STANDARD GUIDELINE: Pressure Injury Prevention and Treatment

Program Area: Across Care Areas

Section: General

Reference Number: CLI.4110.SG.002

Approved by: Regional Lead – Acute Care & Chief Nursing Officer

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### **PURPOSE:**

- Pressure injuries continue to be a significant health concern as the population ages and the complexity of care increases across all care settings. Early identification of persons at risk for pressure injury development and prompt intervention remains key to pressure injury prevention.
- Early identification of **At Risk** clients is important to prevent the development of pressure injuries. This includes a standardized risk assessment.
- Clients, caregivers and families are involved in pressure injury prevention and management strategies.
- > A multidisciplinary approach is required for pressure injury prevention and treatment.
- Wound healing is accelerated by minimizing risk factors, providing an optimum environment for wound healing and addressing the cause of the wound.
- This guideline is based on current research and is revised as new evidence is published.
- > Diabetic foot ulcers as defined by Wounds Canada are excluded from this risk guideline.

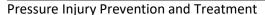
#### **DEFINITIONS:**

**Active Support Surface** - a powered surface with the capability to change its load distribution properties, with or without applied load.

**Braden Scale** - a universally accepted tool to help professionals identify individual clients who may be at risk for developing pressure injuries. This tool has been tested for reliability and validity.

Capillary Closing Pressure - the amount of pressure required to close capillaries, impairing blood flow to tissue and resulting in tissue anoxia and eventual cell death. It is often measured to be between 28-32 mmHg in healthy individuals. The amount of pressure required decreases to 12 or lower in compromised individuals.

**Diabetic Foot Ulcer** - are most commonly seen on weight bearing surfaces. Foot deformities common in patients with diabetes can accentuate bony prominences and predispose the patient to pressure and the development of ulcers. Poor fitting shoes and the lack of protective sensation further exacerbate this problem. Common locations of diabetic foot ulcers include the plantar surface at the hallux, 1st metatarsal joint, heel (and tarsus region in **Charcot foot**), nail fold, nail bed and on the bottom, tips or between toes. If there is a question of whether the wound is a pressure injury or a Diabetic Foot Ulcer consult a Wound Clinician.



CLI.4110.SG.002

**Moisture Associated Skin Damage (MASD)** - caused by prolonged exposure to various sources of moisture, including urine or stool, perspiration, wound exudate, mucus, saliva, and their contents. MASD is characterized by inflammation of the skin, occurring with or without erosion or secondary cutaneous infection.

**Pressure Injury** - localized damage to the skin and/or underlying soft tissue usually over a bony prominence, or related to a medical or other device. The injury can present as intact skin or an open ulcer, and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue.

**Pressure (Interface Pressure)** - the force per unit area that acts perpendicularly between the body and the support surface. It is affected by the stiffness and thickness of the support surface, the composition of the body tissue, and the geometry of the body being supported.

#### **Pressure Redistribution:**

- Pressure Reducing Surfaces surfaces that lower the interface pressure as compared to a standard hospital mattress or chair surface but do not consistently reduce pressure to less than capillary closing pressure.
- Pressure Relieving Surfaces surfaces that consistently lower interface pressure below capillary closing pressure.

**Support Surface** - special beds, mattresses, mattress overlays or seat cushions used for pressure redistribution.

**Wound Assessment & Treatment Form (WATF)** - a tool used as a means of standardizing wound assessment and documentation of wound status. The WATF is used to document the wound characteristics and is completed during the initial evaluation. The WATF is used:

- At every dressing change.
- Wound measurements are completed a minimum of weekly, or at the discretion of the health provider once the wound becomes chronic (i.e. more than six weeks old), depending on changes in the wound.

In order to properly use the tool, clinicians must develop some competency in wound assessment skills and vocabulary.

