

Pressure Injuries

Care for Patients in All Settings



Let's make our health system healthier



Summary

This quality standard focuses on care for people who have developed or are at risk of developing a pressure injury. The scope of the standard covers all settings, including primary care, home and community 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.

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About Quality Standards

Health Quality Ontario, in collaboration with clinical experts, patients, residents, and caregivers across the province, is developing quality standards for Ontario.

Quality standards are concise sets of statements that will:

- · Help patients, residents, families, and caregivers know what to ask for in their care
- Help health care professionals know what care they should be offering, based on evidence and expert consensus
- Help health care organizations measure, assess, and improve their performance in caring for patients

The statements in this quality standard do not override the responsibility of health care professionals to make decisions with patients, after considering each patient's unique circumstances.

How to Use Quality Standards

Quality standards inform clinicians and organizations about what high-quality health care looks like. They are based on the best available evidence.

They also include indicators to help clinicians and organizations assess the quality of care they are delivering, and to identify gaps and areas for improvement. These indicators measure process, structure, and outcomes.

In addition, tools and resources to support clinicians and organizations in their quality improvement efforts accompany each quality standard.

For more information on how to use quality standards, contact: **qualitystandards@hqontario.ca**.

About This Quality Standard

Scope of This Quality Standard

This quality standard focuses on care for people who have developed or are at risk of developing a pressure injury. The scope of the standard covers all settings, including primary care, home and community 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 diabetic foot ulcers and venous leg ulcers.

Why This Quality Standard Is Needed

Wounds represent a significant burden for patients, their caregivers and families, clinicians, and the Ontario health system, but the human and financial costs of wounds are not fully appreciated.¹ People with pressure injuries report low levels of health-related quality of life,² high rates of depression,³ and high rates of pain and discomfort.^{4,5}

Pressure injuries are characterized as "damage to the skin and/or underlying soft tissue, usually over a bony prominence or related to a medical or other device."⁶ They "occur as a result of intense and/or prolonged pressure and/or shear."⁶ Pressure injuries can present as intact skin or as an open ulcer.⁶ Pressure injuries are more likely to occur in people who are older; reside in long-term or critical care settings; are acutely or

seriously ill; have experienced trauma; or have a spinal cord injury, a fractured hip, a neurological condition, diabetes, impaired mobility, or nutritional deficiency.^{7,8} Most pressure injuries are treatable if they are detected early, but when they are left untreated, they are associated with adverse outcomes for the people who have them and high treatment costs for the health system.⁹

Wound care represents a significant area of opportunity for quality improvement in Ontario. There are important gaps and variations in access to services and in the quality of care received by people who have developed or are at risk of developing a pressure injury. For example, rates of new pressure injuries in home care varied two-fold across community care access centres in 2013/2014 (Home Care Database, 2014). Previous efforts to improve the coordination and delivery of wound care across the province have highlighted the inconsistent application of best practice guidelines, a lack of standardized documentation, tracking of wound outcome measures, and poor coordination of care.¹⁰

Based on the best available evidence and guided by expert consensus from health care professionals and people with lived experience, this quality standard addresses key areas with significant potential for quality improvement in the care of people who have developed or are at risk of developing a pressure injury in Ontario. The 13 quality statements that make up this standard provide guidance on high-quality care, with accompanying indicators to help health care professionals and organizations measure their own quality of care. Each statement also includes details on how it affects people who have developed or are at risk of developing a pressure injury, their caregivers, health care professionals, and health care services at large.

Note: In this quality standard, the term patient includes community care clients and residents of long-term care homes.

Principles Underpinning This Quality Standard

This quality standard is underpinned by the principles of respect and equity.

People who have developed or are at risk of developing a pressure injury should receive services that are respectful of their rights and dignity and that promote selfdetermination.

A high-quality health system is one that provides good access, experience, and outcomes for all Ontarians, no matter where they live, what they have, or who they are.

People who have developed or are at risk of developing a pressure injury are provided services that are respectful of their gender, sexual orientation, socioeconomic status, housing, age, background (including self-identified cultural, ethnic, and religious background), and disability.

How We Will Measure Our Success

We have set a limited number of objectives for this quality standard as a whole, and we have mapped these objectives to indicators to measure its success. In addition, each quality statement within this quality standard is accompanied by one or more indicators to measure the successful implementation of the statement.

- Percentage of patients with a new pressure injury in a 6-month period (incidence)
- Percentage of patients with a pressure injury in a 6-month period (prevalence)
- Percentage of patients with a closed pressure injury in a 12-week period
- Percentage of patients with a healed pressure injury who were diagnosed with a secondary pressure injury within 1 year (recurrence)
- Percentage of patients with a pressure injury who had a diagnosed wound infection in a 6-month period
- Percentage of patients with a pressure injury in a 12-month period who reported high satisfaction with the care provided

Quality Statements in Brief

QUALITY STATEMENT 1: Risk and Skin Assessment

People with at least one risk factor for developing a pressure injury undergo a comprehensive risk assessment, including a skin assessment, to determine their level of risk. Those at risk are reassessed on an ongoing basis.

QUALITY STATEMENT 2: Patient Education and Self-Management

People who have developed or are at risk of developing a pressure injury and their families and caregivers are offered education about pressure injuries, including an overview of the condition; the importance of mobilization and repositioning for pressure redistribution; and who to contact in the event of a concerning change.

QUALITY STATEMENT 3: Comprehensive Assessment

People with a pressure injury undergo a comprehensive assessment, including an evaluation of risk factors that affect healing to determine the healing potential of the wound.

QUALITY STATEMENT 4: Individualized Care Plan

People who have developed or are at risk of developing a pressure injury have a mutually agreed-upon individualized care plan that identifies patient-centred concerns and is reviewed and updated regularly.

QUALITY STATEMENT 5: Support Surfaces

People who have developed or are at risk of developing a pressure injury are provided with appropriate support surfaces based on their assessment.

