

Pressure Injury Prevention and Management in Palliative Care

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Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline



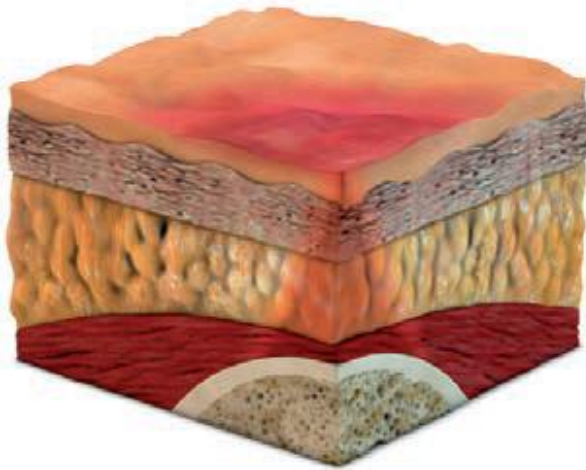
Terminology

- ▶ Decubitus ulcer
- ▶ Bed sore
- ▶ Pressure ulcer
- ▶ Pressure injury
- ▶ A pressure ulcer/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.

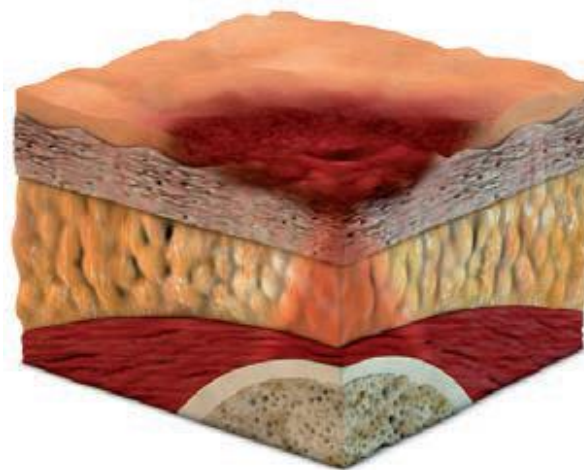
Implications of Pressure Ulcers

- ▶ Physical and psychosocial consequences for patient and family/carer
- ▶ Major source of morbidity, and in some cases mortality
- ▶ Financial and litigious implications for health care providers
- ▶ Increased duration of hospitalisation and ongoing costs in the community

