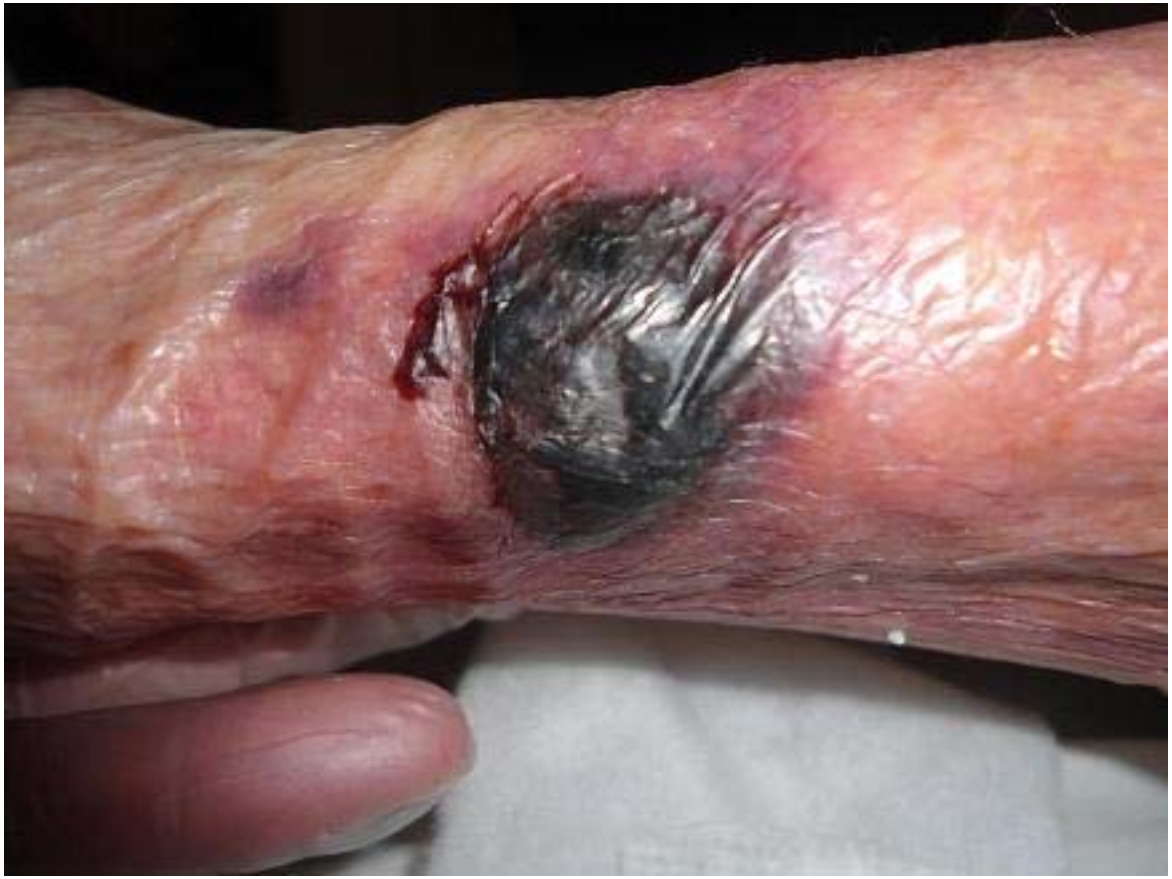
Pressure Injury - Prevention

Marge Murphy
Wound Care Nurse Specialist
Residential Aged Care

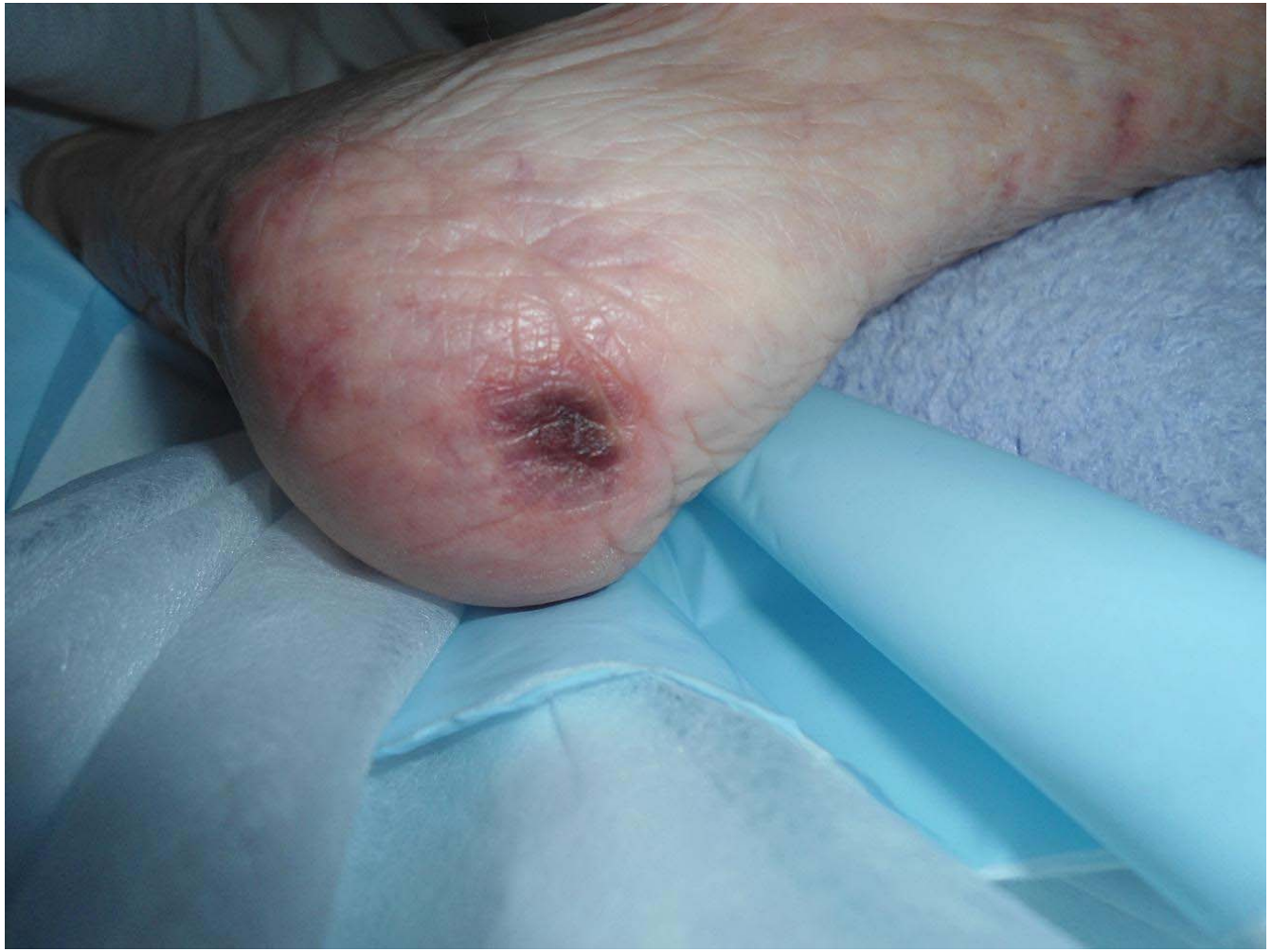
Mrs Scott- RH resident

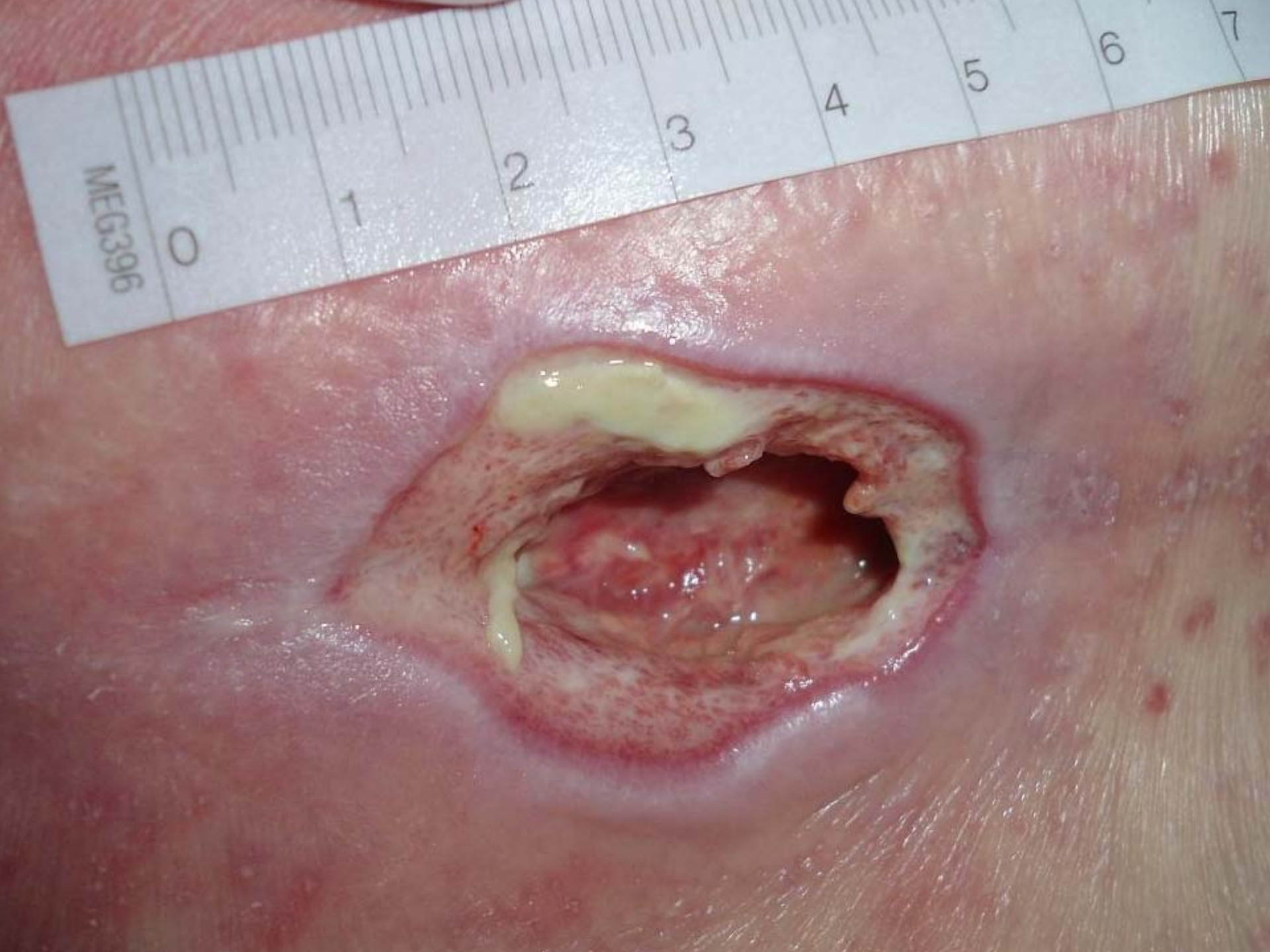
- 91 admitted to hospital by GP/ low grade pyrexia/Ulcer below knee 2-3 months/MRSA on PO antibiotics 3 days – Mobility declining appetite poor
- Admitted diagnosed minor infection of lower limb. Secondary Diagnosis; acute on chronic renal failure /developed thrombocytopenia/ 2 units of blood/antibiotics changed to Vancromycin
- Stabilised but now deemed hospital level care/12 day admission.
- Discharged to private hospital reported on Discharge Summary “in a stable condition” On admission to PH she was assessed to have a Grade 111 pressure injury sacral area/ Haematoma Rt lower leg /Deep tissue damage Lt heel. Complaining of constant pain, discharged on Paracetamol
- Nil reference to any of the above on Discharge Summary
- Not recorded as treatment injury

Lt lateral leg



Heel




MEG396
0
1
2
3
4
5
6
7

Pressure injuries – Residential aged care

- How do we prevent pressure injury (PI) with the best available evidence
- The Waitemata experience
- Where are we at in NZ.
- What works and what are the next steps .