QUALITY STATEMENT 6: Repositioning

People who have developed or are at risk of developing a pressure injury receive interventions that enable repositioning at regular intervals, encouraging people to reposition themselves if they are mobile or helping them to do so if they cannot reposition themselves.

QUALITY STATEMENT 7: Wound Debridement

People with a pressure injury have their wound debrided if it is determined as necessary in their assessment, and if it is not contraindicated. Debridement is carried out by a trained health care professional using an appropriate method.

QUALITY STATEMENT 8: Local Infection Management

People with a pressure injury and a local infection receive appropriate treatment, including antimicrobial and non-antimicrobial interventions.

QUALITY STATEMENT 9: Deep/Surrounding Tissue Infection or Systemic Infection Management

People with a pressure injury and suspected deep/surrounding tissue infection or systemic infection receive urgent assessment (within 24 hours of initiation of care) and systemic antimicrobial treatment.

QUALITY STATEMENT 10: Wound Moisture Management

People with a pressure injury receive wound care that maintains the appropriate moisture balance or moisture reduction in the wound bed.

QUALITY STATEMENT 11: Surgical Consultation

People who are adherent to treatment and have a stage 3 or 4 healable pressure injury that is not responding to optimal care are referred for a surgical consultation to determine their eligibility for surgical intervention.

QUALITY STATEMENT 12: Health Care Provider Training and Education

People who have developed or are at risk of developing a pressure injury receive care from health care providers with training and education on the assessment and treatment of pressure injuries.

QUALITY STATEMENT 13: Transitions in Care

People with a pressure injury who transition between care settings have a team or provider who is accountable for coordination and communication to ensure the effective transfer of information related to their care.

Risk and Skin Assessment

People with at least one risk factor for developing a pressure injury undergo a comprehensive risk assessment, including a skin assessment, to determine their level of risk. Those at risk are reassessed on an ongoing basis.

Background

An assessment to determine an individual's level of risk of developing a pressure injury can inform appropriate prevention strategies. People are considered to be at high risk if they have multiple risk factors, a history of pressure injuries, and/or an active pressure injury.⁷

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³



For Patients

If you are immobile or cannot be moved around, you may be at risk of developing a pressure injury. You should have a full risk assessment that includes a skin assessment. This information will be used to determine how often you should be re-checked.

For Clinicians

Carry out a comprehensive risk assessment, including a skin assessment, of all people with at least one risk factor for developing a pressure injury, to determine their level of risk. Reassess those at risk on an ongoing basis.

For Health Services

Ensure that health care professionals have access to comprehensive risk-assessment tools, including tools and protocols for skin assessment.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Risk factors

These include:

- Admission to a health care facility (such as acute care, complex continuing care, rehabilitation, or long-term care)
- Impaired or limited mobility
- Use of an assistive device such as a wheelchair
- Use of medical devices, such as tubes
- Inability to reposition oneself
- Limited ability or inability to feel pain
 or pressure
- Nutritional deficiency
- Being underweight
- Cognitive impairment
- Past or current pressure injuries

Comprehensive risk assessment

This includes:

- An assessment of the following:
 - Mobility and ability to reposition oneself
 - Positioning throughout the day
 - Support and transfer surfaces, and areas of pressure
 - Impaired sensation or numbness
 - Infection
 - Risk of malnutrition

Quality Indicators

Process Indicators

Percentage of people with at least one risk factor for developing a pressure injury who have a comprehensive risk assessment, including a full skin assessment, upon admission to acute or long-term care or their first home care visit

- Denominator: number of people with at least one risk factor for developing a pressure injury
- Numerator: number of people in the denominator who have a comprehensive risk assessment, including a full skin assessment, upon admission to acute or long-term care or their first home care visit
- Data source: local data collection

Percentage of people at high risk for developing a pressure injury who are reassessed on an ongoing basis or when there is a significant change in their condition or risk factors

- Denominator: number of people at high risk for developing a pressure injury
- Numerator: number of people in the denominator who are reassessed on an ongoing basis (frequency may vary and is based on an individual's level of mobility, acuity of illness, and setting of care) or when there is a significant change in their condition or risk factors
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Comprehensive risk assessment (continued)

- Cognitive ability
- Continence
- Nerve injuries that can cause spasticity, increased tone, and shear forces
- Factors that affect healing (poor circulation, loss of sensation, systemic infection)

Examples of validated risk-assessment tools to support clinical judgement are the interRAI Pressure Ulcer Risk Score (PURS), the Braden scale, the Braden Q scale (pediatric population), the Waterlow score, or the Norton risk assessment scale

Skin assessment

This includes a full head-to-toe assessment of the following:

- Skin integrity, focusing on high-pressure areas (skin covering bony prominences)
- Skin discolouration (including redness)
- Blanching, swelling, pain, or induration (hardening)
- Changes in skin moisture and temperature

Reassessed on an ongoing basis

The frequency of the reassessment varies and is based on a person's level of mobility, acuity of illness, and setting of care. For example, individuals who are immobile, confined to a bed or wheelchair, or are critically ill may need to be reassessed daily.

Patient Education and Self-Management

People who have developed or are at risk of developing a pressure injury and their families and caregivers are offered education about pressure injuries, including an overview of the condition; the importance of mobilization and repositioning for pressure redistribution; and who to contact in the event of a concerning change.

Background

Providing education to people who have developed or are at risk of developing a pressure injury, and their families and caregivers, can enable them to play an active role in self-examination and care. People involved in self-management can help prevent an initial injury, detect the signs and symptoms of an injury early on, monitor current injuries to determine if they are getting worse, and prevent recurrent injuries. Adherence to prevention and management strategies, such as repositioning and use of appropriate support surfaces, can positively affect outcomes.

