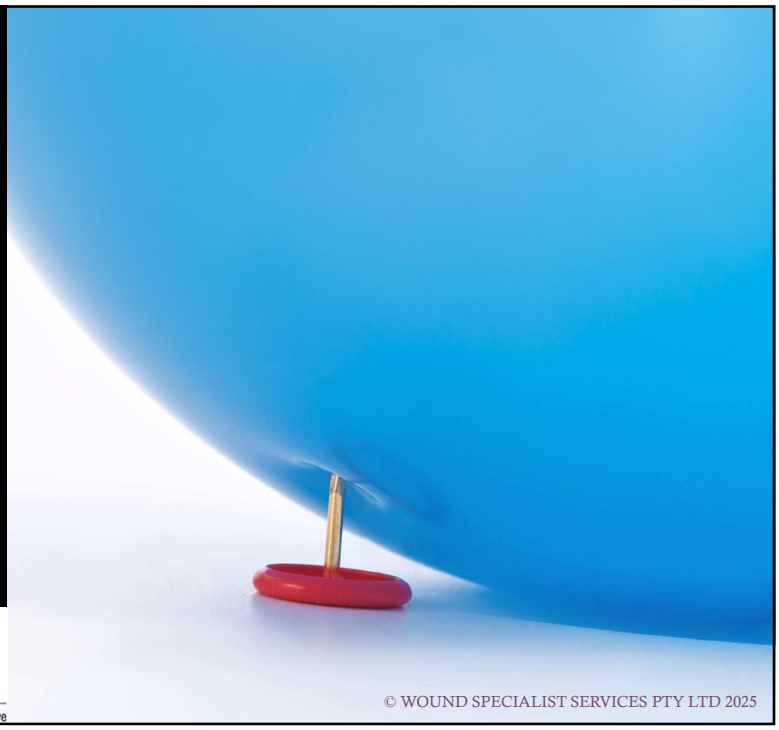
PRESSURE INJURY WORKSHOP

Dr Michelle Gibb
PhD M Nsg Sci(NP) M Wound Care BN
Wound Specialist Services



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ACKNOWLEDGEMENT OF COUNTRY

We respectfully acknowledge the people of the Yugambeh language region, the traditional owners of the land on which we meet and pay our respect to their elders past and present, and all Aboriginal and Torres Strait Islander Peoples here today.

ACKNOWLEDGEMENTS

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LEARNING OBJECTIVES

By participating in this workshop, participants will:

- Develop an understanding of pressure injury prevalence in Australia
- Identify the different types of pressure injuries
- Explore the International Pressure Injury Clinical Practice Guideline (2025) and how this resource can be applied through real-life case examples for the prevention and management of pressure injuries in the aged care context.

Human Impact

95% of PIs are preventable

3 x greater risk of dying

Background

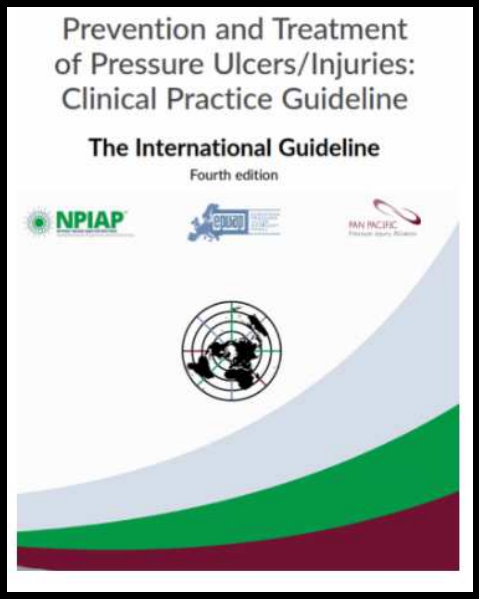
- Up to 32% of consumers in long term care have a PI

Costs

- Australia - A$983 million pa
- New Zealand – NZ$694 million pa
- United States – US$11 billion pa
- Singapore – SGD$4745 - $13,139 per ulcer

(Nguyen, Chaboyer & Whitty 2015; EPUAP/NPIAP/PPPIA, 2019)

