to improve care coordination and effective transitions, ensure the wound care population is a focus. This includes the use of digital technology to transfer required information between providers.

Medium-term

Health Care Providers and Organizations

Time Frame*

Assess the care being provided against the quality standard using Health Quality Ontario's Getting Started Guide and refer to the Action Plan Template as a tool to support quality improvement.

Immediate

Update organizational policies to enable qualified health care professionals to work to their full scopes of wound care practice.

Immediate

Increase the use of e-Consult to improve timely access to specialty care and facilitate communication between primary care providers and specialists.

Immediate

Provide training for personal support workers on wound prevention strategies and early wound identification skills.

Immediate

Provide education and mentorship opportunities to support health care professionals in acquiring skills to address knowledge gaps specific to the quality standard.

Immediate

Provide access to a user-friendly multimedia communications platform where patients and caregivers can obtain information that is aligned with evidence reflected in the quality standard. Ensure education materials include early prevention strategies and tools to support self-identification of risk factors.

Immediate

Disseminate the patient care guide for this quality standard.

Immediate

APPENDIX B CONTINUED

Health Shared Services Ontario	Time Frame*
Develop/adapt a common provincial care pathway for use by each LHIN that reflects LHIN-specific resources and capacity.	Medium-term
Provide training for personal support workers on wound prevention strategies and early wound identification skills.	Immediate
Provide education and mentorship opportunities to support health care professionals in acquiring skills to address knowledge gaps specific to the quality standard.	Immediate
Establish a LHIN-based initiative to track wound care data, ensuring it aligns with the provincial data strategy when it becomes available. Use the recommended indicators of the quality standard on diabetic foot ulcers to benchmark performance among different health care organizations.	Medium-term
Education Partners	Time Frame*
Incorporate this quality standard into health professional curricula, with a focus on developing basic competencies.	Immediate
Patient and Caregiver Organizations	Time Frame*
Provide a user-friendly multimedia communications platform where patients and caregivers can obtain information that is aligned with evidence reflected in the quality standard. Ensure education materials include early prevention strategies and tools to support self-identification of risk factors.	Immediate
Disseminate the patient care guide for this quality standard.	Immediate
*Three time frames for adoption are referenced: Immediate means within 1 year; medium-term refers to 1 to 3 years; and long-term is 3 or more years.	

For more information:

Website: hqontario.ca/QualityStandards

Email: qualitystandards@hqontario.ca

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