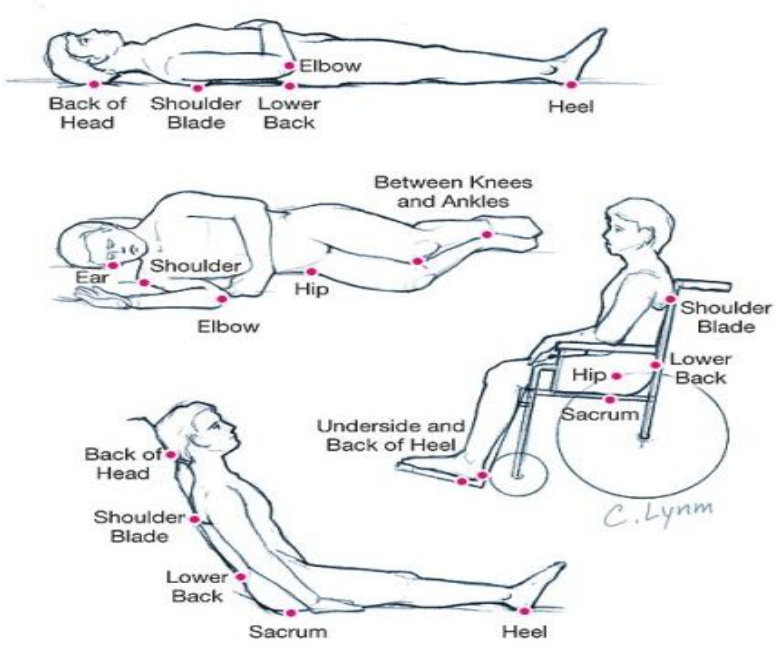
Developed in collaboration with the Wound Care Champions, Wound Care Specialists, Enterostomal Nurses, and South West Regional Wound Care Program (SWRWCP) members from Long Term Care Homes, Hospitals, and South West Community Care Access Centre contracted Community Nursing Agencies in the South West Local Health Integration Network.	
Title	**Guideline: The Assessment People with Pressure Injuries**

Background	• In Canada, pressure injury prevalence is estimated to be 25.1% in acute care, 29.9% in non-acute care settings, and 15.1% in community care[1]
	• One month of care in the community for a pressure injury costs roughly $9,000[2]
	• "A pressure injury is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear"[3]
	  ○ Pressure[7]: the perpendicular force that is applied to the skin distorting and compressing underlying soft tissues, especially over bony prominences
	  ○ Shear[7]: force generated when the ski is moved against a fixed surface such as a bony skeleton moving in an opposite direction to the skin surface
	  ○ Friction[7]: a resistance to movement created between two surfaces
	• Pressure Injuries most often occur over bony prominences, but can occur anywhere on the body where undue pressure +/- friction/shear are present (see the figure below for frequent pressure injury locations):
	 
	
	Figure: Common Locations for Pressure Injuries (Image from okahomalawyer.com)

	• The most prevalent location for a pressure injury is the sacrum (60%) • Intrinsic risk factors (i.e. physical and psychological characteristics that cannot be altered independently) such as impaired tissue oxygenation/cardiopulmonary dysfunction, hypovolemia, body edema/anasarca, peripheral vascular disease, diabetes, neuromuscular conditions, autoimmune diseases, renal disease, cerebral palsy, cancer, extremes of age, end of life and body habitus can increase the susceptibility of a person's skin to pressure, friction, and shearing forces • Extrinsic risk factors (i.e. factors external to the individual, which, in many instances, can be altered) such as immobility, malnutrition, hospital length of stay, smoking, substance use, use of medications known to interfere with wound healing, medical devices, behaviors, and moisture can increase the susceptibility of a person's skin to pressure, friction, and shearing forces • Iatrogenic risk factors such as inappropriate dressing selection/use, prolonged surgical procedures (i.e. greater than four hours), radiation, and perioperative analgesia increase the susceptibility of a person's skin to pressure, friction, and shearing forces • Avoidable pressure Injuries occur when a healthcare institution did not do one or more of the following[6]: o Evaluate the persons clinical condition and pressure injury risk factors; o Define and implement interventions consistent with the person's needs, goals, and the recognized standards of practice, and/or; o Monitor and evaluate the impact of interventions and revise the interventions as appropriate. • Unavoidable pressure Injuries occur despite the fact that a healthcare institution did the aforementioned[6]. The following consensus statements describe situations where pressure Injuries may be unavoidable[4]: o When an individual's cardiopulmonary status is significantly altered and recovery to baseline does not occur within minutes o When an individual is repositioned and alterations in hemodynamic stability require ongoing vasopressor support o When sustained head of bed of greater than 30 degrees elevation is medically necessary o Septic shock and/or systemic inflammatory response syndrome o Extensive body edema o Severe burn injury o In hemodynamically unstable or critically ill/injured individuals, when management of life-threatening conditions must take precedence over skin-preservation interventions