Classification of pressure injuries



Stage I



Stage II

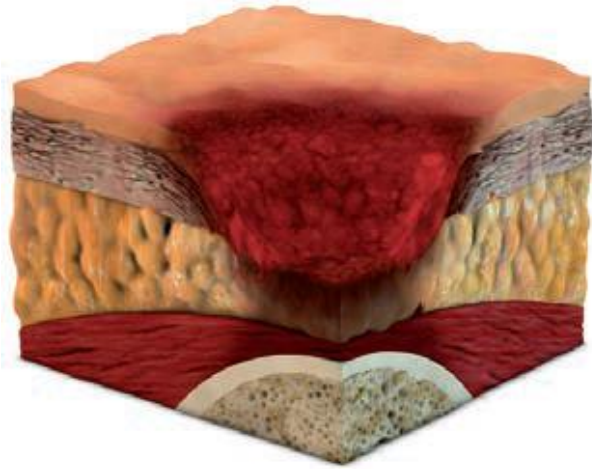


Stage I

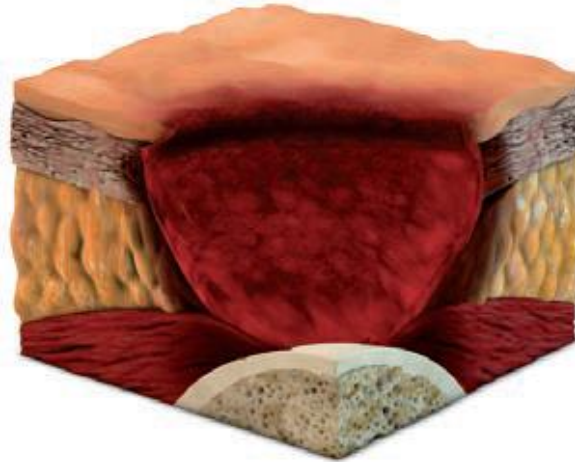


Stage II

Classification of pressure injuries



Stage III



Stage IV



Stage III

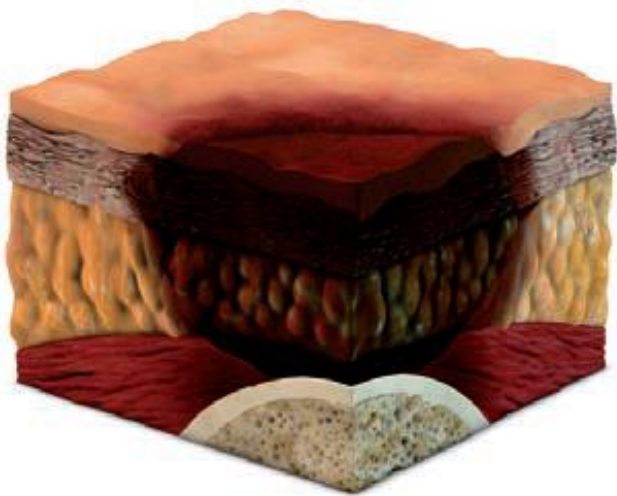


Stage IV

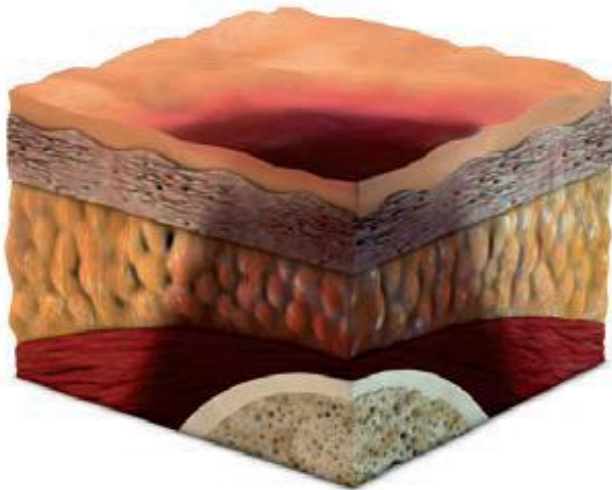
Blanching and Non-blanching Erythema



Classification of pressure injuries: Unstageable Pressure Injury

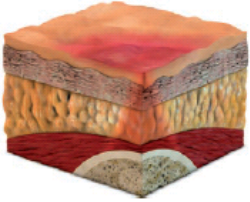

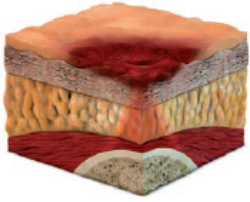