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³



BACKGROUND CONTINUED

To support adherence, people with pressure injuries should receive education on these interventions and how to implement them. Educational materials should consider the person's condition and level of mobility, and the presence of neurological and cognitive impairment.⁷ They should be offered in both oral and written formats, and tailored to a person's language and education level where possible, to support understanding.



For Patients

If you have a pressure injury or are at risk of developing one, you and your family or caregiver should be taught about pressure injuries and who to contact for help.

For Clinicians

Offer people who have developed or are at risk of developing a pressure injury (as well as their families and caregivers) education about pressure injuries, including an overview of the condition; the importance of mobilization and repositioning for pressure redistribution; and who to contact in the event of a concerning change.

For Health Services

Ensure the availability of educational materials on pressure injuries for people who have developed or are at risk of developing a pressure injury, as well as their families and caregivers.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Education

This includes the following topics:

- What causes pressure injuries
- How to prevent pressure injuries, including an overview of methods, techniques, and devices
- Signs and symptoms of pressure injuries
- Complications associated with pressure injuries
- Treatments for pressure injuries
- Risk factors for recurrence of pressure injuries

Concerning changes

These include signs and symptoms of a pressure injury, such as skin discolouration (including redness), skin temperature change, change in pain or new pain, swelling, or odour.

Quality Indicators

Process Indicator

2

Percentage of people who have developed or are at risk of developing a pressure injury who, along with their families and caregivers, are offered education about pressure injuries and who to contact in the event of a concerning change

- Denominator: number of people who have developed or are at risk of developing a pressure injury
- Numerator: number of people in the denominator who, along with their families and caregivers, are offered education (such as printed materials, video presentations, and in-person resource/instruction) about pressure injuries and who to contact in the event of a concerning change
- Data source: local data collection

Structural Indicator

Availability of educational materials on pressure injuries for people who have developed or are at risk of developing a pressure injury, and their families and caregivers

Comprehensive Assessment

People with a pressure injury undergo a comprehensive assessment, including an evaluation of risk factors that affect healing to determine the healing potential of the wound.

Background

A comprehensive assessment helps identify causative and contributing factors, supports accurate diagnosis, and informs the treatment and management of pressure injuries. The results of the assessment help to determine the healing potential of the injury (wounds may be categorized as healable, maintenance, or non-healable) and inform a corresponding approach to optimal wound care and management.¹⁴ Healable wounds have adequate blood supply and can be healed if the underlying cause is addressed and treated. Maintenance wounds have healing potential, but barriers are present that may prevent healing (such as lack of access to appropriate treatments or poor adherence to treatment). Non-healable wounds are not likely to heal because of non-treatable causes or illnesses.¹⁴ Comprehensive assessment also provides an opportunity to determine factors that may affect wound healing and risk factors for recurrence. Depending on the care setting, the components of the assessment may be carried out by multiple members of an interprofessional team.

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³

For Patients

If you have a pressure injury, you should have a full assessment that includes a skin assessment. Your health care team will want to learn more about your health history, concerns, and preferences. They should also examine your skin from head to toe. They will use this information to develop a care plan with you.

For Clinicians

Carry out a comprehensive assessment for people with a pressure injury to determine the healing potential of the wound. The results should inform their individualized care plan.

For Health Services

Ensure that tools, systems, processes, and resources are in place to help clinicians assess people with a pressure injury. This includes providing the time required for a full assessment and ensuring access to assessment tools.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Comprehensive assessment

This includes the following components, at a minimum:

- A comprehensive physical examination and health history, including history of pressure injuries, past medical history, allergies, medications, family history, and psychosocial history
- An assessment of risk factors, including:
 - Mobility, ability to reposition oneself, positioning throughout the day, and presence of impaired sensation, neuropathy, or numbness
 - Areas of pressure and the need for pressure redistribution devices
 - Presence of infection
 - Nutrition assessment using a validated tool
 - Cognitive assessment
 - Continence assessment
 - Nerve injuries that can cause spasticity, increased tone, and shear forces
 - Factors that may affect wound healing (nutritional deficiency, poor circulation, loss of sensation, systemic infection)



Quality Indicators

Process Indicator

Percentage of people with a pressure injury who have a comprehensive assessment at first presentation that informs their individualized care plan

- Denominator: number of people with a pressure injury
- Numerator: number of people in the denominator who have a comprehensive assessment at first presentation that informs their individualized care plan
- Data source: local data collection

Percentage of people with a pressure injury who have a comprehensive assessment at each transition that informs their individualized care plan

- Denominator: number of people with a pressure injury
- Numerator: number of people in the denominator who have a comprehensive assessment at each transition that informs their individualized care plan
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Comprehensive assessment (continued)

- A full (head-to-toe) skin assessment, including:
 - Skin integrity, focusing on high-pressure areas (skin covering bony prominences)
 - Skin discolouration (including redness)
 - Blanching, swelling, pain, or induration (hardening)
 - Changes in skin moisture and temperature
- Pain assessment using a validated tool
- Assessment of pressure injury characteristics and classification using the National Pressure Ulcer Advisory Panel/European Pressure Ulcer Advisory Panel (NPUAP/EPUAP) classification system
- Diagnostic testing
- Vascular assessment (extremity injuries)
- Individual concerns, preferences, goals of care, and activities of daily living

Individualized Care Plan

People who have developed or are at risk of developing a pressure injury have a mutually agreed-upon individualized care plan that identifies patient-centred concerns and is reviewed and updated regularly.

Background

An individualized care plan guides effective, integrated coordination and delivery of care. The content of the care plan will reflect whether the individual is at risk of developing a pressure injury (focusing on prevention strategies) or has a current pressure injury (focusing on management and treatment plans). Consideration of factors that may affect the healing potential of the wound (pressure injuries may be healable, maintenance, or non-healable—please see Quality Statement 3 for definitions) is essential for optimizing healing conditions and quality of life. These factors include poor circulation, numbness or lack of sensation, and systemic infection.⁸

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³



BACKGROUND CONTINUED

Goals should be mutually agreed-upon by the health care professional(s) and the person receiving care. For example, people receiving palliative care are at higher risk of developing pressure injuries, but goals related to prevention and healing (and associated strategies and treatments) may not be appropriate or realistic compared to goals that focus on quality of life, comfort, and symptom management.¹¹ Regular review of the care plan also provides an opportunity to revisit goals, review progress, and make adjustments based on the changing needs and preferences of the person receiving care.