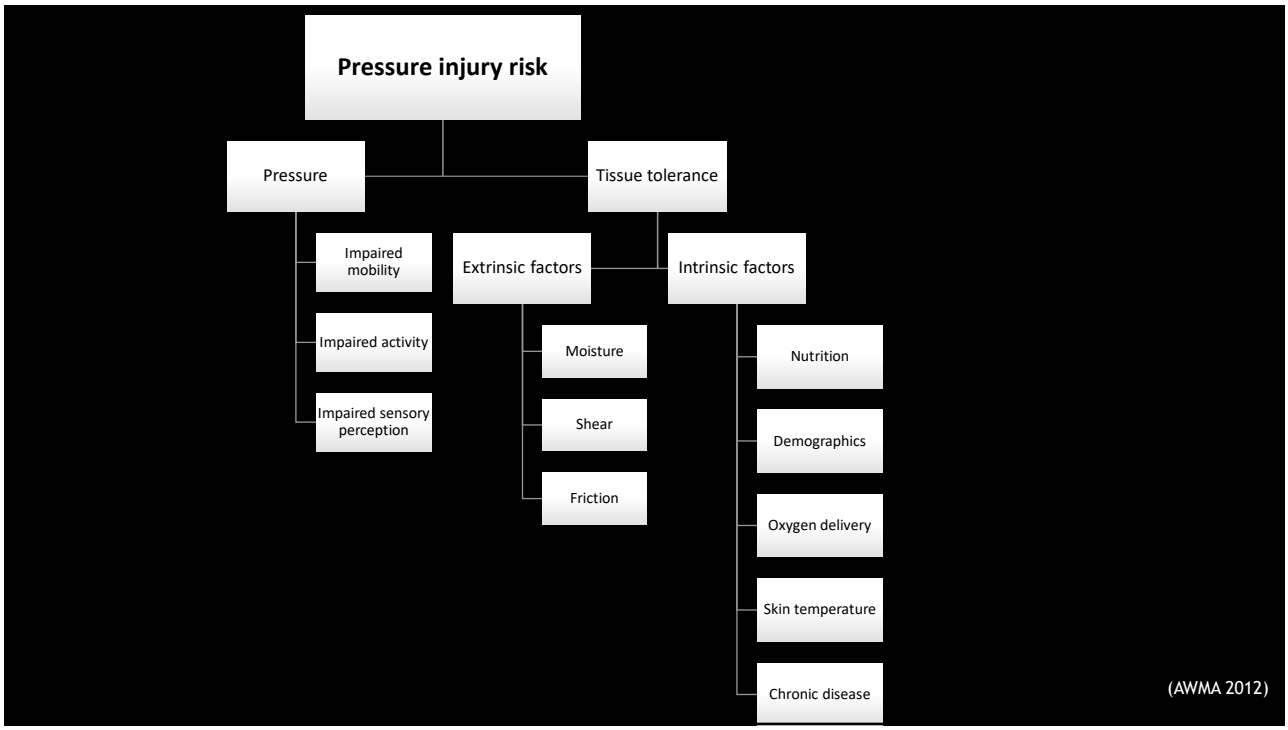
The International Guideline (2025)



WHAT IS A PI?

- Localised injury to the skin and/or underlying soft tissue usually over a bony prominence or related to a medical or other device.
- Result of intense and/or prolonged pressure or pressure in combination with shear

(NPUAP/EPUAP/PPPIA 2019)



Risk assessment

- Risk assessments should be performed as soon as possible after admission & then periodically using a risk assessment tool
- Reassessment should be performed weekly for 4 weeks, then monthly in high care and quarterly in low care or whenever the consumer's condition changes
- Identify the level of risk & record on a risk assessment chart, care plan & the health record. Include the date & time the risk assessment was conducted
- Most common risk assessment tools include the:
  - Braden Scale
  - Waterlow Score
  - Norton Scale

WHAT TO ASSESS?

Colour

Texture

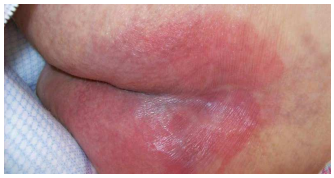
Temperature

Integrity

WHAT TO LOOK & FEEL FOR?

- Redness/ erythema – non-blanching when finger pressure applied
- Pain / soreness
- Warmer or cooler area over bony prominence
- Boggy feeling
- Hardened area
- Discolouration – dark red, purple, black
- Broken skin / ulcer

Document any changes & continue to monitor closely!



SKIN TOLERANCE TEST

Normal hyperaemic response to pressure

Press finger over reddened area for 15 seconds, then lift finger up

If the area blanches, it is not a stage 1 PI. If it stays red, it is a stage 1 PI

Darkly pigmented skin does not blanch.
Signs of early tissue damage include purple discolouration,
skin feeling too warm or cold, numbness, swelling, hardness or pain

PROBLEM AREAS

PRESSURE INJURY STAGING

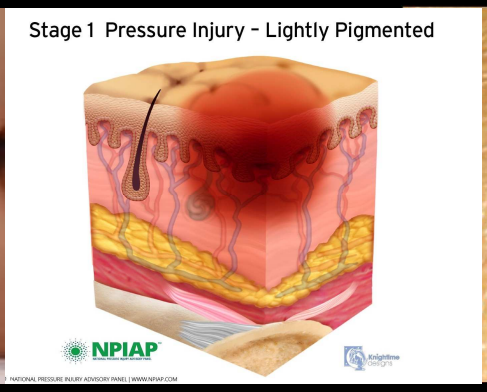
PI's are staged as:

- Stage I
- Stage II
- Stage III
- Stage IV

The higher the stage number the deeper the tissue involvement

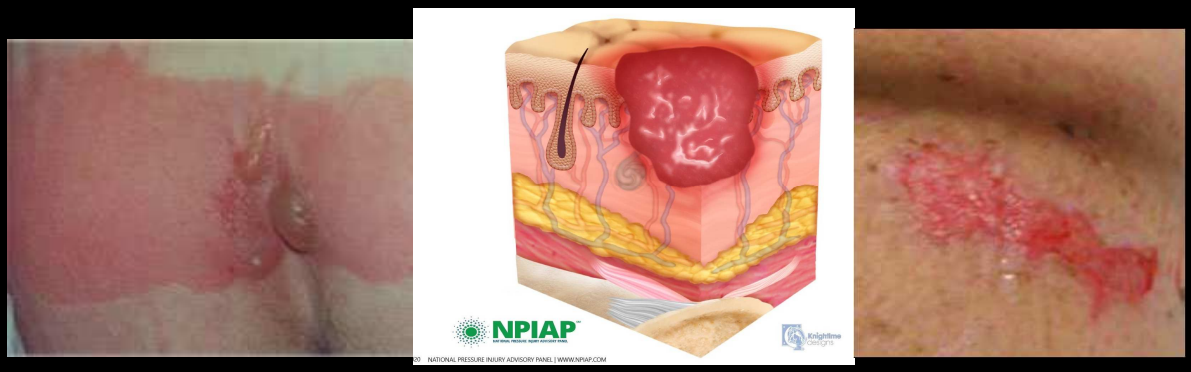
- Unstageable
- Suspected Deep Tissue Injury

STAGE 1 PRESSURE INJURY



(NPIAP 2020)

STAGE 2 PRESSURE INJURY



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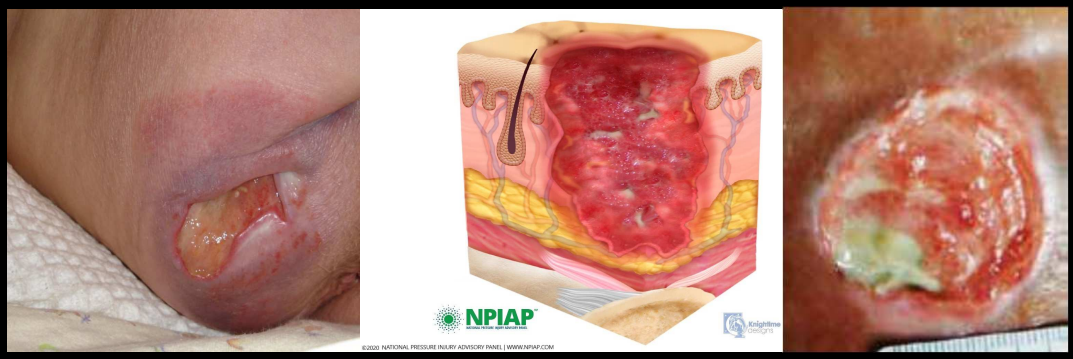
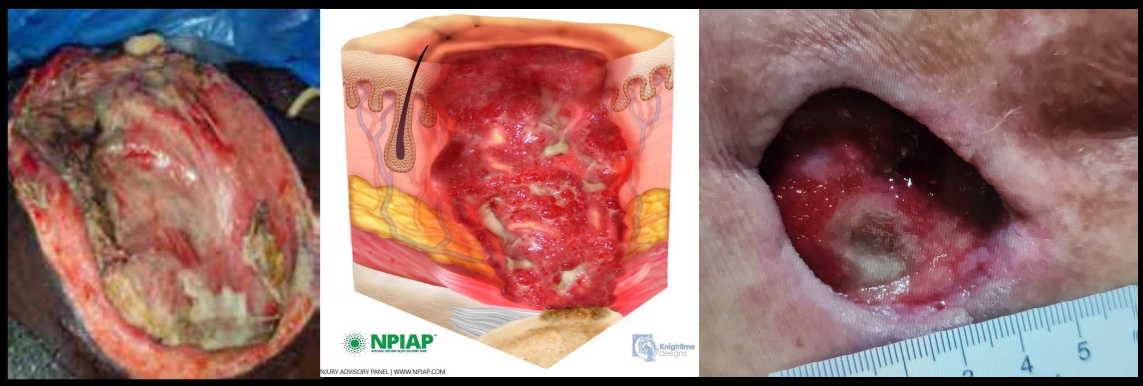
STAGE 3 PRESSURE INJURY