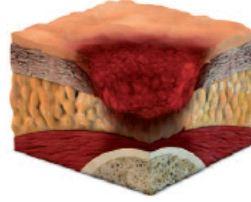

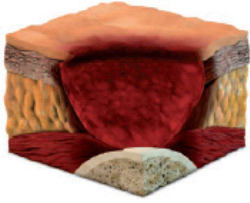

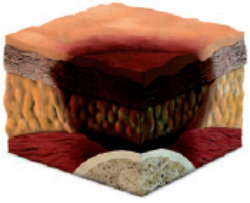

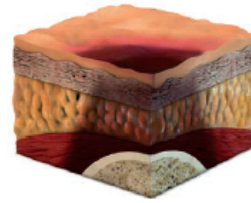



Classification of pressure injuries: Suspected Deep Tissue Injury



HOW TO CLASSIFY AND DOCUMENT PRESSURE INJURIES

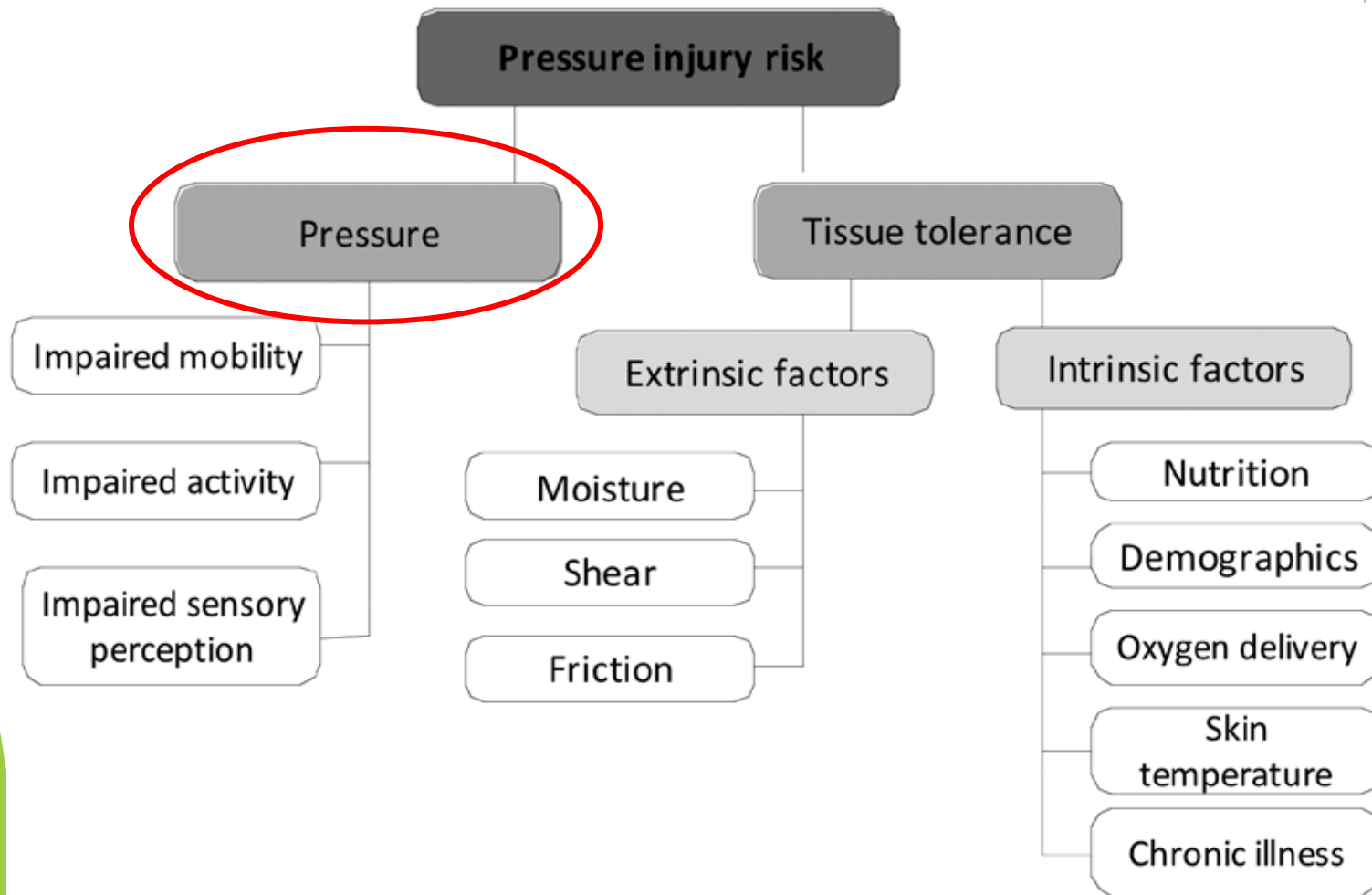
The NPUAP/EPUAP Pressure injury classification system provides a consistent and accurate means by which the severity of a pressure injury can be communicated and documented.