### PRESSURE INJURY PREVENTION, ASSESSMENT AND MANAGEMENT ALGORITHM

Assess and/or Reassess 2 Set Goals · Assess the patient, the wound (if applicable), as prevention · quality of life and healing well as environmental and system challenges. non-healing symptom control · Identify risk and causative factors that may · non-healable impact skin integrity and wound healing. 5 Evaluate Outcomes 3 Assemble the Team **Goals Partially Met** · Select membership based on patient need. · Ensure sustainability. or Not Met: ✓ Cycle is completed reassess Establish and Implement a Plan of Care · Establish and implement a plan of care that addresses: · the environment and system · the patient • the wound (if applicable) • Ensure meaningful communication among all members of the team. · Ensure consistent and sustainable implementation of the plan of care. Provide Local Skin/Wound Care (if applicable) Cleansing/ **Bacterial** Moisture debridement: balance: balance: · Remove debris · Rule out or treat · Ensure adequate and necrotic or superficial/ hydration. indolent tissue, spreading/ if healable. systemic infection. Select appropriate dressing and/or advanced therapy

Figure 2: The Wound Prevention and Management Cycle

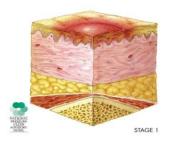
 $Foundations \ of \ Best \ Practice \ for \ Skin \ and \ Wound \ Management \ | \ Best \ Practice \ Recommendations \ for \ the \ Prevention \ and \ Management \ of \ Wounds \ | \ 7$ 

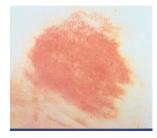
Wound Canada 2017

**National Pressure Injury Advisory Panel (NPUAP)** - Pressure injuries are staged according to the National Pressure Ulcer Advisory Panel (NPUAP) injury severity guidelines, 2019. Staging can only occur after necrotic tissue has been removed allowing complete visualization of the injury bed.

# Stage 1 Pressure Injury - Non-blanchable erythema of intact skin

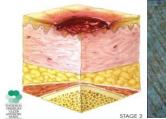
Intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.





# Stage 2 Pressure Injury - Partial-thickness skin loss with exposed dermis

Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe moisture associated skin damage (MASD) including incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARSI), or traumatic wounds (skin tears, burns, abrasions).





# Stage 3 Pressure Injury - Full-thickness skin loss

Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunneling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.





### Stage 4 Pressure Injury - Full-thickness skin and tissue loss

Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.





# Unstageable Pressure Injury - Obscured full-thickness skin and tissue loss-dark eschar

Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3, Stage 4 or Unstageable pressure injury will be revealed. Stable eschar (i.e. dry, adherent, and intact without erythema or fluctuance) on an ischemic limb or the heel(s) should not be removed.





# Deep Tissue Pressure Injury - Persistent non-blanchable deep red, maroon or purple discoloration

Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures is visible, this indicates a full thickness pressure injury (Stage 3, Stage 4 or unchangeable). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.





**Medical Device Related Pressure Injury** - Medical device related pressure injuries result from the use of devices designed and applied for diagnostic or therapeutic purposes. The resultant pressure injury generally conforms to the pattern or shape of the device. The injury should be staged using the staging system.

**Mucosal Membrane Pressure Injury** - Mucosal membrane pressure injury is found on mucous membranes with a history of a medical device in use at the location of the injury. Due to the anatomy of the tissue these injuries cannot be staged.

Pressure injury staging is only appropriate for defining the maximum anatomic depth of tissue damage. *Reverse* staging is not appropriate to measure pressure injury healing.

#### PROCEDURE:

#### 1. Risk Assessment

- The client's risk for pressure injury development is determined by a combination of clinical judgment and the use of a valid reliable risk assessment tool. The Braden Scale for Predicting Pressure Injuries (CLI.4110.SG.002.FORM.01) is the tool used in Southern Health-Santé Sud.
- Assess for intrinsic/extrinsic risk factors that are associated with the development of pressure injuries.
- These include but are not limited to:
  - Intrinsic factors decreased mobility, poor nutrition, altered skin perfusion, decreased sensation, increased age, coexisting health conditions, impaired cognition, body build, and previous pressure injury.
  - Extrinsic factors failure to recognize risk, inadequate treatment protocols, trauma from client handling techniques, positioning techniques, inadequate hygiene, medications.
- Consider any person with spinal cord injury at high risk for pressure injury, irrespective of their score on the Braden Scale.
- If any of the major risk factors are present, advance to the next level (to draw the clinician's attention to these risk factors, this area on the form has been highlighted)

The **Braden Scale is** completed on admission and then repeated at regular intervals.