	○ Immobility ○ When life-sustaining, vascular access, or other medical devices preclude turning and/or repositioning ○ An unstable pelvic fracture or spinal cord injury that precludes turning an individual ○ Terminally ill individuals who become immobile ○ Individuals with malnutrition in combination with multiple comorbidities ○ Individuals with cachexia ○ A medical device related unavoidable pressure injury can occur in situations where it would be medically contraindicated to adjust, relocate or pad underneath a therapeutic medical device • A Kennedy Terminal Injury is a type of pressure injury that some develop as they are actively dying. It can be shaped as a pear, butterfly, or horseshoe, and is usually found on the coccyx or sacrum, but can occur in other areas. These Injuries can appear as red, yellow or black, occur suddenly, and usually indicate that death is imminent[4]
Indications	This guideline is intended to be used by front line registered health care providers, to guide their assessment of individuals presenting with a pressure injury.
Guideline	**NOTE: The assessment and management of a person with a pressure injury follows "The SWRWCP's Pressure Injury Assessment and Management Algorithm".** 1. Upon discovery of a person with a pressure injury or upon admission of a person with such a wound to your health care facility/service, conduct a history and focused physical assessment, using the SWRWCP's "Initial Wound Assessment Form" (see "Procedure: Initial Wound Assessment Form"), if not already done, to determine the persons: a. Health/medical history (and the persons understanding of) b. Nutritional status c. Wound history d. Wound and treatment related pain and quality of life (pain can be an indicator of infection) e. Extrinsic, intrinsic, and iatrogenic factors affecting wound healing f. Concordance concerns This form contains the "Nestle Mini Nutritional Assessment (MNA©) Tool" to evaluate whether the person is malnourished or at risk for malnourishment, which can negatively affect wound healing (see "Procedure: Nestle Mini Nutritional Assessment (MNA©) Tool"). ***NOTE: Individual permission must be obtained by each organization wishing to use the MNA©*** 2. Complete the "Braden Scale for Predicting Pressure Sore Risk" tool

	(for people aged 8+) or the "Braden Q Scale" (for children under eight years of age), see "Procedure: Predicting Pressure Sore Risk in Adults and Children". These tools will cue the assessor to look at factors such as mobility, activity, sensory perception, moisture, nutrition, and friction/shear as it pertains to that person's pressure sore risk/development. In addition assess the persons understanding of the wound and their risk factors 3. Conduct a psychosocial assessment to determine the: a. Person's goals, preferences for treatment, and motivation to comprehend and adhere to the plan of care b. The impact of the wound on the person, their quality of life and the person's body image c. Financial concerns and availability of support systems to address concerns d. The impact of the persons environment, physical/medical/psychosocial factors, and end-of-life goals on their care, as applicable 4. Review the "Interdisciplinary Pressure Injury Contributing Factors Assessment Tool" (see "Procedure: Interdisciplinary Pressure Injury Contributing Factors Assessment Tool"), or request an Occupational or Physiotherapist to complete the form if you do not have the skill to do so, if the form has not previously been completed, to determine the person's neurological conditions, bowel and bladder control, use of pressure redistribution aides, the person's activity in the past 24 hours, and to systematically physically assess the persons: a. Mobility and function, and; b. Posture and joint function. 5. If the presenting pressure injury is located on the feet or lower legs of the individual, complete the "Interdisciplinary Lower Leg Assessment Form" (see "Procedure: Interdisciplinary Lower Leg Assessment Form"), or review the form if one has been previously completed, to rule out vascular compromise 6. Assess the wound using the "NPUAP PUSH Tool 3.0" (see "Procedure: NPUAP PUSH Tool 3.0"). A comprehensive reassessment using the same tool should be completed weekly at a minimum to determine the wound progress and the effectiveness of the treatment plan. ***NOTE: Wound measurements (length and width) should be recorded on admission and at least weekly, with a calculation performed weekly to determine the percentage reduction in wound size since admission/occurrence*** 7. Assess the wounds moisture balance as the per the "Guideline: The Assessment and Management of Moisture in Acute and Chronic Wounds" 8. Assess the wound for signs/symptoms of increased bacterial burden, as per "Guideline: Assessment and Management of Bacterial Burden in Acute and Chronic Wounds", using the "Bioburden Assessment