Recognising pressure injuries

- **Pressure ulcers can range from a discoloured or reddened area of intact skin to full thickness skin loss, affecting muscle and bone. It is perhaps more correct to refer to them as pressure injuries as many are not open wounds**
- **A pressure injury is a localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure in combination with shear and/or friction (Pan Pacific guidelines 2012).**

Factors (localised) which determine if a pressure injury will develop

- *duration* **of pressure**
  - **Time it takes before injury occurs.**
- *intensity* **of pressure**
  - **Boney prominences and surfaces and posture**
- **and ability of** *tissue to tolerate pressure* **(tissue tolerance) - (pressure, shearing, friction and moisiture).**

Risk Factors

- Reduced mobility or immobility
- Malnutrition and / or dehydration, recent weight loss.
- Continence
- Sensory impairment
- Vascular disease
- Advancing age.
- Severe chronic or terminal illness
- Previous history of pressure injury
- Cognitive impairment

Prevention and Management - Assessment

- **Conduct a comprehensive holistic assessment taking into account: (CBR)**
  - **Risk factors**
  - **Mobility and activity**
  - **Nutrition**
  - **Continence**
  - **Cognitive assessment**
  - **Pain**

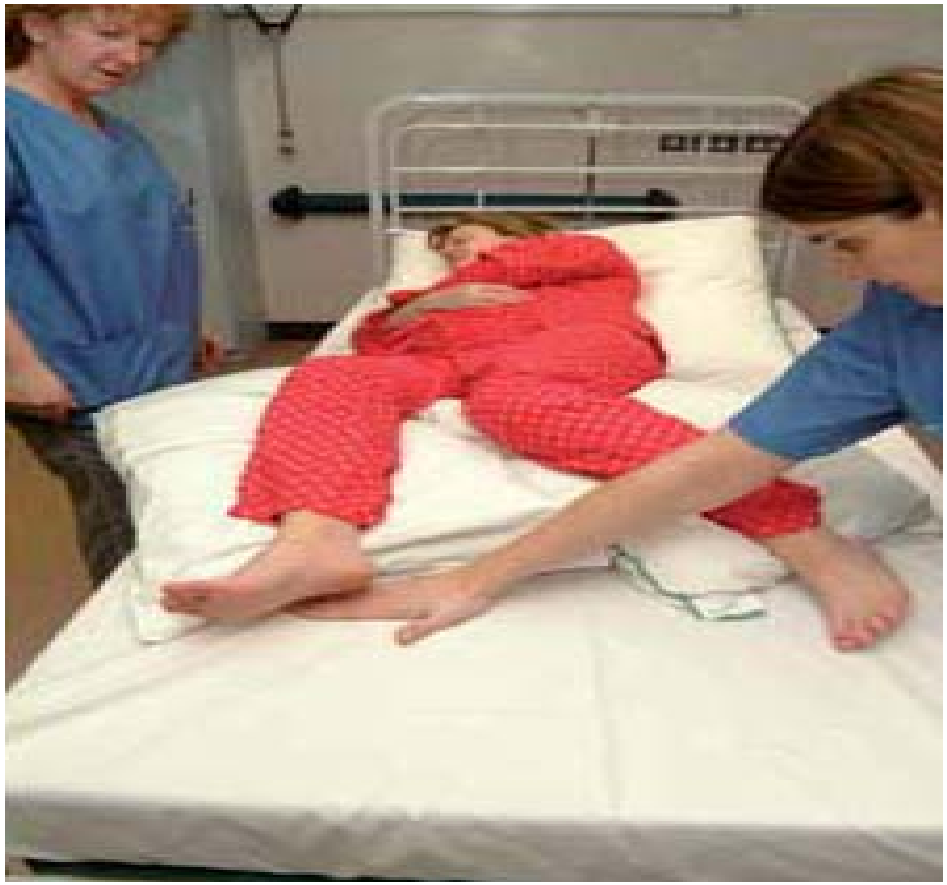
Assessment

1. **Assessment of environmental factors.**
2. **Use a validated pressure injury risk assessment scale**
   - **Braden, Norton, Waterlow (B)**
3. **Conduct a complete skin assessment (C)**
   - Within 6 hours ? **and ongoing daily e.g. showering.**
   - **And when condition changes**