### **Critical Care**

- On admission.
- Every 24 hours thereafter.
- When a change in condition occurs.

# Acute Care (excluding obstetrics unless clinically indicated)

- On admission.
- 48 hours after initial assessment.
- Weekly thereafter.
- ➤ When a change in condition occurs.

# **Long Term Care / Transitional Care**

- On admission.
- Weekly for the first 4 weeks.
- Quarterly thereafter.
- When a change in condition occurs.

#### **Home Care**

- On admission.
- Weekly for the first three (3) weeks after hospital discharge for clients who score 18 or under on the Braden Scale then
  - O Quarterly if Very High Risk (9 or less) or High Risk (10-12).
  - o Annually and when a change in condition occurs (e.g. incontinence).
- ➤ When assessing and/or re-assessing for a therapeutic sleep surface.

# 2. Care Plan

Care plans are developed and interventions planned for clients with a Braden category score of  $\underline{18}$  or less. These tools help to identify strategies that may be implemented based on client assessment and individualized need. This information is transferred to the Care Plan/Kardex as applicable. **Acute** 

### Care, Critical Care, Long Term Care, Transitional Care

- ➤ A Pressure Injury Prevention and Management Intervention Checklist (CLI.4110.SG.002.FORM.02) or,
- ➤ Braden Scale Standard Care Plan (CLI.4110.SG.002.FORM.04).

#### **Home Care**

➤ The Pressure Injury Prevention and Management Individualized Care Plan – Home Care (CLI.4110.SG.002.FORM.03).

### 3. Skin Assessment

### Nursing

- Critical thinking and sound nursing judgment are used in deciding the appropriateness and frequency of skin assessment. It is the responsibility of the nurse to determine how frequently skin assessment/observation is done based on the Braden score. The nurse updates the Integrated Care Plan, Care Plan, and Kardex accordingly.
- A comprehensive head to toe, front to back, skin assessment is carried out with all clients at admission, and at least daily thereafter for those identified with a Braden Score of 18 or less and at least weekly for those identified with Braden Score of 19 or greater.
- Skin is inspected for localized heat, edema, or induration (hardness), especially in individuals with darkly pigmented skin.
- Skin assessment is documented on the admission record/nursing admission history and on the appropriate document thereafter (may include Integrated Progress Notes). Wounds documented on the CLI.4110.SG.013.FORM.01 Wound Assessment and Treatment Form
- Assess for discomfort and/or pain that can be attributed to pressure damage.
- Particular attention is paid to vulnerable areas, especially over bony prominences and skin adjacent to external devices.
- Inspect the skin under and around medical devices at least once per shift for the signs of pressure related injury on the surrounding tissue.

# **Health Care Aide Skin Observation**

## **Long Term Care and Acute/Transitional Care Units**

- ➤ The Health Care Aide (HCA) inspects skin daily for clients determined to have a Braden Score of 18 or less. For these clients, the HCA completes the Health Care Aide Skin Observation Form (CLI.4110.SG.002.FORM.05) weekly on bath/shower day.
- ➤ The HCA documents in the Section A of the form if no concerns are observed.
  - o If a skin problem is identified, Section B of the form is completed by the HCA.
  - o The form is directed to the nurse who is responsible for the care of the client.

- The nurse reviews the HCA documentation, assesses the client and completes Section C of the form.
- The problem is only documented on the HCA Skin Observation Form once. If a new problem develops, a new form is used to document that problem.

# > If identified as an injury, the nurse:

- o Identifies the likely cause (venous, arterial, malignant, pressure, MASD).
- Documents findings on the Wound Assessment and Treatment Form (CLI.4110.SG.002.FORM.07) if applicable.
- o Documents the wound care provided.
- o Develops a Care Plan.
- o Updates the Kardex.
- o Reports findings to the interdisciplinary team as appropriate.