For Patients

Your health care professional should work with you to develop a care plan that reflects your needs, concerns, and preferences. A care plan is a written document that you have developed with your health care professional. It describes your goals for your care, the care you will receive, and who will provide it.

For Clinicians

Work with people who have developed or are at risk of developing a pressure injury to create a mutually agreedupon individualized care plan that identifies patient-centred concerns. For patients at risk, the care plan should include prevention strategies. For patients with a pressure injury, the care plan should include a treatment plan and a plan for local wound care. The plan should be reviewed and updated regularly.

For Health Services

Ensure that systems, processes, and resources are in place to support clinicians in developing individualized care plans for people who have developed or are at risk of developing a pressure injury. This may also include tools such as standardized care plan templates.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Risk factors

These include:

- Admission to a health care facility (such as acute care, complex continuing care, rehabilitation, or long-term care)
- Impaired or limited mobility
- · Use of an assistive device, such as a wheelchair
- Use of medical devices, such as tubes
- · Inability to reposition oneself
- Limited ability or inability to feel pain or pressure
- Nutritional deficiency
- Being underweight
- Cognitive impairment
- Past or current pressure injuries

Individualized care plan

This includes:

- Results of the risk and comprehensive assessments (see Quality Statements 1 and 3), including identified risk factors and the dimensions, characteristics, and healing trajectory of the pressure injury (these should be reassessed on a regular basis)
- Mutually agreed-upon goals of care and individual concerns and preferences
- Factors that may affect wound healing and patientcentred concerns, such as pain management, optimizing activities of daily living, and psychosocial needs and supports
- Provision of information on pressure injury prevention and management



Quality Indicators

Process Indicators

Percentage of people who have developed or are at risk of developing a pressure injury who have a mutually agreedupon individualized care plan that identifies patient-centred concerns

- Denominator: number of people who have developed or are at risk of developing a pressure injury
- Numerator: number of people in the denominator who have a mutually agreed-upon individualized care plan that identifies patient-centred concerns
- Data source: local data collection

Percentage of people with a pressure injury who have had their individualized care plan reviewed and updated regularly

- Denominator: number of people with a pressure injury
- Numerator: number of people in the denominator who have had their individualized care plan reviewed and updated regularly (frequency may range from daily to every 3 months)
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Individualized care plan (continued)

- For people at risk, prevention strategies:
 - Skin care
 - Managing and reducing pressure and shear in high-pressure areas (use of pressure redistribution devices, mobilization, and repositioning)
 - Individualized nutrition care plan
 - Continence management
- For people with a pressure injury, a treatment plan, including local wound care, that is based on the healing potential of the wound:
 - Debridement, infection management, and moisture management
 - Managing and reducing pressure and shear in high-pressure areas (use of pressure redistribution devices, mobilization, and repositioning)
 - Pain management
 - Individualized nutrition care plan
 - Continence management

Reviewed and updated regularly

Frequency may range from daily (during dressing changes and based on regular wound assessments) to every 1 to 3 months (for a full care plan review) and is based on the characteristics of the wound, the acuity of the problem, and whether or not there are significant changes. Reviewing the care plan may require a partial reassessment (repeating aspects of the comprehensive assessment) or a full reassessment, including revisiting the goals of care.

Support Surfaces

People who have developed or are at risk of developing a pressure injury are provided with appropriate support surfaces based on their assessment.

Background

The use of support surfaces, with regular repositioning, is an effective way to prevent and treat pressure injuries.^{8,12,15} Support surfaces reduce pressure, friction, and shear by protecting and supporting at-risk areas such as bony prominences, and by redistributing pressure more evenly across a larger surface area.^{7,11,16} People undergoing surgical procedures that are longer than 90 minutes and those seated for long periods of time or who use a wheelchair also require high-quality support surfaces, such as cushions, pads (foam or gel), or seating surfaces that redistribute pressure.^{7,17}

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Ontario Health Technology Advisory Committee, 2014¹⁷ | Registered Nurses' Association of Ontario, 2016¹³



For Patients

As part of your care plan, you should be given something called "support surfaces." These are special mattresses, cushions, or pads that redistribute pressure across the whole surface of your skin. They can help heal or prevent a pressure injury.

For Clinicians

Provide people who have developed or are at risk of developing a pressure injury with appropriate support surfaces based on their assessment. These include high-density foam mattresses, cushions, pads, or seating surfaces that redistribute pressure.

For Health Services

Ensure the provision of appropriate support surfaces for people who have developed or are at risk of developing a pressure injury. These include high-density foam mattresses, cushions, pads, or seating surfaces that redistribute pressure.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Risk factors

These include:

- Admission to a health care facility (such as acute care, complex continuing care, rehabilitation, or long-term care)
- Impaired or limited mobility
- Use of an assistive device, such as a wheelchair
- Use of medical devices, such as tubes
- Inability to reposition oneself
- Limited ability or inability to feel pain or pressure
- Nutritional deficiency
- Being underweight
- Cognitive impairment
- Past or current pressure injuries

Support surfaces

Support surfaces include high-density foam mattresses (mattresses that provide reduced interface pressure to prevent the breakdown of tissue, as compared to standard mattresses), cushions, pads (foam or gel), or seating surfaces that redistribute pressure.