Interventions - Repositioning

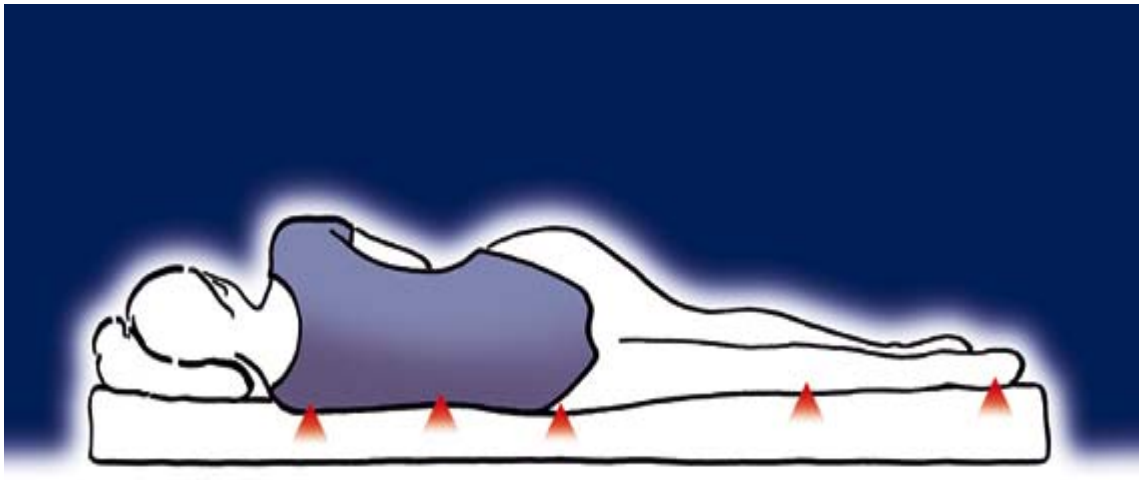
- Frequent repositioning reduces the amount of pressure over vulnerable areas, such as bony prominences and heels. (A)
- Frequency of repositioning should consider the patient's risk of pressure injury development, skin response, comfort (pain relief), functional level, medical condition and the support surface used.
- Evidence that the 30 degree tilt is most effective (A)

30 degree tilt



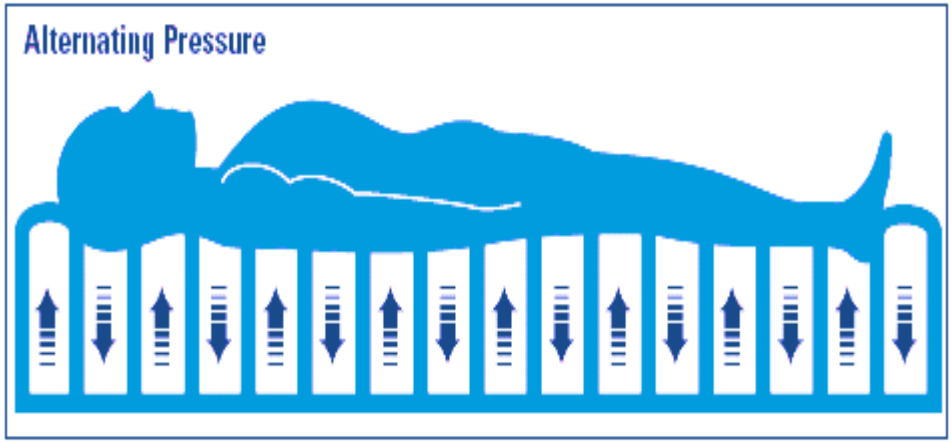
Pressure reducing

- **Pressure reducing or** static support **surfaces,** redistribute **body weight and hence pressure over as great an area as possible, thereby reducing the amount of pressure at any one point. (A)**