# > If identified as a pressure injury, the nurse:

- Stages/categorizes according to National Pressure Ulcer Advisory Panel (NPUAP).
- o Ensures the Braden Scale is completed and done at appropriate intervals.
- Completes the Pressure Injury Prevention and Management Intervention Checklist or Braden Scale Standard Care Plan.
- o Updates the Care Plan.
- Documents in Integrated Progress Notes (IPN).
- Updates the Kardex.
- Once a problem is documented, the nurse ensures that the problem is communicated with the team in whatever way is appropriate for the facility/program (Kardex, Communication board, etc.).

# **Home Care**

- A Home Care Health Care Aide Skin Observation Form (CLI.4110.SG.002.FORM.06) is used to document skin observations made by the Home Care Health Care Aide (HCA).
- The HCA documents in Section A of the form, if no concerns observed.
- ➤ If an abnormal skin observation is noted, the HCA completes section B of the form and then contacts the Resource Coordinator, who forwards the information to the Case Coordinator (CC).
- The problem is only documented on the HCA Skin Observation Form once. If a new problem develops, a new form is used to document that problem.
- The CC determines the most appropriate person to provide follow up assessment of the skin observation. This may include the Direct Service Nurse (DSN) or client's primary care provider.
- If identified as a wound, not related to pressure, the DSN:
  - o Identifies the likely cause (venous, arterial, malignant, pressure, MASD).
  - Documents findings on the Wound Assessment and Treatment Form (CLI.4110.SG.002.FORM.07) if applicable.
  - o Completes Section C of the HCA Skin Observation form
  - Develops and implements a Nursing Care Plan if required
  - o Reports findings to the CC and interdisciplinary team as appropriate.

### If identified as a pressure injury, the DSN:

- Stages/categorizes according to NPUAP.
- o Ensures the Braden Scale is completed and done at appropriate intervals.
- Completes and implements the Pressure Injury Prevention and Management Individualized Care Plan - Home Care.
- Develops or updates the Nursing Care Plan.
- o Completes Section C of the HCA Skin Observation form

- Copies the Braden and Pressure Injury Prevention and Management Individualized Care Plan
  Home Care, for the CC records.
- Following report from the DSN the CC complete the following:
  - Communicate client pressure reduction/risk interventions to the relevant disciplines
    - Update the HCA Care Plan
    - Update the Nursing Service Request.
  - o Document in Dated Notes in the client's Electronic Health Care Record.

# 4. Pressure Injury Occurrence

- The occurrence of a pressure injury is an unusual event and must be documented. Review Stage 2, Stage 3, Stage 4 and Unstageable Pressure Injury Reporting Process Algorithm (CLI.4110.SG.002.SD.01).
- ➤ If a Stage 2, 3, 4 and Unstageable pressure injury is identified, an Occurrence Report is completed.
- A Stage 3 and 4 pressure injury is identified as a Critical Incident on the Occurrence Report.
- The Regional Patient Safety Coordinator is notified of a Stage 3, 4 and Unstageable pressure injury as indicated on the Critical Incidents/Critical Occurrences section of the form.
- An Interdisciplinary Team Pressure Injury Safety Huddle occurs on identification of any Stage 2, 3, 4 and Unstageable pressure injury:
  - The purpose of the huddle is to review what has occurred and to evaluate interventions currently in place and to consider other interventions that may be used.
  - o It occurs within 24-48 hours.
  - o The Manager or designate is the clinical lead responsible for:
    - Scheduling the place, date and time of the Interdisciplinary Team Pressure Injury Safety Huddle.
    - Contacting the health care team members to participate.
    - Leading the Safety Huddle discussion.
    - Ensuring appropriate documentation is completed.
    - Manager to complete the Interdisciplinary Team Pressure Ulcer Safety Huddle Form (CLI.4110.SG.002.FORM.08) and file it in the patient/client health record.
- ➤ Any facility or program identifying a pressure injury upon admission or transfer is required to complete an occurrence report unless previously reported on the Wound and Skin Discharge Summary Form and verification that an Occurrence Report has been completed (CLI.4110.SG.002.FORM.10).

