



## Health Quality Ontario Long-Term Care Pressure Ulcers

## **Best Practices**

Updated on December 03, 2015

"Insanity is doing things the way we've always done them and expecting different results" Albert Einstein

**Evidence-informed best practices** are based on quality evidence and should be implemented into practice to optimize outcomes. <sup>10</sup> Listed below you will find best practices graded according to the type of evidence. To view a description of the types of evidence, **click here**.

To help you move from best evidence to best practice, click on the + button next to each best practice to find details on how to implement, as well as change ideas to test using a PDSA approach.

Change ideas are specific and practical changes informed by experience and research that focus on improving specific aspects of a system, process or behaviour. To learn more about change ideas see the QI: Getting Started tab.

#### **EVIDENCE-INFORMED BEST PRACTICES**

### Early identification of Stage 1 pressure ulcers (Assessment)

#### Make Change

Evidence- Informed Best Practice	How To Implement	Toolbox
Early identification of Stage 1 pressure ulcers (Assessment)	<ul> <li>Evaluate the at-risk resident for pressure ulcers using tools such as RAI MDS (PURS) and Braden Scale</li> <li>Early Identification of Stage 1 pressure ulcers to prevent progression</li> <li>Examine each pressure ulcer incident to determine cause and effect to identify contributing factors and prevent worsening</li> <li>Residents who are restricted to bed and/or chair, or those experiencing surgical intervention, should be assessed for pressure, friction and shearing in all positions and during lifting, turning and repositioning</li> <li>Consult with interdisciplinary team to identify required changes to the care plan</li> <li>Provide staff opportunities for education and training (at orientation and regular intervals on best practices related to pressure ulcer identification)</li> </ul>	Risk Assessment and Prevention of Pressure Ulcers Nursing Best Practice Guideline [http://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO) Braden Scale for Predicting Pressure Sore Risk [http://www.veterans.gc.ca/eng/forms/document/292], Veterans Affairs Canada Pressure Ulcer Prevention, Institute for Health Care Improvement Map [http://app.ihi.org/imap/tool/#Process=cbe9c419-f6ae-49ed-8bb5-5d17844796e2], Institute for Healthcare Improvement

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Early identification of Stage 1 pressure ulcers

Type of Evidence: I (High)

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Systematic Reviews

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### Ongoing assessment of pressure ulcers (Assessment)

Evidence- Informed Best Practice	How To Implement	Toolbox
Ongoing assessment of pressure ulcers (Assessment)	<ul> <li>Develop a monitoring system to ensure prevention measures are implemented effectively</li> <li>Consider use of Pressure Ulcer Scale for Healing (PUSH) tool to allow for assessing the progress of healing for existing pressure ulcers</li> <li>Consult with interdisciplinary team to identify required changes to the care plan</li> <li>Provide staff opportunities for education and training (at orientation and regular intervals on best practices related to pressure ulcer identification)</li> </ul>	Pressure Ulcer Scale for Healing (PUSH) Tool [http://www.npuap.org/wp- content/uploads/2012/02/pu sh3.pdf], National Pressure Ulcer Advisory Panel

Ongoing Assessment of Pressure Ulcers

Type of Evidence: IV (Expert Opinion)

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Supporting Research

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# Identify contributing factors to pressure ulcer development to prevent recurrence (*Prevention*)

Evidence- Informed Best Practice	How To Implement	Toolbox
Identify contributing factors to pressure ulcer development to prevent recurrence (Prevention)	<ul> <li>Examine each pressure ulcer incident to determine cause and effect to determine contributing factors and prevent recurrence</li> <li>Consult with interdisciplinary team to identify required changes to the care plan</li> <li>Conduct regular inspections of mobility assistive devices for potential causes of pressure</li> </ul>	Pressure Ulcer Prevention, Institute for Health Care Improvement Map Inttp://app.ihi.org/imap/tool/# Process=cbe9c419-f6ae- 49ed-8bb5-5d17844796e2], Institute for Healthcare Improvement Risk Assessment and Prevention of Pressure Ulcers Nursing Best PracticeGuideline Inttp://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO)

Identify Contributing Factors to Pressure Ulcer Development to Prevent Recurrence

Type of Evidence: IV (Expert Opinion)

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## Establish a regular turning schedule for high-risk residents (*Prevention*)

Evidence- Informed Best Practice	How To Implement	Toolbox
Establish a regular turning schedule for high-risk residents (Prevention)	Minimize pressure through the immediate use of a positioning schedule for residents with an identified risk for pressure ulcer development     Use proper positioning, transferring, and turning techniques     Consult an Occupational Therapist or Physical Therapist (OT/PT) regarding transfer and positioning techniques and devices to reduce friction and shear and to optimize client independence	Risk Assessment and Prevention of Pressure Ulcers Nursing Best PracticeGuideline [http://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO)