	Tool" (see "Procedure: Bioburden Assessment Tool"). ***NOTE: you may wish to consider radiology to rule out osteomyelitis if the wound probes to bone. NOTE: visible evidence of infection may be muted or non-existent due to compromised arterial blood flow in arterial leg Injuries and in diabetic foot Injuries*** 9. Assess to determine if wound debridement is warranted, as per the "Guideline and Procedures: Wound Debridement (excluding conservative sharp debridement)" 10. Stage the person's pressure injury using the "NPUAP Staging System for Pressure Injuries" (see "Procedure: NPUAP Staging System for Pressure Injuries"). ***NOTE: pressure Injuries can NOT be back staged*** 11. Determine the healability of the persons pressure injury based on your holistic assessment, the persons/caregivers willingness to participate in and adhere to the plan of care, and based on the results of use of the "Determining Healability Tool" (see "Procedure: Determining Healability Tool"). Choose the most appropriate wound healing goal: a. Healable b. Maintenance c. Non-healable/palliative 12. Once you have completed a thorough assessment of the person and their pressure injury and have determined its 'healability', you may proceed towards management interventions, as outlined in "Guideline: The Management of People with Pressure Injuries".
References	1. Woodbury MG, Houghton PE. Prevalence of pressure ulcers in Canadian health care-settings. Ostomy Wound Management. 2004;50, 22-38. 2. Allan J, Houghton PE. Electrical stimulation: A case for a stage III pressure ulcer. Wound Care Canada. 2004:2, 34-36 3. European Pressure Ulcer Advisory Panel, National Pressure Ulcer Advisory Panel. International guideline: Prevention of pressure Ulcers: Quick reference guide. 2009. Available at: http://npuap.org/Final_Quick_Prevention_for_web_2010.pdf. Accessed March 27, 2011. 4. Sibbald RG, Krasner DL, Lutz JB, et al. The SCALE expert panel: Skin changes at life's end. Preliminary Consensus Document. September 2008. 5. Association for the Advancement of Wound Care. AAWC Guideline of Pressure Ulcer Guidelines. Accessed from: aawconline.org/profession-resources/resources/ 6. Black J, et al. Pressure Ulcers: Avoidable or unavoidable? Results of the National Pressure Ulcer Advisory Panel Consensus Conference. Ostomy Wound management. 2011;57(2):24-37 7. Bergstrom N, Horn SD, Rapp MP, et al. Turning for ulcer reduction: a multisite randomized clinical trial in nursing homes. J Am Geriatr Soc. 2013;61:1705-1713.

Related Tools (NOTE: these tools and their instructions can be found on the SWRWCP's website: swrwoundcareprogram.ca)	• The SWRWCP's Pressure Injury Assessment and Management Algorithm • Initial Wound Assessment Form • Procedure: Initial Wound Assessment Form • Nestle Mini Nutritional Assessment (MNA©) Tool • Procedure: Nestle Mini Nutritional Assessment (MNA©) Tool • Braden Scale for Predicting Pressure Sore Risk • Braden Q Scale • Procedure: Predicting Pressure Sore Risk in Adults and Children • Interdisciplinary Pressure Injury Contributing Factors Assessment Tool • Procedure: Interdisciplinary Pressure Injury Contributing Factors Assessment Tool • Interdisciplinary Lower Leg Assessment Form • Procedure: Interdisciplinary Lower Leg Assessment Form • NPUAP PUSH Tool 3.0 • Procedure: NPUAP PUSH Tool 3.0 • Guideline: The Assessment and Management of Moisture in Acute and Chronic Wounds • Guideline: Assessment and Management of Bacterial Burden in Acute and Chronic Wounds • Guideline and Procedures: Wound Debridement (excluding conservative sharp debridement) • Bioburden Assessment Tool • Procedure: Bioburden Assessment Tool • NPUAP Staging System for Pressure Injuries • Procedure: NPUAP Staging System for Pressure Injuries • Determining Healability Tool • Procedure: Determining Healability Tool • Guideline: The Management of People with Pressure Injuries