# 5. Prevention Strategies: General

- Consider the impact of the following factors on a client's risk of pressure injury development: friction and shear, sensory perception and mobility, nutritional indicators, factors affecting perfusion and oxygenation, skin moisture and temperature, advanced age, previous history of pressure injuries; and other major risk factors located and highlighted on the Braden Scale for Predicting Risk of Pressure Injuries form. Pressure Injury Prevention Quick Reference Guide (CLI.4110.SG.002.SD.08) may be used as an additional tool for Health Care Providers.
- Consider the impact of medical device injuries. These injuries generally conform to the pattern or shape of the device. The injury is staged using the staging system. Include but do not stage/categorize mucosal membrane pressure injuries.

#### **Skin Care**

- > Consider any client with alterations to intact skin to be at risk of pressure injury development.
- Use pH balanced, non-sensitizing skin cleanser with warm water for cleansing.
- Minimize force and friction during care (e.g. use a soft wipe or spray/foam cleanser). Do not vigorously rub skin that is at risk of pressure injury.
- Maintain skin hydration by applying moisturizing agents that are non-sensitizing, pH balanced, fragrance free and/or alcohol and lanolin free.
- Protect skin from excessive moisture and incontinence to maintain skin integrity.
- > Use topical protective barriers to protect skin from moisture. Avoid ingredients and excess application of products that may compromise the absorptive capacity of the incontinent brief.
- ➤ Use protective barriers (e.g. liquid barrier films, transparent films, hydrocolloids) or protective padding to reduce friction injuries.
- > If skin irritation persists due to moisture, consult with an appropriate Interdisciplinary team for evaluation and topical treatment.
- > Establish a bowel and bladder program.
- Monitor fluid intake to ensure adequate hydration.
- Massaging over bony prominences and reddened areas is avoided.
- Avoid subjecting the skin to shear or friction forces.

### **Positioning**

- Repositioning is done to reduce the duration and magnitude of pressure over vulnerable areas of the body. Consider using a repositioning schedule for all at risk clients.
- A repositioning schedule of at least every 2 hours is promptly implemented for at risk clients. This includes an emergency stretcher or operating room table surface. A turning clock or Turning and Positioning Flow Sheet (CLI.4110.SG.002.FORM.09) may be used.
- For clients seated in a wheelchair/chair, encourage repositioning every 15 minutes. If they are unable to do so, staff or family assist them in shifting or repositioning hourly. Methods such as full or partial push-up, forward lean or side to side lean are taught and encouraged.
- > Limit the amount of time the client spends seated in a chair without some form of pressure redistribution.
- When positioning the client supine, the head of the bed is elevated no more than 30 degrees to minimize the risk of sliding and shear forces.
- When positioning side lying (lateral position), the angle is no more than 30 degrees. A 90 degree side lying position is avoided as this puts pressure on the trochanter.
- > Use pillows to prevent bony prominences from contact with each other.
- > Sitting in bed is avoided. Clients are positioned in a wheelchair or chair for meals or activities.
- ➤ While sitting, the best posture to use is 90 degrees at hip, 90 degrees at knees, and 90 degrees at ankles
- Whenever possible, do not turn the client onto a body surface that is still reddened from a previous episode of pressure loading.
- Implementation of intraoperative pressure management devices is recommended for surgical procedures lasting more than 90 minutes.
- Complete bed rest is not recommended for the prevention and healing of pressure injuries. Determine the rationale for bed rest and focus on getting the client up into an appropriate chair or wheelchair for part of the day.
- Assess the client's skin condition and general comfort with each repositioning. If the client is not responding as expected to the repositioning regime, reconsider the frequency and method of repositioning.