Quality Indicators

Process Indicators

Percentage of people who have developed or are at risk of developing a pressure injury and have appropriate support surfaces based on their assessment

- Denominator: number of people who have developed or are at risk of developing a pressure injury
- Numerator: number of people in the denominator who have appropriate support surfaces based on their assessment
- Data source: local data collection

Percentage of people who are undergoing surgical procedures longer than 90 minutes, who are seated for long periods of time, or who use a wheelchair and have cushions, pads, or seating surfaces that redistribute pressure

- Denominator: number of people who are undergoing surgical procedures longer than 90 minutes, who are seated for long periods of time, or who use a wheelchair
- Numerator: number of people in the denominator who have cushions, pads, or seating surfaces that redistribute pressure
- Data source: local data collection

Structural Indicator

Availability of high-quality foam mattresses in hospitals, long-term care homes, and community care for those at risk

Repositioning

People who have developed or are at risk of developing a pressure injury receive interventions that enable repositioning at regular intervals, encouraging people to reposition themselves if they are mobile or helping them to do so if they cannot reposition themselves.

Background

Repositioning is an important part of pressure injury prevention and treatment, because it reduces the length of time and amount of pressure on at-risk areas, such as bony prominences and heels.⁸ Repositioning may also contribute to increased comfort, dignity, and functional ability, and it provides an opportunity for health care providers to interact with individuals and observe their skin condition.^{8,11} People who are seated or lying down need to be repositioned in a way that relieves or redistributes pressure and limits the skin's exposure to pressure and shear.⁸

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Ontario Health Technology Advisory Committee, 2014¹⁷ | Registered Nurses' Association of Ontario, 2016¹³

For Patients

You should reposition yourself often (or be helped by a health care professional or caregiver) to prevent or heal a pressure injury.

For Clinicians

Provide interventions that enable repositioning at regular intervals for people who have developed or are at risk of developing a pressure injury. These interventions should be based on people's functional ability. People who are mobile should be encouraged to reposition themselves; if they are not able to do so, help them to reposition themselves.

For Health Services

Ensure that systems, procedures (protocols), and resources are in place to support clinicians in providing interventions that enable repositioning at regular intervals for people who have developed or are at risk of developing a pressure injury.

Quality Indicators

Process Indicators

Percentage of people who have developed or are at risk of developing a pressure injury and receive interventions that enable repositioning at regular intervals

- Denominator: number of people who have developed or are at risk of developing a pressure injury
- Numerator: number of people in the denominator who receive interventions that enable repositioning at regular intervals (frequency may vary depending on the level of mobility and risk of developing a pressure injury)
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Risk factors

These include:

- Admission to a health care facility (such as acute care, complex continuing care, rehabilitation, or long-term care)
- Impaired or limited mobility
- Use of an assistive device, such as a wheelchair
- Use of medical devices, such as tubes
- · Inability to reposition oneself
- Limited ability or inability to feel pain or pressure
- Nutritional deficiency
- Being underweight
- Cognitive impairment
- Past or current pressure injuries



PROCESS INDICATORS CONTINUED

Percentage of long-term care residents who are at risk of developing a pressure injury who reposition themselves or are repositioned every 2 hours

- Denominator: number of long-term care residents who are at risk of developing a pressure injury (Braden score of less than 10)
- Numerator: number of long-term care residents in the denominator who reposition themselves or are repositioned every 2 hours
- Data source: local data collection

Percentage of long-term care residents who are at lower risk for pressure injuries and have a high-density foam mattress who reposition themselves or are repositioned every 4 hours

- Denominator: number of long-term care residents who are at lower risk for pressure injuries (Braden score of 10 or higher) and have a high-density foam mattress
- Numerator: number of long-term care residents in the denominator who reposition themselves or are repositioned every 4 hours
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Enable repositioning at regular intervals

Encouraging people who are mobile to reposition themselves or helping them to do so (if they cannot reposition themselves) as a way of relieving pressure, particularly over at-risk areas such as bony prominences and heels, and at a frequency that corresponds with their level of mobility and risk of developing a pressure injury. Evidence from the long-term care setting supports repositioning at least every 4 hours for residents with a Braden score of 10 or higher if a high-density foam mattress is also used, and at least every 2 hours for residents with a Braden score of less than 10.17

Wound Debridement

People with a pressure injury have their wound debrided if it is determined as necessary in their assessment, and if it is not contraindicated. Debridement is carried out by a trained health care professional using an appropriate method.

Background

The purpose of debridement is to remove nonviable, dead (slough and/or necrotic) tissue, callus, and foreign matter (debris) from the wound to reduce infection and promote healing. There are many methods of debridement, but the most common are sharp/surgical, autolytic, and mechanical.^{8,11} Assessing the need for and method of debridement should be based on the individual's goals of care, preferences, and comfort; their condition, including pain, vascular condition, and risk of bleeding; the type, amount, and location of dead tissue; and health care professional training and experience.^{11,13} Sharp debridement requires specialized knowledge, education, and skills.^{8,11,18}

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³



For Patients

To help your wound heal, you should have dead skin, callus, and debris removed (this is called debridement) if your health care professional determines that it is necessary and appropriate.

For Clinicians

Debride wounds for people with a pressure injury using an appropriate method of debridement if it is determined as necessary in their assessment, and if it is not contraindicated. Sharp/surgical debridement should be considered first, unless it is contraindicated.

For Health Services

Ensure that health care professionals across settings who care for people with pressure injuries are trained in appropriate methods of wound debridement. This includes providing access to training programs and materials.

Quality Indicators

Process Indicator

Percentage of people with a pressure injury who have their wound appropriately debrided by a trained health care professional if it is determined as necessary in their assessment

- Denominator: number of people with a pressure injury and wound debridement determined as necessary in their assessment
- Numerator: number of people in the denominator who have their wound appropriately debrided (using sharp/surgical, mechanical, or autolytic methods) by a trained health care professional
- Data source: local data collection
- · Potential stratification: patient type

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Contraindication

Inadequate vascular supply.