Establish a Regular Turning Schedule for High Risk Residents

Type of Evidence: I (High)

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## Use pressure relieving mattresses and pressure relieving padding (*Prevention*)

#### Make Change

Evidence- Informed Best Practice	How To Implement	Toolbox
Use pressure relieving mattresses and pressure relieving padding	Residents at risk of developing a pressure ulcer should use a pressure relieving mattress, such as one with high-density foam	Risk Assessment and Prevention of Pressure Ulcers Nursing Best Practice Guideline [http://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO)  Pressure Ulcer Prevention, Institute for Health Care Improvement Map [http://app.ihi.org/imap/tool/#Process=cbe9c419-f6ae-49ed-8bb5-5d17844796e2], Institute for Healthcare Improvement

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Use Pressure Relieving Mattresses and Pressure Relieving Padding to Prevent Pressure Ulcers

Type of Evidence: I (High)

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### Minimize use of restraints (Prevention)

#### Make Change

Evidence- Informed Best Practice	How To Implement	Toolbox
Minimize use of restraints (Prevention)	Use of restraints should be minimized whenever possible	

#### References

Minimize Use of Restraints

Type of Evidence: III (Low)

References:

Supporting Research

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## Minimize shearing forces (Prevention)

Evidence- Informed Best Practice	How To Implement	Toolbox
Minimize shearing forces (Prevention)	Use of shearing forces should be minmized whenever possible	

Minimize Shearing Forces

Type of Evidence: II (Medium)

References:

Systematic Reviews

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## Use pressure relieving mattresses and pressure relieving padding (*Treatment*)

Evidence- Informed Best Practice	How To Implement	Toolbox
Use pressure relieving mattresses and pressure relieving padding (Treatment)	Ensure consistent use of positioning cushions/aids and pressure relieving surfaces	Risk Assessment and     Prevention of Pressure     Ulcers Nursing Best Practice     Guideline     [http://mao.ca/bpg/guidelines /risk-assessment-and- prevention-pressure-ulcers],     Registered Nurses'     Association of Ontario (RNAO)

Use Pressure Relieving Mattresses and Pressure Relieving Devices

Type of Evidence: I (High)

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## Establish standardized treatment for each pressure ulcer stage (*Treatment*)

#### Make Change

Evidence- Informed Best Practice	How To Implement	Toolbox
Establish standardized treatment for each pressure ulcer stage (Treatment)	Use standardized approach to treating ulcers for each stage using evidence based treatments     Conduct regular (e.g., weekly) high-risk rounds for all residents with ulcers to assess improvement	Pressure Ulcer Treatment: Quick Reference Guide [http://www.epuap.org/gui delines/Final Quick Treat ment.pdf], European Pressure Ulcer Advisory Panel Risk Assessment and Prevention of Pressure Ulcers Nursing Best Practce Guideline [http://mao.ca/bpg/guidelines /risk-assessment-and- prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO)

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Establish Standardized Treatment for each Pressure Ulcer Stage

Type of Evidence: IV (Expert Opinion)

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## Protect and promote skin integrity from excessive moisture and incontinence (*Treatment*)

#### Make Change

Evidence- Informed Best Practice	How To Implement	Toolbox
Protect and promote skin integrity from excessive moisture and incontinence (Treatment)	<ul> <li>Individualize the resident's bathing schedule</li> <li>Avoid hot water and use a pH balanced, non-sensitizing skin cleanser</li> <li>Minimize force and friction on the skin during cleansing</li> <li>Maintain skin hydration by applying non-sensitizing, pH balanced, lubricating moisturizers and creams with minimal alcohol content</li> <li>Use protective barriers (e.g., liquid barrier films, transparent films, hydrocolloids) or protective padding to reduce friction injuries</li> <li>Ensure hydration through adequate fluid intake</li> </ul>	Pressure Ulcer Prevention, Institute for Health Care Improvement Map [http://app.ihi.org/imap/tool/# Process=cbe9c419-f6ae- 49ed-8bb5-5d17844796e2], Institute for Healthcare Improvement Risk Assessment and Prevention of Pressure Ulcers Nursing Best Practice Guideline [http://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO)

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Protect and Promote Skin Integrity from Excessive Moisture and Incontinence

Type of Evidence: IV (Expert Opinion)

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### Minimize pain (Treatment)