At risk clients are turned every two hours until a personalized schedule is established. Repositioning frequency is determined by the client's tissue tolerance, level of activity and mobility, general medical condition, overall treatment objectives, skin condition and type of support surface in use.

### **Devices**

- Use devices to enable the client to assist or independently position, lift and transfer (e.g. trapeze, bed rails). Increase activity as rapidly as tolerated.
- Do not use soakers or bed sheets to reposition or move clients in bed. Limit the amount of linen and pads placed on the mattress.
- > Do not use synthetic sheepskins, cutout pads, rings, IV bags or donut-type devices to relieve pressure. Natural sheepskin pads allow air circulation and therefore may assist in preventing pressure injuries by helping to manage moisture.
- > Ensure the positioning devices and incontinence pads are compatible with the support surfaces.
- Before implementing localized pressure management devices (e.g. heel boots, wedges) consider:
  - o Potential for increased pressure over surrounding areas of the skin by the device.
  - o Caregiver training and education to ensure correct use of the device.
  - o Factors that enable client adherence.
- Inspect the skin under and around medical devices at least twice daily for signs of pressure-related injury on the surrounding tissue.
- ➤ Use prophylactic dressings to protect skin from medical devices. Prophylactic dressings differ in their qualities, so it is important to select a dressing that is appropriate to the individual and the clinical use.
- Consider applying a foam dressing to bony prominences (e.g. heels, sacrum) for the prevention of pressure injuries in anatomical areas frequently subjected to friction and shear.
- If ROHO or other air-filled cushions are used, they are placed on a rigid surface. For example; a sling type of wheelchair may be modified using a rigidizer (board) device. Consult Occupational Therapy (OT).
- ➤ If ROHO or other air filled cushions are used, they are checked daily to ensure they are appropriately inflated as per How to Adjust Your ROHO Cushion (CLI.4110.SG.002.SD.07).

### Heels

- ➤ Heels must be completely off- loaded in all positions
- If not feasible, reasons are documented, the heels are monitored, and other prevention strategies implemented. Consider use of off-loading boot.
- Remove the off-loading boot to inspect the skin of the foot twice daily.
- The knee is in slight (5-10 degree) flexion.
- If an off-loading boot is used, ensure that it does not create additional pressure. Check device placement frequently; at minimum twice daily.

#### **Rehabilitation Services**

- Consider use of a pressure redistributing seat cushion for clients with reduced mobility that are seated in a chair or wheelchair. Consult Occupational Therapist to recommend an appropriate cushion.
- Dynamic tilt, or tilt used in combination with other dynamic wheelchair functions like recline may be indicated for clients who are unable to independently maintain or change their position. Refer to OT for full seating assessment and recommendations for an appropriate wheelchair for clients with seating challenges.
- Use proper positioning, transferring and turning techniques as per Safe Client Handling and Injury Prevention Program (SCHIPP) guidelines.
- Consult Rehabilitation Services regarding transfer and positioning techniques and strategies, as well as devices to reduce pressure, friction and shear. Optimizing client independence is a goal of care.
- Continue to reposition the client regardless of the support surface in use. Establish reposition frequency based on the characteristics of the support surface and the client's tissue response.
- Consider consulting Rehabilitation Services for clients who have limited mobility, spasticity, or abnormal muscle tone or do not have the ability to independently reposition themselves.
- Institute a rehabilitation/restorative/activity program with the multidisciplinary team to maximize client's functional status that is consistent with the overall goals of care.

