

UNDER PRESSURE: DEFINING ROLES IN PRESSURE ULCER PREVENTION AND MANAGEMENT

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The mean prevalence of pressure ulcers in the Canadian Health Care System is twenty-five percent¹. Prevalence rates vary by setting¹:

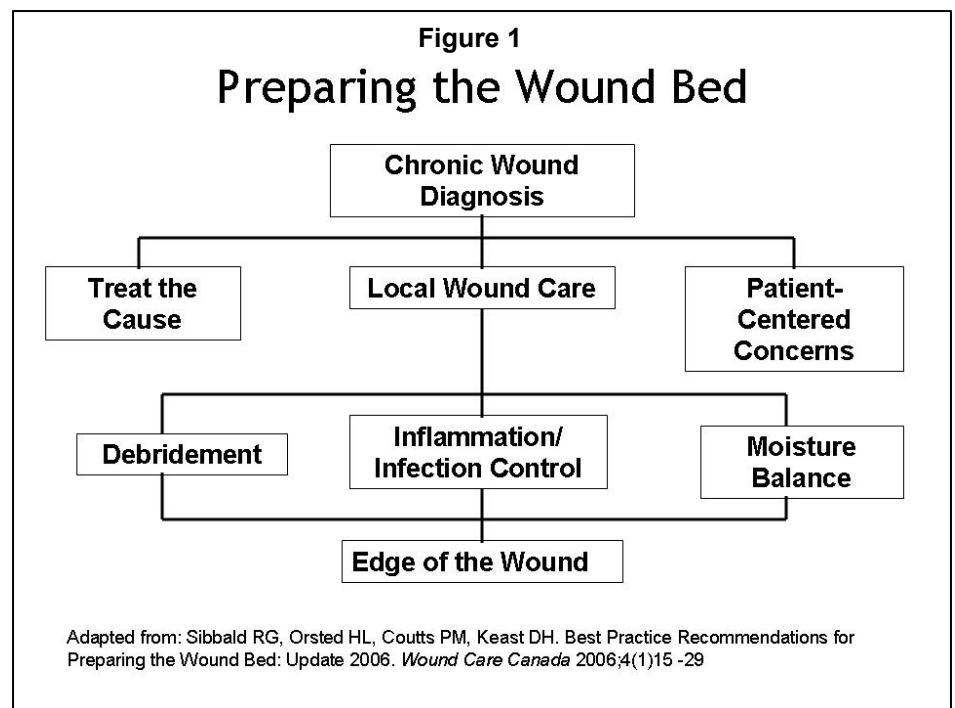
- 25% in acute care,
- 30% in non-acute care,
- 22% in mixed health-care settings, and
- 15% in community care

“These figures translate into untold patient suffering, caregiver anguish, extra work for health-care providers, and millions spent in health-care dollars—all for a largely preventable condition.”² Considering these facts, pressure ulcer prevention and management should be a priority for health care professionals in all sectors, however this is not always the case. Every member of the health care team including the client, caregiver, therapist, vendor and administrator has a role to play in the prevention and management of pressure ulcers.

The Preparing the Wound Bed Paradigm³ defines three domains which must be optimized to manage a pressure ulcer: treat the cause, local wound care and patient centred concerns (see Figure 1). To optimize healing, each one of these areas needs to be addressed. Under this model, choosing the appropriate seating to manage pressure, selecting the right dressing and empowering the client are equally important.

Building on this model, the Canadian Association of Wound Care developed 12 Best Practice Recommendations⁴ specifically related to the

prevention and management of pressure ulcers. By examining each recommendation, health care providers can define their own role in preventing and managing pressure ulcers.



	Recommendations⁴
Treat the Cause	1. Complete patient history and physical examination to determine general health and risk factors that may delay healing.
	2. Assess and modify situations where pressure may be increased (e.g., when seated or lying down).
	3. Maximize nutritional status.
	4. Control moisture and incontinence.
	5. Maximize activity and mobility, reducing or eliminating friction and shear.

Assistive technology can impact every aspect of the client's life. Taking a thorough client history will assist the clinician and sales representative to determine the piece of equipment which would fit best with the client's needs. Seating and mobility equipment, as well as other surfaces such as commodes, therapeutic support surfaces, transfer boards etc, can also be a source of pressure and shear and must be examined to ensure these forces are minimized.

Assessment should include every surface on which the client sits or lies, and include an investigation of the forces of pressure and shear. Modification of the surface or changing the activity to reduce these forces should begin where the client spends the most time or where the forces are the highest. Surfaces can be modified with foam, gel or air to help manage the pressure. Changing activities may include having a bed bath rather than a shower on a commode if the commode is causing areas of high pressure.