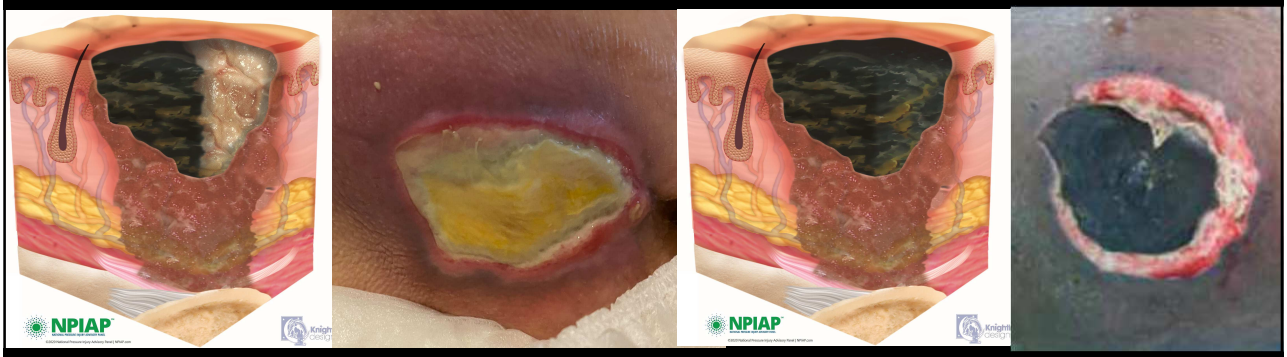
(NPIAP 2020)

STAGE 4 PRESSURE INJURY



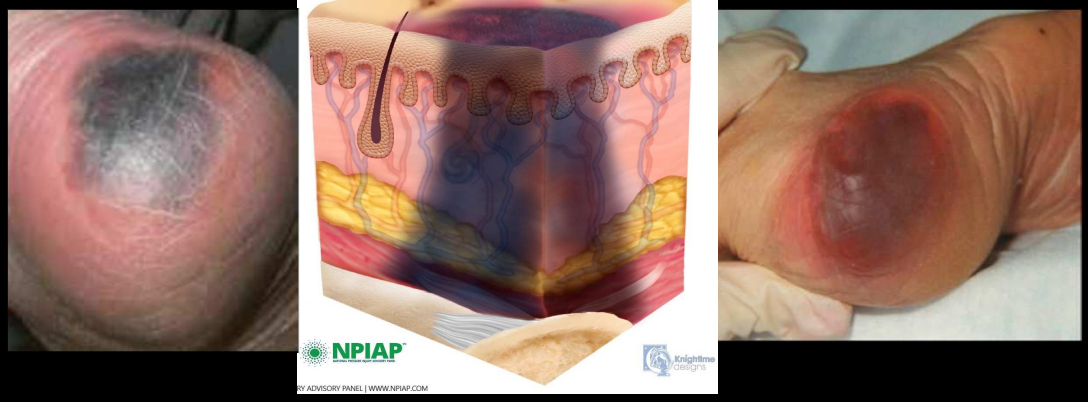
(NPIAP 2020)

UNSTAGEABLE PRESSURE INJURY



(NPIAP 2020)

SUSPECTED DEEP TISSUE INJURY: DEPTH UNKNOWN

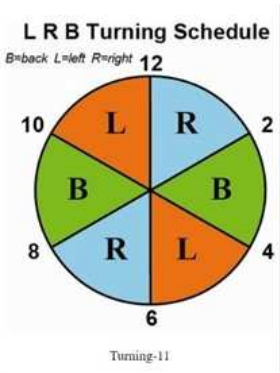


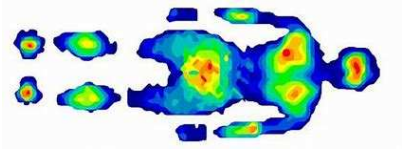
(NPIAP 2020)

MANAGEMENT & PREVENTION STRATEGIES

- Repositioning & mobilisation
- Equipment
- Education
- Skin care
- Nutrition & hydration

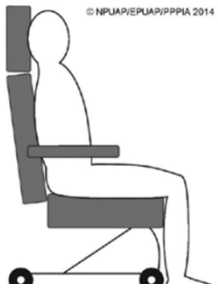
REPOSITIONING & MOBILISATION

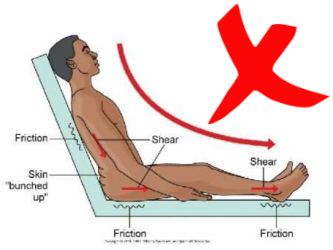


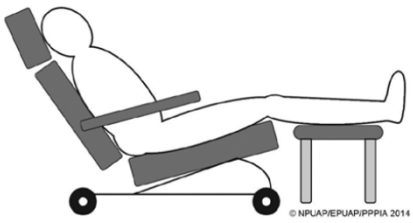


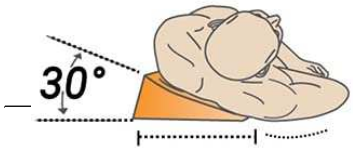
(EPUAP/NPIAP/PPPIA, 2025)

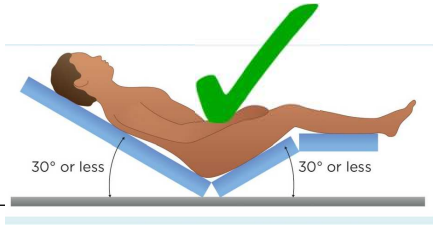
REPOSITIONING & MOBILISATION











(EPUAP/NPIAP/PPPIA, 2025)