| Stage I pressure injury: non-blanchable erythema | Stage II pressure injury: partial thickness skin loss | Stage III pressure injury: full thickness skin loss |
|---|---|--|
| <ul style="list-style-type: none"> Intact skin with non-blanchable redness of a localised area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area. The area may be painful, firm, soft, warmer or cooler compared to adjacent tissue. May be difficult to detect in individuals with dark skin tones. May indicate "at risk" persons (a heralding sign of risk). | <ul style="list-style-type: none"> Partial thickness loss of dermis presenting as a shallow, open wound with a red-pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister. Presents as a shiny or dry, shallow ulcer without slough or bruising (NB bruising indicates suspected deep tissue injury). Stage II PI should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation. | <ul style="list-style-type: none"> Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunnelling. The depth of a stage III PI varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and stage III PIs can be shallow. In contrast, areas of significant adiposity can develop extremely deep stage III PIs. Bone or tendon is not visible or directly palpable. |
|   |   |   |
| Stage IV pressure injury: full thickness tissue loss | Unstageable pressure injury: depth unknown | Suspected deep tissue injury: depth unknown |
| <ul style="list-style-type: none"> Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. The depth of a stage IV pressure injury varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and these PIs can be shallow. Stage IV PIs can extend into muscle and/or supporting structures (e.g. fascia, tendon or joint capsule) making osteomyelitis possible. Exposed bone or tendon is visible or directly palpable. | <ul style="list-style-type: none"> Full thickness tissue loss in which the base of the PI is covered by slough (yellow, tan, grey, green or brown) and/or eschar (tan, brown or black) in the PI bed. Until enough slough/eschar is removed to expose the base of the PI, the true depth, and therefore the stage, cannot be determined. Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as the body's natural biological cover and should not be removed. | <ul style="list-style-type: none"> Purple or maroon localised area or discoloured, intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue. Deep tissue injury may be difficult to detect in individuals with dark skin tone. Evolution may include a thin blister over a dark wound bed. The PI may further involve and become covered by thin eschar. Evolution may be rapid, exposing additional layers of tissue even with optimal treatment. |
|   |   |   |

All 3D graphics designed by Jarrod Gittos, Gear Interactive, <http://www.gearinteractive.com.au>
 Photos stage I, IV, unstageable and suspected deep tissue injury courtesy C. Young, Launceston General Hospital.
 Photos stage II and III courtesy K. Carville, Silver Chain. Used with permission.

Pressure Injury Risk Factors

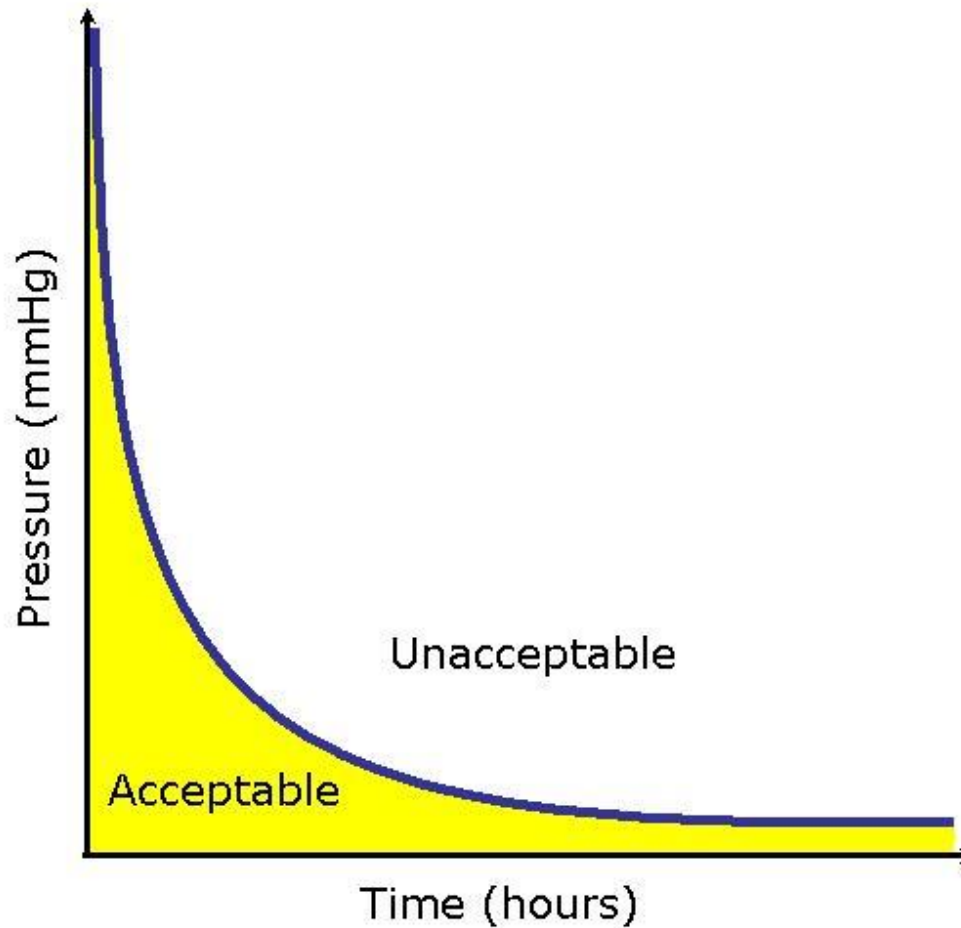
- ▶ contribute to increased exposure of the skin to excessive pressure or diminishes the skin's tolerance to pressure