#### Surfaces

- Consider the need for additional features such as the ability to control moisture and temperature when selecting a support surface. The microclimate may be manipulated to address the specific needs of the client.
- ➤ Clients with a Braden Score of 15 18 rest on a pressure management surface, such as a high-specification foam pressure redistribution mattress. Our current standard hospital mattress fits this criteria. However, if the Braden Standard Care Plan or Intervention Checklist indicates a greater risk, then a higher-level support surface is recommended.
- When higher level support surfaces are required, refer to Support Surface Mattress Selection Tool (CLI.4110.SG.002.SD.02) for support surface selection options.
- Identify and prevent potential complications of support surface use. Possible complications include:
  - Overlays placed on top of an existing mattress can elevate the surface near to the level of the bedrails. The top of the rail is more than 22 cm (8.66") above the mattress.
  - Entrapment may occur if the surface is not the same dimension as the original mattress.
    Risks increase if the mattress edges compress and bedrails are in use.
  - o High beds may be difficult to transfer in and out of, increasing the risk of falling.
  - Active surfaces may be less stable than reactive surfaces which may compromise the client's ability to reposition or transfer in and out independently.
  - Mattresses that produce air flow at the skin interface can accelerate evaporation of perspiration and can lead to dehydration. This is considered in daily fluid intake and output.
- For critically ill clients consider the need to upgrade the support surface. These clients often have poor local and systemic oxygenation and perfusion and require a surface that can improve pressure redistribution, shear reduction and microclimate control.
- Consider use of pressure redistribution surfaces on all sitting surfaces including toilet seats, bath seats, car seats, etc.

#### Education

Any client with a Braden Score of 18 or less or with an "At Risk" Braden Level, is provided education and a teaching handout regarding pressure injury prevention. "Taking the Pressure Off - Pressure Injury Prevention" pamphlet (CLI.4110.SG.002.SD.05) is used. Information is shared with the client, caregiver and/or family.

#### Pain

- Assess, document and effectively manage pain to enable implementation of the most appropriate plan of care for pressure injury prevention without compromising comfort and quality of life.
- Use a validated pain scale.
- Organize care delivery to ensure that it is coordinated with pain medication administration and that minimal interruptions follow.
- Anticipate that incident pain may occur with dressing changes/treatment and use pharmacological and non-pharmacological options for prevention.

#### Nutrition

- A nutrition and hydration assessment with appropriate interventions is implemented on entry to any health-care setting and when the client's condition changes.
- If nutritional deficit and/or dehydration is suspected, consult with dietitian.
- Investigate factors that compromise an apparently well-nourished individual's dietary intake (especially protein or calories) and/or fluid intake and offer the individual support with eating/drinking.
- Plan and implement a nutritional support and/or supplementation program for nutritionally compromised/dehydrated individuals.
- > If dietary/fluid intake remains inadequate, consider alternative nutritional interventions.

## **Bariatric Clients**

- > Fit the client to the bed and mattress from the time of admission.
- Use a bed and mattress with appropriate weight capacity for the client.
- Ensure the bed surface is sufficiently wide to allow repositioning of all body surfaces. The client should not reach the side rails when the client is turned side to side.
- Consider using features that provide air flow over the surface of the skin to facilitate fluid evaporation if the skin is often moist or hot (e.g. low air loss mattress or microclimate manager mattress).
- Ensure wheelchairs/chairs are wide enough to accommodate the client's girth.
- Provide bariatric walkers, overhead trapeze, and other devices to support continued mobility and independence.

## **Spinal Cord Injury Clients**

- Any person with spinal cord injury who has had a pressure ulcer is considered to be at high risk for pressure injury.
- If the client has a spinal cord injury, consider sending a consult to the spinal cord team at Health Sciences Centre.
- > Evaluate microclimate management.
- Assess all support surfaces, lifts and transfers.

# 6. Discharge/Transfer of Care Arrangements

- Provide the following information for clients moving between care settings utilizing the Wound and Skin Discharge Summary Form (CLI.4110.SG.002.FORM.10):
  - o Risk factors identified.
  - Details of pressure points and skin condition prior to discharge.

- o Current plan to minimize pressure, friction and shear.
- Type of bed/mattress.
- Type of seating.
- Current transfer techniques used by the client.
- o History of injuries, previous treatment, products used and products not effective.
- Stage/category, site and size of existing injuries.
- o Type of dressing currently used and frequency of dressing changes.
- Allergies and adverse reactions to wound care products.
- o Wound Assessment and Treatment Form.
- o Client and family response/adherence to prevention and treatment plan.
- o Requirements for pain management.
- o Details of injuries that are closed.
- Need for on-going interdisciplinary support.
- Indicate if an Occurrence Report was completed for Stage 2, 3, 4 or Unstageable pressure injuries. For Stage 3 and Stage 4, indicate if a Critical Incident Report was generated and reported to the Regional Patient Safety Team.