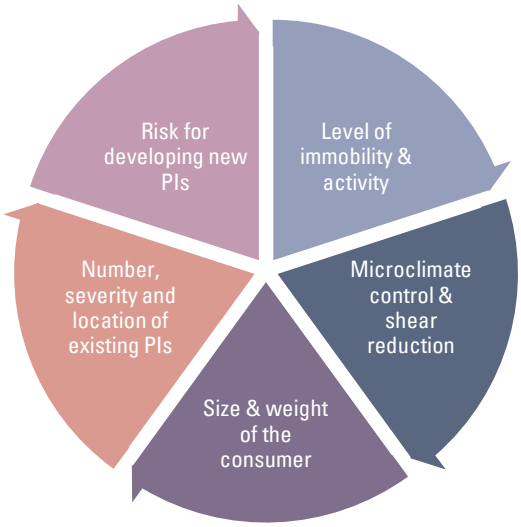
REPOSITIONING & MOBILISATION

Documented plan for repositioning:

- Individualised (level of activity, skin & tissue tolerance, clinical condition, comfort, sleep patterns, goals of care, support surface in use)
- Sitting
- In bed
- Methods of transfer
- Ability to independently reposition & level of mobility
- Frequency of repositioning
- Equipment

(EPUAP/NPIAP/PPPIA, 2025)

HOW TO DECIDE?



(EPUAP/NPIAP/PPPIA, 2025)

EQUIPMENT

- Pressure re-distribution
- Support surfaces
- Adjunct devices

SUPPORT SURFACES

'Specialised devices for pressure redistribution designed for management of tissue loads, microclimate, and/or other therapeutic functions (i.e. any mattress, integrated bed system, mattress replacement, overlay, or seat cushion, or seat cushion overlay'

(EPUAP/NPIAP/PPPIA, 2019)

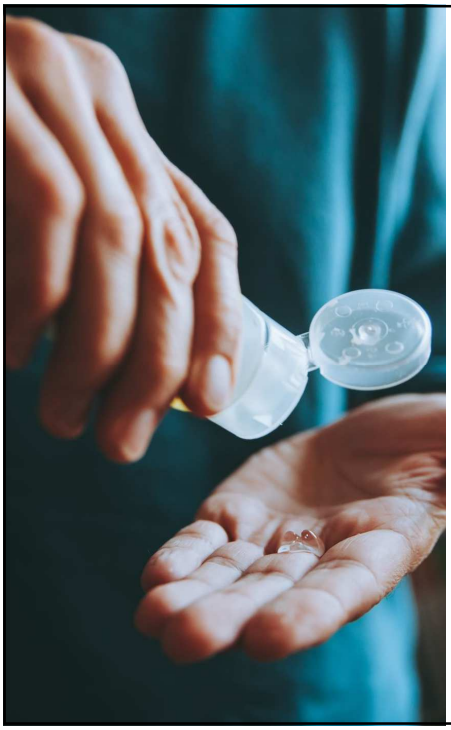
HOW TO DECIDE?

- Level of immobility & activity
- Microclimate control & shear reduction
- Size & weight of the consumer
- Number, severity and location of existing PIs
- Risk for developing new PIs

(EPUAP/NPIAP/PPPIA, 2025)

EDUCATION & SELF-CARE

- Regular & consistent communication with resident, family & carers
- Prompts & reminders



PREVENTIVE SKIN CARE

- Skin cleansers
- Barrier preparations
- Emollients

HOW COMMON IS IAD?

Prevalence ranges from 20 - 40%

Of 25% of patients with incontinence, 42% had IAD

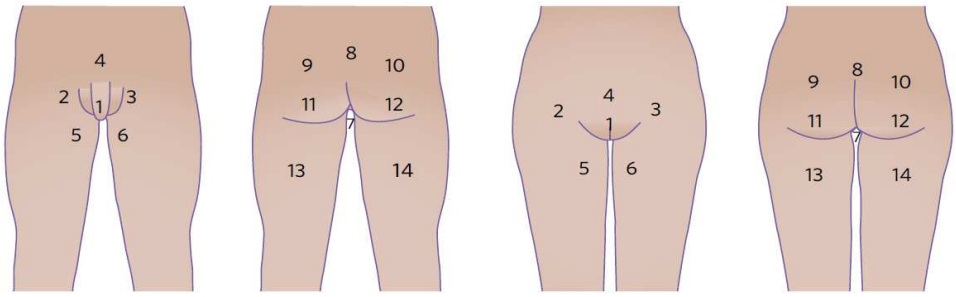
IAD + unrelieved pressure results in a

5-fold increase in pressure injury risk

RISKS FOR IAD

- Type of incontinence
  - Faecal incontinence (diarrhoea/formed stool)
  - Double incontinence (faecal and urinary)
  - Urinary incontinence
- Frequency of incontinence
- Use of occlusive containment products
- Poor skin condition
- Compromised mobility
- Poor cognitive awareness
- Inability to perform self-care
- Pain
- Temperature
- Medications
- Poor nutritional status
- Critical illness