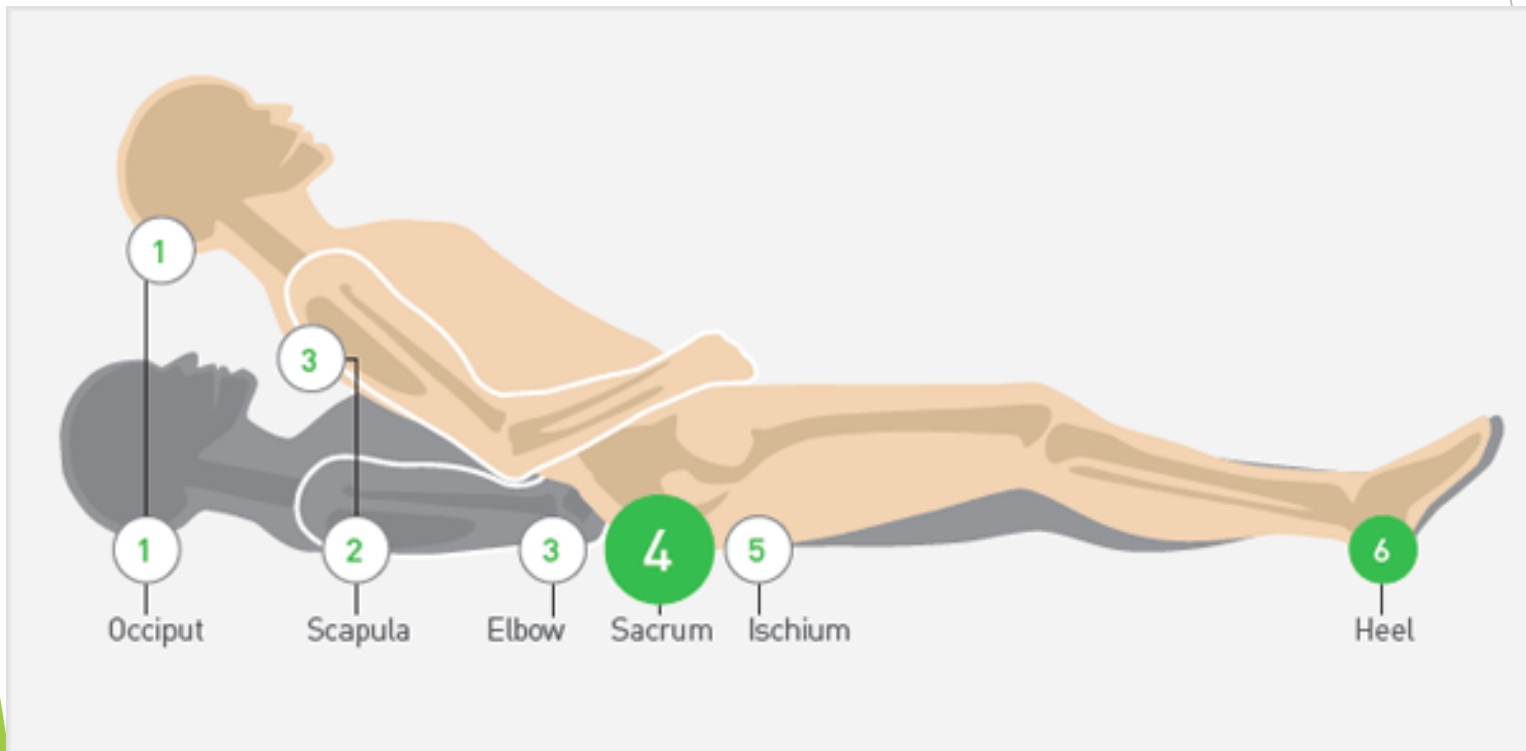
Increased exposure to pressure

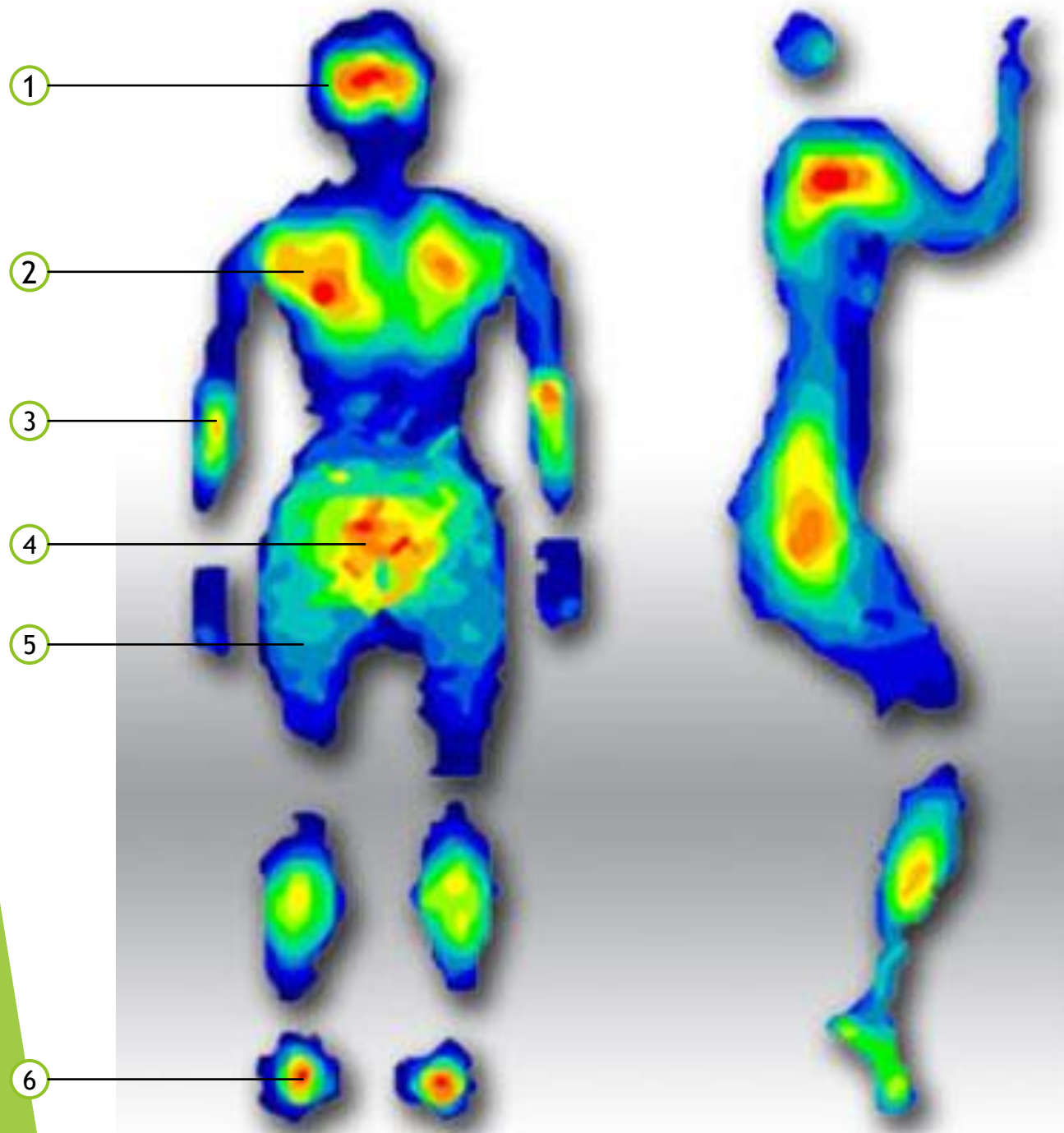
- ▶ Related to impaired mobility, activity or sensory perception, all of which reduce the patient's ability to change their body position in order to reduce pressure
 - ▶ spinal cord injury
 - ▶ stroke
 - ▶ multiple sclerosis
 - ▶ trauma (e.g. fracture)
 - ▶ obesity
 - ▶ diabetes
 - ▶ cognitive impairment
 - ▶ medication use (e.g. sedatives, hypnotics and analgesics)
 - ▶ surgery