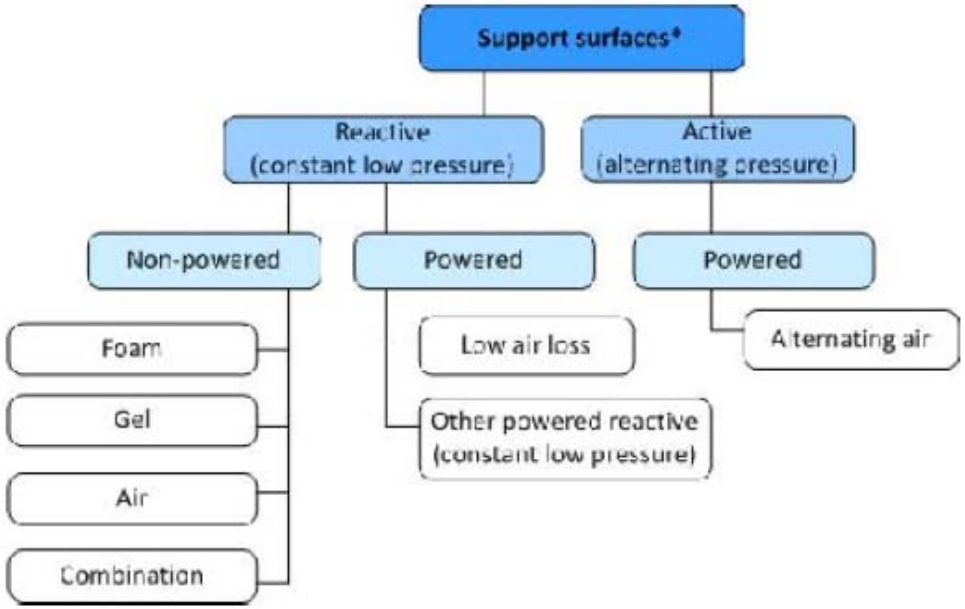
Pressure relieving

Active support **surfaces produce an** alternating pressure **through mechanical means regardless of the pressure load. This is usually achieved through alternation of air pressure in support air cells on a programmed cycle time. This mechanism continually changes the part of the body supporting higher pressure loads.(A)**



Support Surfaces

Table 6.1 Types of support surfaces[4, 44]



* Not a hierarchy

Nb: suppliers may use a combination of these technologies in some products to produce a hybrid product.

Skin Protection

Practice points (CBR)

- Appropriate manual handling techniques with use of hoist and sliding sheet etc
- Provide transfer assistant devices e.g. overhead handles to promote independent patient transferring
- Do not vigorously rub the patients skin
- Continence management plan
- PH appropriate skin cleansers and barrier cream
- Dressings or pads may be appropriate for pts at risk of friction or shear

Nutrition

At risk patients are identified (MUST tool) (B)

Interventions

- **High protein and calorie diet**
- **Document fluid and food intake**
- **Weekly weigh.**
- **Assist with food intake**
- **Patient preference**
- **Consider Dietician referral**

Education

- Provide patients with education on the prevention and management of pressure injuries.
- Involve patient and family.
- Staff education (CBE

Staging

- The most commonly used systems are National Pressure Ulcer Advisory Panel (NPUAP) and European Pressure ulcer advisory panel (EPUAP)
- Superficial lesion are usually due to moisture and friction, should they be included in our statistics?
- Different tissue has different susceptibility to pressure, muscle is most susceptible followed by subcutaneous fat then dermis. Deep tissue damage can occur with little or no evidence of superficial damage. The first signs could be a deep necrotic wound. Seen frequently on the heel.
- Do PI on the sacral area follow a different physiological process to the heel area?

Waitemata experience

- First do no harm – voluntary reporting of all grade 111, 1V, Unstagable and all suspected deep tissue injury
- Sep 2013, approx 20 facilities submitted data (total 60)
- Difficult to trend due to low numbers both in terms of facility numbers and patient numbers
- Records prevalence
- In patient setting unable to get hold of data

NZ

- Global Trigger tool - Measuring adverse events
- First do no harm – intervention to reduce falls and grade 111, and 1V- Collection of data from RAC sector/Voluntary
- Pressure Injury prevalence surveys on an ad hoc basis
- Some of the worst cases of pressure injury surface as complaints to the Health and Disability Commissioner, and increasingly, claims are being made to ACC for treatment injury costs as a result of developing a debilitating pressure ulcer.
- But unlike most other OECD nations, New Zealand does not collect national annual data on PIs

The Future

- Multipronged, multidisciplinary interventions to prevent PI in acute care settings and long-term-care facilities
- Grading ulcers at any one point in time is problematic
- We need to get out of our Silos, Is skin care only a nursing problem ?
- Avoidable?
- Reflection of quality of care
- League tables and benchmarking
- Funding being cut when injury has been deemed avoidable