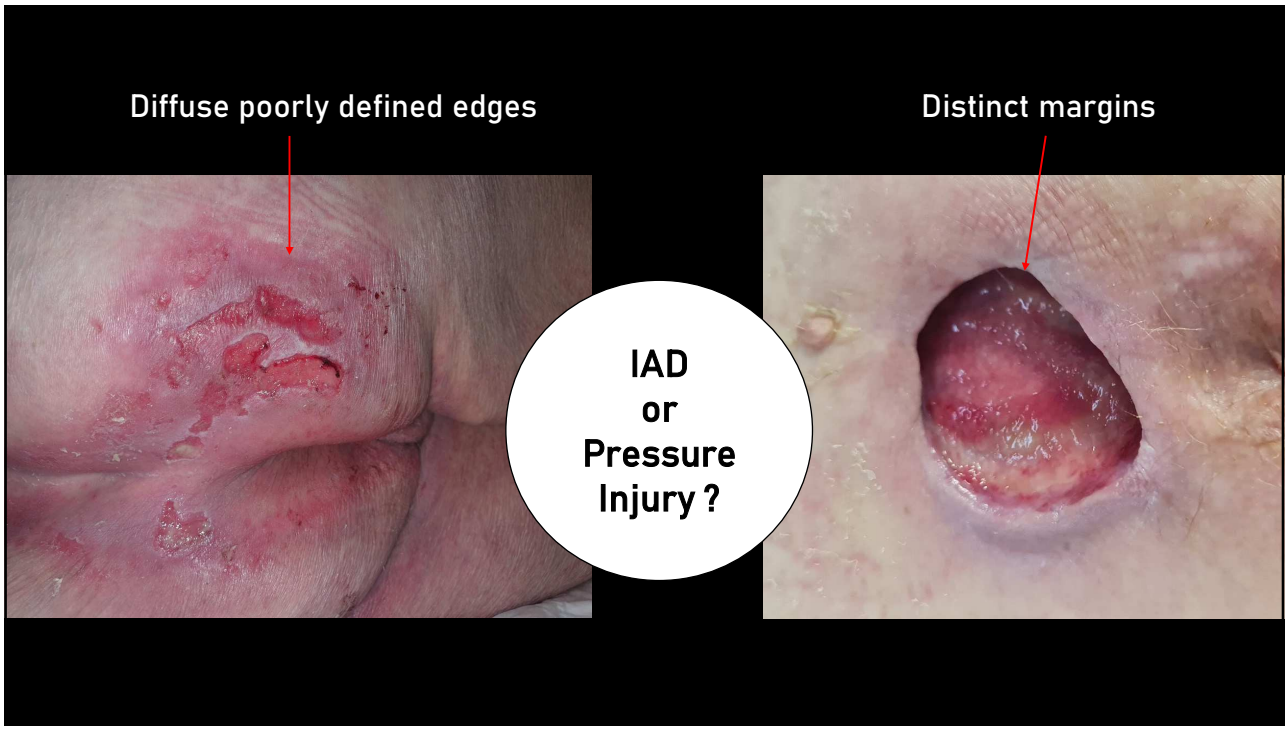
WHERE IS IAD FOUND?