Appropriate method of debridement

Sharp/surgical debridement should be considered first if there is infection, exudate, and/ or extensive dead tissue, unless there is inadequate vascular supply, and if it is in alignment with the individualized care plan and mutually agreed-upon goals of care. Sharp/surgical debridement may be active/ aggressive (extensive and aggressive removal of tissue) or conservative (removal of loose, dead tissue without pain or bleeding). Other appropriate methods include mechanical and autolytic debridement. Pain should be managed during debridement.

Trained health care professional

The health care professional has training specific to the method of debridement being used.

Local Infection Management

People with a pressure injury and a local infection receive appropriate treatment, including antimicrobial and non-antimicrobial interventions.

Background

All pressure injuries contain bacteria,¹³ but not all are infected or require infection treatment.¹¹ Overuse and inappropriate use of antibiotics may contribute to the development of antibioticresistant bacteria.¹⁹ Topical antibiotics should not be used in the treatment of pressure injuries, because their use may be associated with antibiotic resistance and sensitivities.¹¹ Local infection in a pressure injury may be suspected when three or more of the following signs and symptoms are present: stalled healing or lack of healing (pressure injury is not healing at the expected rate or is growing quickly); increased amount of exudate; skin discolouration, including redness (in the surrounding tissue); increased amount of dead tissue; and foul odour.^{13,20} Treatments for infection include antimicrobial and non-antimicrobial interventions, including optimizing the individual's ability to fight infection.⁸

Sources: Australian Wound Management Association, 2012¹¹ | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³



For Patients

If your wound is infected, you should receive treatment, which may include antibiotics.

For Clinicians

Provide appropriate antimicrobial and non-antimicrobial treatment for people with an infected pressure injury. Avoid using topical antibiotics in the treatment of pressure injuries.

For Health Services

Ensure that systems, processes, and resources are in place to support clinicians in treating people with a pressure injury and a local infection.

Quality Indicators

Process Indicator

Percentage of people with a pressure injury and a local infection who receive appropriate treatment, including antimicrobial and non-antimicrobial interventions

- Denominator: number of people with a pressure injury and a local infection
- Numerator: number of people in the denominator who receive appropriate treatment, including antimicrobial and non-antimicrobial interventions
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Local infection

This is characterized as superficial or local to the skin and subcutaneous tissue.

Treatment

For local infection, treatment may include antimicrobial and non-antimicrobial interventions, and strategies to enable the body to fight infection, such as addressing nutritional deficiencies, glycemic control, increasing arterial blood flow, and reducing immunosuppressant therapy, if appropriate.

Deep/Surrounding Tissue Infection or Systemic Infection Management

People with a pressure injury and suspected deep/ surrounding tissue infection or systemic infection receive urgent assessment (within 24 hours of initiation of care) and systemic antimicrobial treatment.

Background

All pressure injuries contain bacteria,¹³ but not all are infected or require infection treatment.¹¹ Overuse and inappropriate use of antibiotics may contribute to the development of antibiotic-resistant bacteria.¹⁹ Topical antibiotics should not be used in the treatment of pressure injuries, because their use may be associated with antibiotic resistance and sensitivities.¹¹ Deep/surrounding or systemic infection may be suspected when three or more of the following signs and symptoms are present: increased size; elevated temperature in the periwound; ability to probe to bone or the presence of exposed bone; new areas of tissue breakdown; presence of red tissue and swelling or edema; increased exudate; and foul odour.^{13,20} Pain is also a sign of deep infection.

Sources: Australian Wound Management Association, 2012¹¹ | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³



For Patients

If you have a suspected deep/surrounding tissue or systemic infection, you should have an urgent assessment within 24 hours and treatment with antibiotics.

For Clinicians

Carry out an assessment within 24 hours and provide systemic antimicrobial treatment for people with a pressure injury and suspected deep/surrounding tissue infection or systemic infection.

For Health Services

Ensure that systems, processes, and resources are in place to support clinicians in treating people with a pressure injury and suspected deep/surrounding tissue infection or systemic infection.

Quality Indicators

Process Indicators

Percentage of people with a pressure injury and a suspected deep/ surrounding tissue infection who receive an assessment within 24 hours of initiation of care

- Denominator: number of people with a pressure injury and a suspected deep/ surrounding tissue infection
- Numerator: number of people in the denominator who receive an assessment within 24 hours of initiation of care
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Deep/surrounding tissue infection

This is characterized as a deeper wound, such as an abscess, osteomyelitis, septic arthritis, or fasciitis.

Systemic infection

This is characterized as a local infection with signs of systemic inflammatory response syndrome.



PROCESS INDICATORS CONTINUED

Percentage of people with a pressure injury and a suspected systemic infection who receive an assessment within 24 hours of initiation of care

- Denominator: number of people with a pressure injury and a suspected systemic infection
- Numerator: number of people in the denominator who receive an assessment within 24 hours of initiation of care
- Data source: local data collection

Percentage of people with a pressure injury and a confirmed deep/surrounding tissue infection who receive systemic antimicrobial treatment

- Denominator: number of people with a pressure injury and a confirmed deep/ surrounding tissue infection
- Numerator: number of people in the denominator who receive systemic antimicrobial treatment
- Data source: local data collection

Percentage of people with a pressure injury and a confirmed systemic infection who receive systemic antimicrobial treatment

- Denominator: number of people with a pressure injury and a confirmed systemic infection
- Numerator: number of people in the denominator who receive systemic antimicrobial treatment
- Data source: local data collection

Wound Moisture Management

People with a pressure injury receive wound care that maintains the appropriate moisture balance or moisture reduction in the wound bed.