#### Make Change

Evidence- Informed Best Practice	How To Implement	Toolbox
Minimize pain (Treatment)	<ul> <li>Manage pain (e.g., effective medication, therapeutic positioning, support surfaces, and other non-pharmacological interventions)</li> <li>Monitor level of pain on an ongoing basis, using a valid pain assessment tool</li> </ul>	Pressure Ulcer Treatment: Quick Reference Guide [http://www.epuap.org/guideli nes/Final_Quick_Treatment.p df_], European Pressure Ulcer Advisory Panel Risk Assessment and Prevention of Pressure Ulcers Nursing Best Practice Guideline [http://mao.ca/bpg/guidelines /risk-assessment-and- prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO)

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Minimize Pain

Type of Evidence: IV (Expert Opinion)

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## Ensure optimal nutrition (Treatment)

Evidence- Informed Best Practice	How To Implement	Toolbox
Ensure optimal nutrition (Treatment)	A nutritional assessment with appropriate interventions should be implemented on entry to any new health care environment and when the client's condition changes	Pressure Ulcer Prevention, Institute for Health Care Improvement Map [http://app.ihi.org/imap/tool/#Process=cbe9c419-f6ae-49ed-8bb5-5d17844796e2], Institute for Healthcare Improvement  Pressure Ulcer Treatment: Quick Reference Guide [http://www.epuap.org/guidelines/Final Quick Treatment.pdf], European Pressure Ulcer Advisory Panel  Risk Assessment and Prevention of Pressure Ulcers Nursing Best Practice Guideline [http://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO)

Ensure Optimal Nutrition

Type of Evidence: IV (Expert Opinion)

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## Employ best practices for bed ridden residents (Treatment)

#### Make Change

Evidence- Informed Best Practice	How To Implement	Toolbox
Employ best practices for bed ridden residents (Treatment)	<ul> <li>Utilize an interdisciplinary approach to plan of care</li> <li>Use devices to enable independent positioning, lifting and transfers (e.g., trapeze, transfer board, bed rails)</li> <li>Reposition at least every 2 hours or sooner if at high risk</li> <li>Use pillows or foam wedges to avoid contact between bony prominences</li> <li>Use devices to totally relieve pressure on the heels and bony prominences of the feet</li> <li>A 30° turn to either side is recommended to avoid positioning directly on the trochanter</li> <li>Reduce shearing forces by maintaining the head of the bed at the lowest elevation consistent with medical conditions and restrictions (A 30° elevation or lower is recommended)</li> <li>Use lifting devices to avoid dragging residents during transfer and position changes</li> <li>Do not use donut type devices or products that localize pressure to other areas</li> </ul>	Risk Assessment and Prevention of Pressure Ulcers Nursing Best Practice Guideline [http://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers], Registered Nurses' Association of Ontario (RNAO) Pressure Ulcer Prevention, Institute for Health Care Improvement Map [http://app.ihi.org/imap/tool/#Process=cbe9c419-f6ae-49ed-8bb5-5d17844796e2], Institute for Healthcare Improvement Pressure Ulcer Treatment: Quick Reference Guide [http://www.epuap.org/guidelines/Final Quick Treatment.pdf], European Pressure Ulcer Advisory Panel

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Employ Best Practices for Bed Ridden Residents

Type of Evidence: IV (Expert Opinion)

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## Measurement

Updated on December 03, 2015

"Some is not a number, soon is not a time."

Don Berwick, former President and CEO of IHI, December 2004, at launch of the 100,000 Lives Campaign

How will we know if a change is an improvement? Measurement is one of the critical steps in a quality improvement (QI) initiative that assesses the impact of your tests of change. **Quality indicators** are used to measure how well something is performing. There are three types of quality indicators used to measure your QI efforts: **outcome** (indicators that capture clinical outcomes and or system performance), **process** (indicators that track the processes that measure whether the system is working as planned), and **balancing** indicators (indicators that ensure that changing one part of the system does not cause new problems in other parts of the system).

		How to Calculate:		
Type of Indicator	Indicator of Quality Improvement	numerator —————	Targets/ Benchmarks	How is This Indicator Used?
		denominator		
Outcome	Percentage of Residents Whose Stage 2 to 4 Pressure Ulcer Worsened	Residents who have a pressure ulcer at stage 2 to 4 on their target assessment and for whom the stage of pressure ulcer is greater on their target assessment than on their prior assessment  Residents with valid assessments	Targets: As low as possible (set by individual homes)  Provincial benchmarks:	Quality improvement  QIP indicator  Publicly reported by HQO

#### **Run Charts**

Collected measures can be presented graphically by plugging the monthly results into run chart.

## **Tools & Resources**

Updated on December 03, 2015

"Knowledge derived from research and experience may be of little value unless it is put into practice."