Pressure vs Time

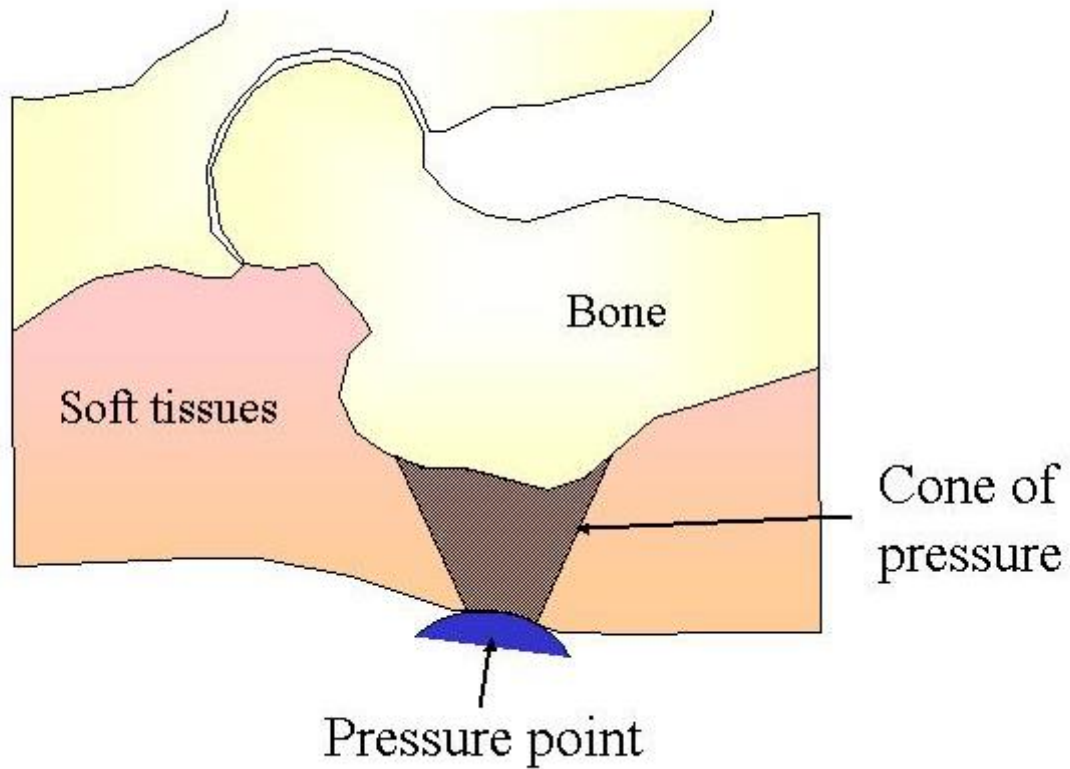


Pressure Points

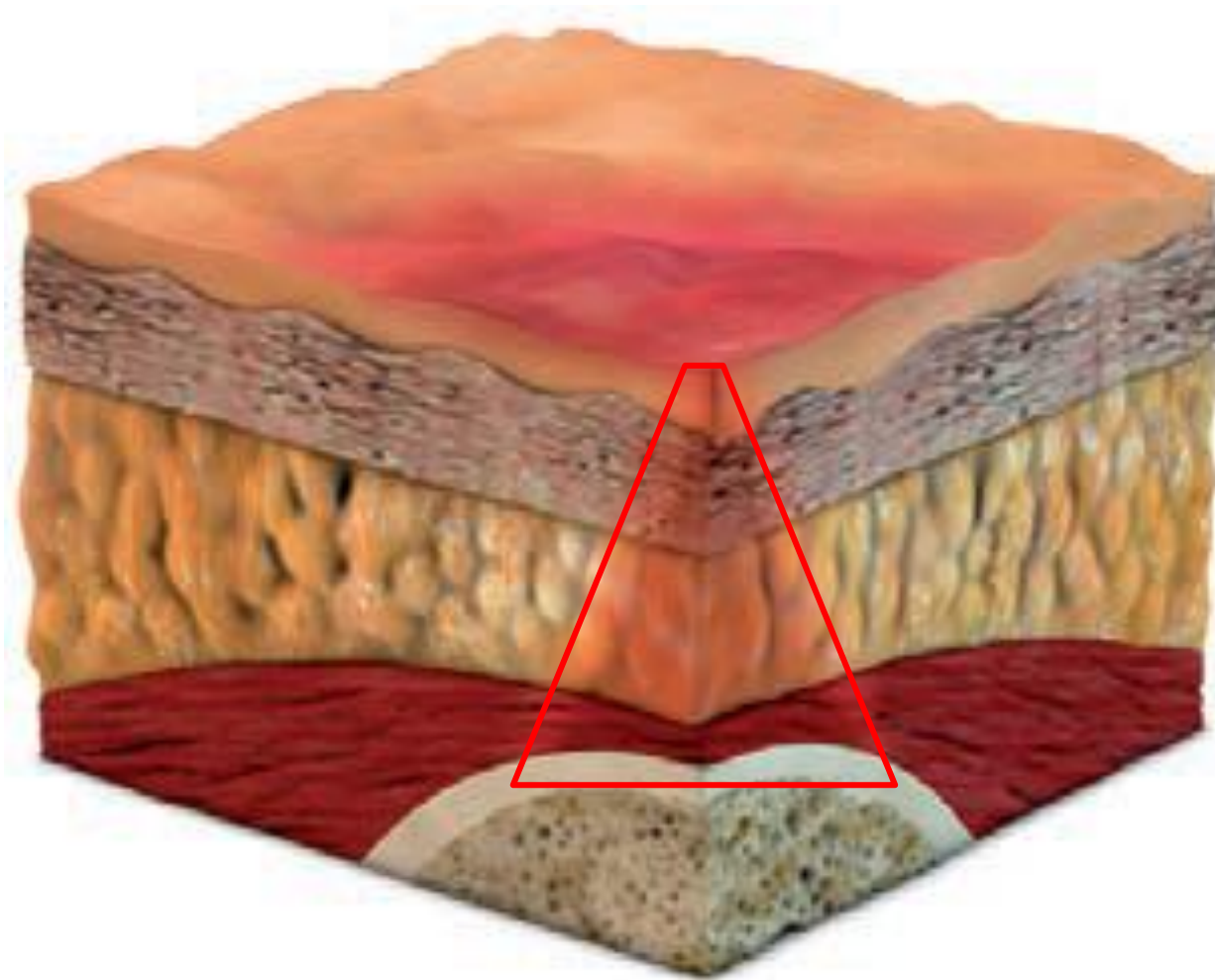




The 'Cone' of Pressure

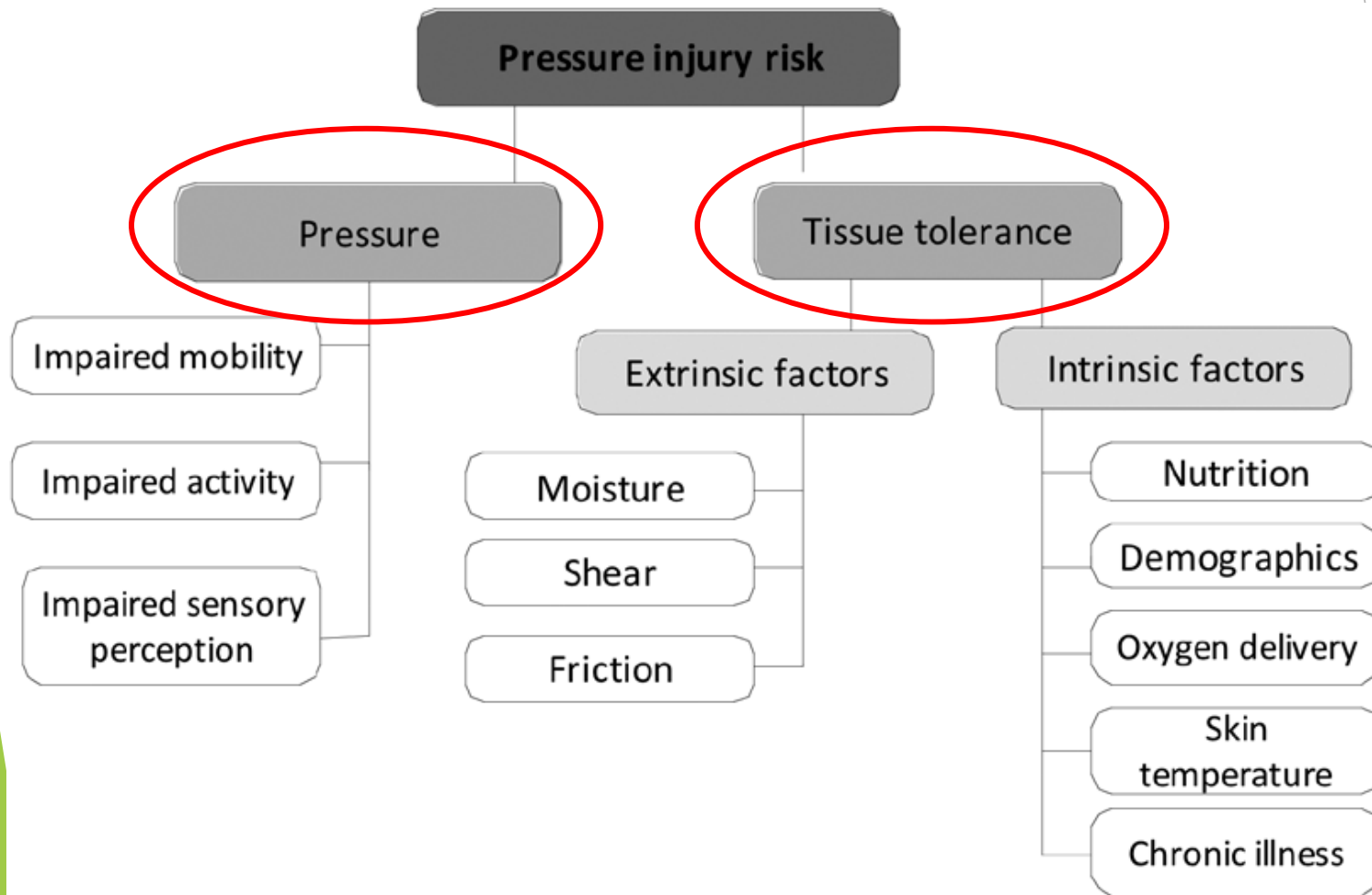


The 'Cone' of Pressure



Pressure Injury Risk Factors

- ▶ contribute to increased exposure of the skin to excessive pressure or diminishes the skin's tolerance to pressure



Reduction in tissue tolerance

▶ Extrinsic factors

- ▶ Shear
- ▶ Friction
- ▶ Moisture

▶ Intrinsic factors

- ▶ Those aged over 65 years are at greater risk, and the risk increases in those aged over 75 years
- ▶ Chronic illnesses and conditions that impair oxygen delivery, tissue perfusion, sensation and/or lymphatic function
- ▶ Poor nutrition - weight loss, malnutrition and inadequate protein or energy intake
- ▶ Elevated skin temperature has also been associated with increased PI risk

Risk Assessment

- ▶ Conduct a comprehensive assessment for all patients to identify pressure injury risk factors
- ▶ A comprehensive assessment should include:
 - ▶ clinical history
 - ▶ pressure injury risk scale
 - ▶ skin assessment
 - ▶ mobility and activity assessment
 - ▶ nutritional assessment
 - ▶ continence assessment
 - ▶ cognitive assessment
 - ▶ assessment of extrinsic risk factors

Skin Assessment

- ▶ Assess the skin of all At Risk patients
- ▶ Inspect the skin of all patients on admission and at each repositioning to identify indications of pressure injury including:
 - ▶ erythema
 - ▶ blanching response
 - ▶ localised heat
 - ▶ oedema
 - ▶ induration
 - ▶ skin breakdown

Preventive Skin Care

- ▶ Avoid positioning the individual on an area of erythema whenever possible
- ▶ Keep the skin clean and dry
- ▶ Do not massage or vigorously rub skin that is at risk of pressure ulcers!!!
- ▶ Develop and implement an individualized continence management plan
- ▶ Protect the skin from exposure to excessive moisture with a barrier product
- ▶ Consider using a skin moisturizer to hydrate dry skin

SSKIN - Self-care

- ▶ **Surface:** make sure you are on a supportive surface
- ▶ **Skin inspection:** check for discolouration and soreness, including under or around medical devices
- ▶ **Keep moving:** change your position often
- ▶ **Incontinence:** keep clean and dry
- ▶ **Nutrition:** eat healthily and drink plenty of fluids