Background

Wound care that maintains moisture balance to promote healing includes cleansing of the wound (tap water is usually sufficient) and selection of a dressing that promotes a moist wound healing environment (for healable ulcers) or moisture reduction (for maintenance ulcers and non-healable ulcers). Cleansing the wound promotes healing by supporting improved wound assessment, increased comfort when adherent dressings are removed, and the potential for rehydration of the wound.¹⁴ There are many options for wound dressings. Selection of these products should be based on patient preference; pain and tolerance; clinical assessment of the wound, including position, size, and depth; frequency of dressing change; and ability to maintain a moist wound bed, control exudate, and avoid skin breakdown of the surrounding skin.^{7,8,11,12,14}

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³

For Patients

Your health care team will determine whether your wound can heal or not. You should have a dressing that keeps the wound moist if it can heal, or dry if it cannot heal.

For Clinicians

For people with a pressure injury, provide wound care that maintains the appropriate moisture balance or moisture reduction in the wound bed. A moist wound environment is appropriate for healable pressure injuries. Moisture reduction is appropriate for maintenance and non-healable pressure injuries.

For Health Services

Ensure that systems, procedures (protocols), and resources are in place to support clinicians in providing wound care that maintains the appropriate moisture balance or moisture reduction in the wound bed.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Moisture management

This is specific to the type of wound:

- Moisture balance and a moist wound environment for healable pressure injuries (pressure injuries that have adequate blood supply and can be healed if the underlying cause is addressed and treated).¹⁴ Note: increased moisture is a sign of infection, which should be treated
- Moisture reduction for maintenance pressure injuries (pressure injuries that have healing potential, but barriers are present that may prevent healing such as lack of access to appropriate treatment and poor adherence to treatment) or non-healable pressure injuries (pressure injuries that are not likely to heal because of nontreatable causes or illnesses)¹⁴



Wound Moisture Management

Quality Indicators

Process Indicators

Percentage of people with a healable pressure injury who receive wound care that maintains the appropriate moisture balance in the wound bed and a moist wound environment

- Denominator: number of people with a healable pressure injury
- Numerator: number of people in the denominator who receive wound care that maintains the appropriate moisture balance in the wound bed and a moist wound environment
- Data source: local data collection

Percentage of people with a maintenance or non-healable pressure injury who receive wound care that maintains the appropriate moisture reduction in the wound bed

- Denominator: number of people with a maintenance or non-healable pressure injury
- Numerator: number of people in the denominator who receive wound care that maintains the appropriate moisture reduction in the wound bed
- Data source: local data collection

Surgical Consultation

People who are adherent to treatment and have a stage 3 or 4 healable pressure injury that is not responding to optimal care are referred for a surgical consultation to determine their eligibility for surgical intervention.

Background

Surgery may be required to repair stage 3 or 4 pressure injuries (based on the National Pressure Ulcer Advisory Panel Pressure Injury Staging System) and promote more rapid healing. When optimal management methods such as management of pressure and shear and local wound care have not been successful, surgical interventions are an important option. Consideration of these interventions should take into account the individual's preferences, medical condition, nutritional status, ability to recover, and likelihood of improvement in quality of life.¹¹

Sources: Australian Wound Management Association, 2012¹¹ | Institute for Clinical Systems Improvement, 2012¹² | National Pressure Ulcer Advisory Panel, 2014⁸



For Patients

If you have a stage 3 or 4 pressure injury that is not healing with optimal care, you should be referred for a surgical consultation to discuss whether or not you are eligible for surgery.

For Clinicians

Refer people who are adherent to treatment but have a stage 3 or 4 healable pressure injury that is not responding to optimal care for a surgical consultation to determine their eligibility for surgical intervention.

For Health Services

Ensure that systems, procedures, and resources are in place to refer people who are adherent to treatment with a stage 3 or 4 healable pressure injury that is not responding to optimal care for a surgical consultation to determine their eligibility for surgical intervention.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Optimal care

This includes management of pressure and shear and local wound care. Operative repair may be required, including flap reconstruction, direct wound closure, or skin grafting if it is in alignment with the individual's condition and goals of care.

Quality Indicators

Process Indicators

Percentage of people with a stage 3 or 4 pressure injury that is not responding to optimal care who are referred for a surgical consultation

- Denominator: number of people with a stage 3 or 4 pressure injury that is not responding to optimal care
- Numerator: number of people in the denominator who are referred for a surgical consultation
- Data source: local data collection

Median time from referral to first surgical consultation for people with a stage 3 or 4 pressure injury that is not responding to optimal care

• Data source: local data collection

Median time from surgical consultation to date of surgery for people with a stage 3 or 4 pressure injury that is not responding to optimal care

Data source: local data collection



Health Care Provider Training and Education

People who have developed or are at risk of developing a pressure injury receive care from health care providers with training and education on the assessment and treatment of pressure injuries.

Background

People who have developed or are at risk of developing a pressure injury benefit from improved outcomes from individualized care by health care professionals who have specific, comprehensive training and education in the appropriate assessment and management of these types of wounds.¹¹ Training and education materials or programs are additional to entry-level programs and should be tailored to providers' roles and responsibilities.

Sources: Australian Wound Management Association, 2012¹¹ | National Institute for Health and Care Excellence, 2014⁷ | National Pressure Ulcer Advisory Panel, 2014⁸ | Registered Nurses' Association of Ontario, 2016¹³



For Patients

You should receive care from a team of health care professionals who have been trained to care for people who have a pressure injury or are at risk for one.

For Clinicians

Ensure that you have the training and education required to effectively provide care (including assessments, strategies for prevention, and treatments) for people who have developed or are at risk of developing a pressure injury, in accordance with your professional role.