Nutritional status may be impacted by the client's posture and independence with feeding. Improving independence through a supported posture, or recommending assistive devices (e.g. large grip spoon) may assist the client to meet their nutritional needs more independently. The importance of fluid intake can not be underestimated so setting up the client's environment so they can access water or other fluids as appropriate is critical. Including a simple cup holder in the prescription of a mobility aid will also help to ensure appropriate fluid intake by providing ready access to fluids.

Managing moisture and incontinence can occur through the choice of incontinence products and dressings, but also through the choice of covers on seating components. These covers should wick moisture away from the client's skin to help keep the skin dry. Moist, macerated skin is much more at risk for breaking down.

	Recommendations⁴
Address patient concerns	6. Assess and control pain.
	7. Assess and assist with psychosocial needs and develop a patient-centred plan.

The selection of an appropriate seating system in conjunction with dynamic positioning devices may help to reduce the client's pain. If pain occurs during a specific activity e.g. with sitting, transferring etc., taking an analgesic 30 minutes before the activity may be helpful.

Getting the client up more frequently and assisting them to engage in life may improve the client's outlook. Stress has been shown to lower the immune system. Involving the client and ensuring that they are part of the decision making process around their seating and mobility goals will empower the client to make realistic choices, and adhere to those choices. For example, if the client wants their wound to heal, but doesn't want to have their seating assessed, providing information regarding the impact of poor seating is a first step. This will help to give the client the insight that by choosing not to have a seating assessment they may also be choosing not to have the wound heal at the optimum rate.

	Recommendations ⁴
Provide local wound care	8. Stage, assess, and treat the wound to provide an optimal wound environment consistent with the principles of Preparing the Wound Bed
	9. Introduce adjunctive modalities or biologically active dressings where appropriate
	10. Consider surgical intervention for deep non-healing ulcers (Stage III and IV).

While the team assessing the client and providing assistive technology may not be directly involved in the local wound care, it is important for the team to be aware of this aspect. For example, certain dressings may contribute to increased pressure over the wound or surrounding structures. Often referrals for changes to the seating system or other support surfaces occur when the wound is not healing at the expected rate. It is important to ensure that the local wound care is optimized before changing the surface, as the surface may not be a contributing factor to the lack of healing.

One adjunctive modality shown to be effective in the treatment of pressure ulcers is Electrical Stimulation. In some cases the electrodes may be part of the dressing applied to the wound area. This technique may allow the client to administer their own treatment on a predetermined schedule. The placement of these electrodes and their type also need to be considered when determining the management of pressure and shearing forces.

	Recommendations ⁴
Provide organizational support	11. Develop an interdisciplinary team specific to the needs of the patient
	12. Educate patients, caregivers, and health care providers on the prevention and treatment of pressure ulcers.

Establishing an interdisciplinary team, whether within the walls of a facility or through networking within the community tends to decrease the incidence of pressure ulcers. Involving, as appropriate, health care providers, manufacturers and vendors concerned with the prescription of assistive technology can enrich the team and provide increased access to knowledge regarding support surfaces, transfer techniques and other information which would enhance the client care plan.

The incidence and prevalence of pressure ulcers also decreases with the provision of education on the prevention and treatment of pressure ulcers. Giving front line staff information about practical

ways to decrease pressure and shearing forces as well as identifying the indications for a referral for an assessment will help caregivers to respond to changes in their client's skin more rapidly.

Summary

The Canadian Association of Wound Care Best Practice Recommendations for Pressure Ulcers⁴ serves as a guideline for health care providers to define their role in pressure ulcer care. Identifying this role and applying it in our day to day practice will help to reduce the prevalence of pressure ulcers in Canada. We all have a role to play. What will you do?

References

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4. Keast DH, Parslow N, Houghton PE, Norton L, Fraser C. Best Practice Recommendations for the Prevention and Treatment of Pressure Ulcers: Update 2006. Wound Care Canada. 2006; 4(1):31--42.

Speaker Bio

Linda is an Occupational Therapist who is a co-author of the Canadian Association of Wound Care Best Practice Recommendations for Pressure Ulcers, and was a team member for the Registered Nurses Association Guidelines for the Assessment and Treatment of Stage I-IV Pressure Ulcers. She is a faculty member at two Ontario Universities, and is currently working on her Masters of Health Science at University of Toronto. She has presented numerous workshops across North America and is the Rehabilitation Education Coordinator with Shoppers Home Health Care.