# 7. Quality Assurance (Organizational Monitoring of Pressure Injury Prevention)

- The success of pressure injury prevention is a joint responsibility between the client, family, health care team and the organization as outlined within the Pressure Injury Prevention and Treatment Guideline.
- Accreditation standards are achieved to support evidence-based practice in injury prevention and treatment.
- Audits are conducted to determine compliance with the Pressure Injury Prevention and Treatment Guideline, to identify new challenges and opportunities and to monitor ongoing improvement in injury prevention and treatment.
- Annual audit (normally in February but subjective to change).
  - Facilities/programs are responsible to conduct this audit using the Pressure Injury Audit Tool (CLI.4110.SG.002.FORM.11).
  - Results are summarized and submitted to the Regional Director- Home Care by the due date (normally February 28 of each year).
  - Related skin and wound care audits are done as directed by the region or as deemed necessary by the facility/program. Sample audit tools are found under supporting documents:
    - Braden Scale Audit Tool (CLI.4110.SG.002.FORM.12)
    - Soaker Pad Audit Tool (CLI.4110.SG.002.FORM.13)
- Critical Incidents related to pressure injuries are reviewed, recommendations and opportunities are identified to support ongoing improvement in pressure injury prevention and treatment.

### **SUPPORTING DOCUMENTS:**

CLI.4110.SG.002.FORM.01	Braden Scale for Predicting Risk of Pressure Injuries
CLI.4110.SG.002.FORM.02	Pressure Injury Prevention and Management Intervention Checklist
CLI.4110.SG.002.FORM.03	Pressure Injury Prevention and Management Individualized Care Plan -
	Home Care
CLI.4110.SG.002.FORM.04	Braden Scale Standard Care Plan
CLI.4110.SG.002.FORM.05	Health Care Aide Skin Observation Form
CLI.4110.SG.002.FORM.06	Home Care Attendant Skin Observation Form
CLI.4110.SG.002.FORM.07	Wound Assessment and Treatment Form
CLI.4110.SG.002.FORM.08	Interdisciplinary Team Pressure Injury Safety Huddle Form
CLI.4110.SG.002.FORM.09	Turning and Positioning Flow Sheet
CLI.4110.SG.002.FORM.10	Wound and Skin Discharge Summary Form
CLI.4110.SG.002.FORM.11	Pressure Injury Prevention Audit Tool
CLI.4110.SG.002.FORM.12	Braden Scale Audit Tool
CLI.4110.SG.002.FORM.13	Soaker Pad Audit Tool
CLI.4110.SG.002.SD.01	Stage 2, Stage 3, Stage 4 and Unstageable Pressure Injury Reporting
	Process Algorithm
CLI.4110.SG.002.SD.02	Support Surface Mattress Selection Tool
CLI.4110.SG.002.SD.05	Taking The Pressure Off - Pressure Injury Prevention Pamphlet
CLI.4110.SG.002.SD.06	Equipment for Pressure Off-loading, Friction & Shear Prevention
CLI.4110.SG.002.SD.07	How to Adjust your ROHO Cushion
CLI.4110.SG.002.SD.08	Pressure Injury Prevention Quick Reference Guide
CLI.4110.SG.013	Wound Assessment and Treatment Flow Sheet
CLI.4110.SG.013.FORM.01	Wound Assessment and Treatment Form

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Canadian Association of Wound Care. https://www.woundscanada.ca/

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- Registered Nurses Association of Ontario (2007) Assessment & management of Stage I to IV pressure ulcers
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- Wound Care Canada. Volume 7, No. 2 The Bates-Jansen wound assessment tool development of a pictorial guide

Prevention and Management of Pressure Injuries Wounds Canada https://www.woundscanada.ca > bpr-workshop > file