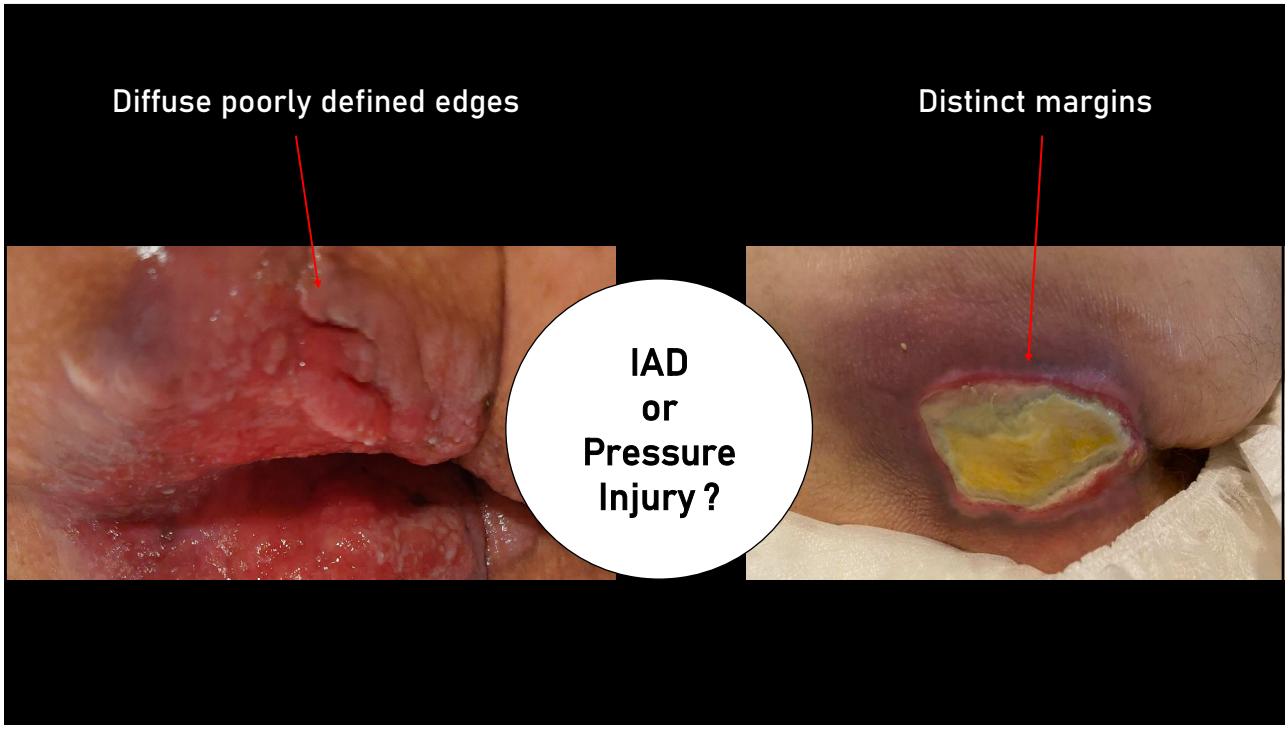


1. Genitalia (labia/scrotum)
2. Right groin fold (crease) between genitalia and thigh
3. Left groin fold (crease between genitalia and thigh)
4. Lower abdomen/suprapubic
5. Right inner thigh
6. Left inner thigh
7. Perinanal skin
8. Gluteal fold (crease between buttocks)
9. Left upper buttock
10. Right upper buttock
11. Left lower buttock
12. Right lower buttock
13. Left posterior thigh
14. Right posterior thigh

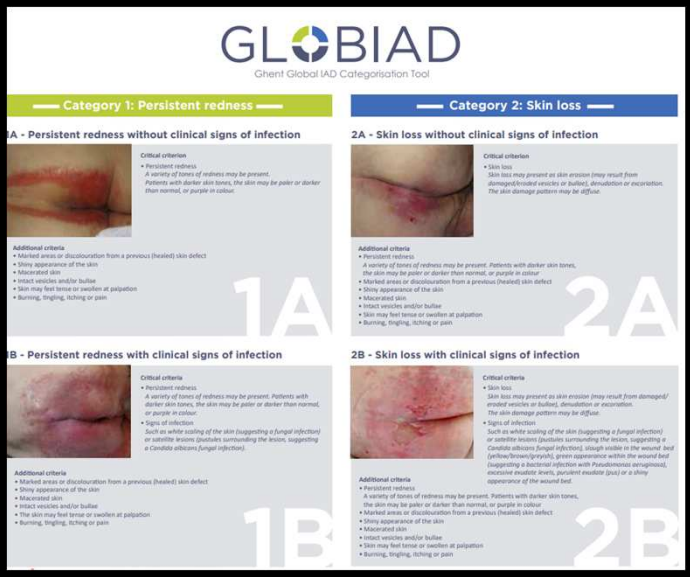
HOW TO IDENTIFY IAD

Parameter	IAD	Pressure Injury
History	Urinary +/- faecal incontinence	Exposure to pressure/shear
Symptoms	Pain, burning, itching, tinging	Pain
Location	Perineum, perigenital area, buttocks, gluteal fold, medial & posterior aspect of upper thighs, lower back, may extend over bony prominence	Usually over a bony prominence or associated with medical device
Shape / edges	Diffuse, poorly defined edges, may be blotchy	Distinct edges or margins
Presentation / depth	Intact skin with erythema (blanchable or non-blanchable), with/without superficial, partial thickness skin loss	Varies from intact skin with non-blanchable erythema to full thickness skin loss. Base of wound may contain non-viable tissue
Other	Secondary superficial skin infection (e.g. candidiasis) may be present	Secondary soft tissue infection may be present


Diffuse poorly defined edges
Distinct margins
IAD
or
Pressure
Injury ?


Diffuse poorly defined edges
Distinct margins
IAD
or
Pressure
Injury ?

IAD Severity Classification



(Beeckman et al., 2015)

MANAGEMENT & PREVENTION STRATEGIES

- CLEANSE, PROTECT, RESTORE

HOW LONG DOES IT TAKE?