Dr. Judith Shamian, keynote address at the 11th International Nursing Infomatics Conference, in Montreal, 2011

#### **Tools**

#### **Pressure Ulcers**

- PUSH Tool [http://www.npuap.org/wp-content/uploads/2012/02/push3.pdf]
   To assess the progress of healing of pressure ulcers. National Pressure Ulcer Advisory Panel
- Braden Scale for Predicting Pressure Sore Risk [http://www.veterans.gc.ca/eng/forms/document/292]
   Veterans Affairs Canada

#### **QI Tools**

- Communications Plan: Instructions, Tool
- Fishbone Template: Instructions, Tool
- Five Whys: Instructions, Tool
- Measurement Plan Template: Instructions, Tool
- Pareto Chart: Instructions, Tool
- PDSA Template
- Project Charter
- Tree Diagram Worksheet

For a more comprehensive list of tools and resources, visit the following links on our HQO website:

HQO Tools and Resources [http://www.hqontario.ca/quality-improvement/tools-and-resources/]

#### Resources

#### **Pressure Ulcers**

- Best Practice Guidelines for Risk Assessment and Prevention of Pressure Ulcers
  [http://mao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers]
  Registered Nurses' Association of Ontario (RNAO)
- Client Centred Care Supplement [http://rnao.ca/sites/maoca/files/storage/related/933 BPG CCCare Supplement.pdf]
   Nursing Best Practice Guideline, Registered Nurses' Association of Ontario (RNAO)
- Pressure Ulcer Treatment: Quick Reference Guide [http://www.epuap.org/guidelines/Final\_Quick\_Treatment.pdf]
   European Pressure Ulcer Advisory Panel. (2009)
- Pressure Ulcer Prevention, Institute for Health Care Improvement Map [http://app.ihi.org/imap/tool/#Process=cbe9c419-f6ae-49ed-8bb5-5d17844796e2]
   by Selected Characteristics, 2005-2006, Canadian Institute for Health Information

#### **QI** Resources

• Interpreting Run Charts

Health Quality Ontario

- Model for Improvement (Clip 1) [http://www.youtube.com/watch?v=SCYghxtiolY]
   Institute for Healthcare Improvement
- Model for Improvement (Clip 2) [http://www.youtube.com/watch?v=6MlUqdulNwQ&feature=reImfu] Institute for Healthcare Improvement
- PDSA Cycle Video (Part 1) [http://www.youtube.com/watch?v=\_-ceS9Ta820&feature=youtu.be]
   Institute for Healthcare Improvement
- PDSA Cycle Video (Part 2) [http://www.youtube.com/watch?v=eYoJxjmv\_Ql&feature=relmfu]
   Institute for Healthcare Improvement
- The run chart: a simple analytical tool for learning from variation in healthcare processes [http://www.ncbi.nlm.nih.gov/pubmed?term=%E2%80%A2%09The run chart%3A a simple analytical tool for learning from variation in healthcare processes]

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## **Background**

Updated on December 03, 2015

#### **Issue**

A **pressure ulcer**, also referred to as a pressure sore, bedsore and decubitus ulcer, is defined as a localized injury to the skin and/or underlying tissue occurring most often over a bony prominence and caused by pressure, shearing, or friction, alone or in combination. Pressure ulcers are graded or staged along a 4-point classification system denoting severity. Stage I (1) represents the beginnings of a pressure ulcer and stage IV (4), the severest grade, consists of tissue loss with exposed bone, tendon, and or muscle. 1

While the causes of pressure ulcers can vary, early assessment, prevention and treatment are all essential if pressure ulcers incidence is to be reduced. The *Long-Term Care Homes Act, 2007*, requires all homes in Ontario to have a wound care program to promote skin integrity, prevent the development of wounds and pressure ulcers, and provide effective skin and wound care interventions.<sup>2</sup> To support your quality improvement efforts, this site includes pressure ulcer evidence informed best practices and change ideas for long-term care homes who aim to improve the incidence and prevalence of pressure ulcers.

#### **Call to Action**

Pressure ulcers can be painful and undermine function, mobility, and quality of life.<sup>3</sup> As well, the interventions to treat them are a significant financial burden to the health care system.<sup>3</sup> More importantly, pressure ulcers are avoidable with a greater focus on prevention. In 2012, 2.6% of LTC residents experienced a new pressure ulcer (stage 2 or higher) and 3% had a pressure ulcer that recently got worse.<sup>5</sup>

Ontario is the first jurisdiction that publicly reports quality indicators for long-term care homes. Measuring and monitoring efforts is essential in quality improvement. The tools and information provided in this resource focus on the process of quality improvement for long-term care homes however, the ultimate goal is to provide residents with the best possible care.

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