Preventive Skin Care - Emerging therapies

- ▶ Microclimate control ✓
 - ▶ Consider the need for additional features, such as ability to control moisture and temperature, when selecting a support surface
- ▶ Prophylactic Dressings ✓
 - ▶ Consider applying a polyurethane foam dressing to bony prominences
- ▶ Fabrics and Textiles ✓
 - ▶ Consider using silk-like fabrics rather than cotton or cotton-blend fabrics to reduce shear and friction
- ▶ Electrical Stimulation of the Muscles for Prevention of Pressure Ulcers ?
 - ▶ especially in individuals with spinal cord injury

Palliative Patients: Pressure Ulcer Prevention

- ▶ Conduct a comprehensive assessment
 - ▶ Use an appropriate Risk Assessment tool
 - ▶ Include clinical judgement
 - ▶ Consider patient wishes and goals of care
- ▶ Reassess if there is any significant change in the patient's condition
- ▶ Assess the skin of all At Risk patients
- ▶ Preventive Skin Care
- ▶ Pressure redistribution
- ▶ Nutrition

Palliative Patients: Pressure Redistribution

- ▶ Reposition and turn the individual at periodic intervals, in accordance with the individual's wishes, comfort and tolerance
 - ▶ Pre-medicate the individual 20 to 30 minutes prior to a scheduled position change
 - ▶ Consider the individual's choices in turning, including whether they have a position of comfort
 - ▶ Consider changing the support surface to improve pressure redistribution and comfort
 - ▶ Strive to reposition the individual at least every 4 hours on a pressure redistributing mattress, such as viscoelastic foam, or every 2 hours on a regular mattress
 - ▶ Document turning and repositioning, as well as the factors influencing these decisions

Palliative Patients: Nutrition

- ▶ Strive to maintain adequate nutrition and hydration compatible with the individual's condition and wishes
- ▶ Offer nutritional protein supplements when ulcer healing is the goal

Palliative Patients: Pressure Ulcer Care

- ▶ Set treatment goals consistent with the values and goals of the individual
 - ▶ Assess the impact of the pressure ulcer on quality of life for the individual and their significant others
 - ▶ Set a goal to enhance quality of life, even if the pressure ulcer cannot be healed or treatment does not lead to closure/healing
 - ▶ Assess the individual initially and at any change in their condition to re-evaluate the plan of care
- ▶ Assess the pressure ulcer initially and with each dressing change, but at least weekly
- ▶ Control wound odour
- ▶ Manage the pressure ulcer and periwound area on a regular basis, as consistent with the individual's wishes and goals of care

Palliative Patients: Pain Management

- ▶ Assess all individuals for pain related to a pressure ulcer or its treatment and document findings
 - ▶ Use a scale that is valid and reliable
- ▶ Investigate other aspects of the pain in order to provide more effective, individualized interventions
- ▶ Do not under treat pain
- ▶ Use WHO analgesic ladder
- ▶ Select a wound dressing that requires less frequent changing and is less likely to cause pain

Skin Changes at Life's End

- ▶ Skin is the largest organ system
- ▶ Like other organs at end of life, the skin can fail
- ▶ Skin changes a manifestation of disease burden rather than poor care
 - ▶ Hypo-perfusion concurrent with severe organ dysfunction or failure
 - ▶ A reflection of compromised skin - reduced soft-tissue perfusion, decreased tolerance to external insults, and impaired removal of metabolic wastes
 - ▶ Increased risk of injury
 - ▶ Sudden onset and rapid deterioration
- ▶ Charcot in 1877, decubitus ominosus
- ▶ Kennedy Terminal Ulcer (1989)
- ▶ SCALE: Skin Changes at Life's End: Final Consensus Statement (2009) - <http://www.epuap.org/scale-skin-changes-at-lifes-end>

Kennedy Terminal Ulcer

- ▶ A Kennedy Terminal Ulcer is a pressure ulcer some people develop as they are dying
 - ▶ It usually presents on the sacrum
 - ▶ It can be shaped like a pear, butterfly or horseshoe
 - ▶ It can have the colours of red, yellow, black or purple
 - ▶ The borders of the ulcer are usually irregular
 - ▶ It has a sudden onset

Kennedy Terminal Ulcer



Case Study

- ▶ 80 year old female
- ▶ Metastatic ovarian cancer
- ▶ Previously treated with surgery and chemotherapy - now recurrent disease
- ▶ COPD and CHF
- ▶ Admitted to hospital with sudden deterioration
- ▶ No further treatment options
- ▶ Cachectic
- ▶ Not eating and drinking 3 days
- ▶ Bedbound for 5 days



Case Study - Management Plan

- ▶ Last days of life care
 - ▶ Poor nutrition
 - ▶ Reduced tissue tolerance
 - ▶ Increased exposure to pressure/moisture
 - ▶ Skin failure at end of life
- ▶ Discuss patient's wishes with family
- ▶ Manage symptoms to ensure comfort
 - ▶ Pain relief
 - ▶ High absorbency dressings/pads
 - ▶ Wound odour management
 - ▶ Manage incontinence
 - ▶ Pressure relief
 - ▶ Debridement?



Pressure Injuries *Skin Care Matters*



- S** **SURFACE:** Make sure you are on a supportive surface
- S** **SKIN INSPECTION:** Check for discolouration and soreness including under or around medical devices
- K** **KEEP MOVING:** Change your position often
- I** **INCONTINENCE:** Keep clean and dry
- N** **NUTRITION:** Eat healthily and drink plenty of fluids

**Help us to work together to
prevent pressure injuries**