For Health Services

Ensure that health care providers caring for people who have developed or are at risk of developing a pressure injury have training and education in how to carry out comprehensive assessments and provide appropriate prevention strategies and treatments.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Risk factors

These include:

- Admission to a health care facility (such as acute care, complex continuing care, rehabilitation, or longterm care)
- · Impaired or limited mobility
- Use of an assistive device, such as a wheelchair
- Use of medical devices, such as tubes
- · Inability to reposition oneself
- Limited ability or inability to feel pain or pressure
- Nutritional deficiency
- Being underweight
- Cognitive impairment
- Past or current pressure injuries

Provider training and education

These should include the following skills and information, at a minimum:

- Techniques for providing effective patient education (Quality Statement 2)
- Information for all health care providers (for prevention of initial ulceration and recurrence) on:



Quality Indicators

Structural Indicator

Local availability of providers trained in the assessment and management of pressure injuries

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Provider training and education (continued)

- How to identify people at risk and complete a skin assessment (Quality Statement 1)
- How to identify pressure damage (Quality Statement 1)
- Methods and actions for preventing new or further damage
- Who to contact for further information
- Assessment and treatment information for health care providers who care for people who have developed or are at high risk for developing a pressure injury, including:
 - How to carry out a comprehensive assessment, including risk and skin assessment (Quality Statements 1 and 3), and individualized care planning (Quality Statement 4)
 - How to support regular repositioning and encouraging people to reposition themselves if they are mobile or helping them to do so if they cannot reposition themselves (Quality Statement 6), and information on support surfaces (Quality Statement 5)
 - Who to contact for advice and support
 - Treatment, including local wound care (Quality Statements 7, 8, 9, and 10)
 - Preventing recurrence

Transitions in Care

People with a pressure injury who transition between care settings have a team or provider who is accountable for coordination and communication to ensure the effective transfer of information related to their care.

Background

Transitions in care involve changes in providers or locations (within and between care settings)²¹ and can increase the risk of errors and miscommunication related to a person's care, which may cause further injury and delay healing.¹² To support coordination and continuity of care, transition planning should be collaborative, involving the person with the pressure injury, their family, and their caregiver(s), and incorporating their individual concerns and preferences.²¹ To support the transfer of accurate information, all providers must document the most up-to-date information in the individualized care plan. A provider or team should be accountable for ensuring the accurate and timely transfer of information on an ongoing basis to the proper recipients as part of a seamless, coordinated transitions.

Source: Institute for Clinical Systems Improvement, 201212



For Patients

When you change health care settings (for example, you return home after being cared for in a hospital), your health care team or health care professional should work with you to make sure that important information is transferred with you, and that you are connected to the supports you need.

For Clinicians

Ensure that people moving between providers or care settings have a person or team responsible for coordinating their care and transferring information.

For Health Services

Ensure that systems, processes, and resources are in place to enable smooth transitions between care settings for people with a pressure injury.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Team or provider

This is the provider or team of providers who have an ongoing role in the coordination and delivery of health care services for the person who has developed a pressure injury. Where possible, this should be a primary care provider or primary care team. Alternatively, an individual at the regional level who is responsible for care coordination could fill this role.

Quality Indicators

Process Indicators

Percentage of people with a pressure injury who transition between care settings and have a team or provider who is accountable for coordination and communication to ensure the effective transfer of information related to their care

- Denominator: number of people with a pressure injury who transition between care settings
- Numerator: number of people in the denominator who have a team or provider who is accountable for coordination and communication to ensure the effective transfer of information related to their care
- Data source: local data collection

Percentage of people with a pressure injury who transition between care settings and report that their team or provider knew about their medical history

- Denominator: number of people with a pressure injury who transition between care settings and answer the question, "During your most recent visit, did this team or provider seem to know about your medical history?"
- Numerator: number of people in the denominator who answer "Yes"
- Data source: local data collection

Percentage of people with a pressure injury who transition between care settings and report that there was good communication between their team and care providers

- Denominator: number of people with a pressure injury who transition between care settings and answer the question, "Do you feel that there was good communication about your care between the team, doctors, nurses, and other staff?"
- Numerator: number of people in the denominator who answer "Usually" or "Always"
- Data source: local data collection

Emerging Practice Statement: Electrical Stimulation

What Is an Emerging Practice Statement?

An emerging practice statement describes an area for quality improvement that has been prioritized by the advisory committee but for which there is insufficient or inconsistent evidence in the guidelines used in the development of the quality statements. An emerging practice statement acknowledges that there is a need for evidence-based guidance to be developed in an area, but the evidence base in this area is still emerging.

Rationale

We cannot provide guidance at this time on the use of electrical stimulation as an adjunct therapy for the treatment of pressure injuries, because of conflicting recommendations in the guidelines used to develop the pressure injury quality statements. While there is a growing body of literature showing that electrical stimulation has positive effects on pressure injury healing, further analysis of the evidence for its effectiveness is needed before a quality statement can be made.

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About Health Quality Ontario

Health Quality Ontario is the provincial advisor on the quality of health care. We are motivated by a single-minded purpose: **Better health for all Ontarians**.

Who We Are

We are a scientifically rigorous group with diverse areas of expertise. We strive for complete objectivity, and look at things from a vantage point that allows us to see the forest and the trees. We work in partnership with health care providers and organizations across the system, and engage with patients themselves, to help initiate substantial and sustainable change to the province's complex health system.

What We Do

We define the meaning of quality as it pertains to health care, and provide strategic advice so all the parts of the system can improve. We also analyze virtually all aspects of Ontario's health care. This includes looking at the overall health of Ontarians, how well different areas of the system are working together, and most importantly, patient experience. We then produce comprehensive, objective reports based on data, facts and the voice of patients, caregivers, and those who work each day in the health system. As well, we make recommendations on how to improve care using the best evidence. Finally, we support large scale quality improvements by working with our partners to facilitate ways for health care providers to learn from each other and share innovative approaches.

Why It Matters

We recognize that, as a system, we have much to be proud of, but also that it often falls short of being the best it can be. Plus certain vulnerable segments of the population are not receiving acceptable levels of attention. Our intent at Health Quality Ontario is to continuously improve the quality of health care in this province regardless of who you are or where you live. We are driven by the desire to make the system better, and by the inarguable fact that better has no limit.

Looking for more information?

Visit our website at **hqontario.ca** and contact us at **qualitystandards@hqontario.ca** if you have any questions or feedback about this guide.

Health Quality Ontario

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