Improvement
1 – 2 days

Resolution
1 -2 weeks

No improvement within 3 – 5 days
REFER

NUTRITION IN PI PREVENTION

- Nutritional screening
- Encourage consumers to eat a balanced diet (nutrient dense food & adequate hydration)
- Promote oral nutrition

For individuals who are malnourished or at risk of malnutrition when nutritional needs are not met by usual dietary intake

- Nutritional supplementation
- Protein supplementation
- Carbohydrate-based energy & micronutrient supplementation

(EPUAP/NPIAP/PPPIA, 2025)

WOUND DRESSINGS FOR PRESSURE INJURIES

- Use antimicrobials cleanser for suspected or confirmed infection
- Cleanse the skin surrounding the PI
- Soft-silicone multi-layered foam dressings for protection of individuals at risk of PIs
- For all PIs, select the most appropriate dressing based on goals & clinical assessment of:
  - Size, shape and depth
  - Need to address bacterial burden
  - Ability keep the wound bed moist
  - Nature and volume of exudate
  - Condition of wound bed
  - Condition of periwound skin
  - Presence of tunnelling and/or undermining
  - Pain
  - Cost-effectiveness

HEEL PRESSURE INJURIES

ASSESSMENT & MONITORING

SET TREATMENT GOALS

AIM FOR AN IMPROVEMENT WITHIN 2 WEEKS

REASSESS EVERY TWO WEEKS TO MONITOR PROGRESS INCLUDING SIZE

(EPUAP/NPIAP/PPPIA, 2019)

WHEN TO REFER?

Referral to a specialist is needed when:

- ✓ Does not show signs of improvement within 2 weeks despite appropriate local wound care, pressure redistribution and nutrition
- ✓ uncertainty in diagnosis
- ✓ complicated wounds
- ✓ signs of infection not responding to antimicrobial therapy
- ✓ wound can be probed to bone
- ✓ wound deteriorates or new ulcers occur
- ✓ the wound appears ischaemic
- ✓ benefit from surgical intervention
- ✓ symptoms limit lifestyle & quality of life

IMPLEMENTING BEST PRACTICE

- Staffing characteristics (skill mix)
- Knowledge & attitudes of workforce
- Access to appropriate equipment & resources
- Quality improvement program
- Evidence-based policies, procedures, protocols, documentation & clinical decision support tools
- Education
- Feedback & reminder systems
- Monitoring of outcomes

SUMMARY

Preserving skin integrity is the best way to prevent PI's from occurring

There are lots of simple, evidence-based strategies to improve outcomes for consumers who are at risk for, or who are, suffering from a break in skin integrity

SEARCH & FIND

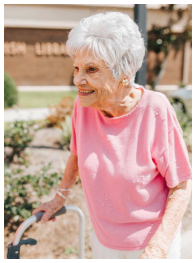
MORNING TEA

CASE STUDIES

CASE STUDY 1

- 81-year-old lady transferred from hospital following admission for dehydration & pneumonia
- Health history includes:
  - CVA
  - Dementia
  - Diabetes
  - Incontinent
  - Immobile and requires assistance for repositioning
- Wound on R) ischial tuberosity (buttock)
- Measures 8cm x 7.5cm with undermining of 5cm at 3 o'clock
- Large amounts of green, malodouress exudate
- Periwound erythema and excoriation
- Responds to painful stimuli
- She also has non-blanchable reddened areas on both hips

CASE STUDY 2



Background

Mrs Grace is 87 years old. Nursing staff noticed a wound on her left heel approximately 3 months ago and it has been progressively worsening.

Social History

Mrs Grace was admitted to a high care, dementia specific facility 4 months ago. Before admission she lived with her husband in their own home. She has four adult children and eight grandchildren. Mrs Grace was a non-smoker and had an occasional glass of alcohol. She currently weighs 60kg and has been losing weight and has a loss of appetite.

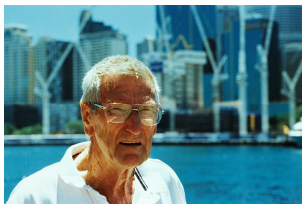
Health History

Mrs Graces' health history includes Alzheimer's, Parkinson's disease, Type II Diabetes Mellitus, peripheral arterial disease, neuropathy and osteoarthritis. Mrs Grace has urinary and faecal incontinence and requires full assistance with all activities of daily living.

Medications

Levodopa, tolcapone, donepezil, risperidone, temazepam, insulin

CASE STUDY 3



Right heel

Background

Mr Silverton is an 86-year-old retired shopkeeper. He developed a sore on his right heel following a total hip replacement 4 weeks ago after a fall at home. Mr Silverton has a history of falls.

Social History

Prior his THR, Mr Silverton lived in his own home but following discharge from hospital he has been in respite awaiting placement in a high care facility. Since his THR his health has deteriorated markedly. He lacks appetite and is losing weight. He sits in a chair for long periods during the day. Mr Silverton's wife passed away 2 years ago. He used to enjoy spending time with his large family and working on his vintage cars. He is a non-drinker and non-smoker.

Health History

Mr Silverton's health history includes depression, osteoarthritis and Paget's disease. He has had multiple fractures including his left radius, right neck of femur, right clavicle, right tibia and left knee.

Medications

Aspirin, ibuprofen, sertraline, alendronate, omeprazole, paracetamol, vitamin D

CASE STUDY 4

BACKGROUND

- Pressure injury left heel
- Wound started as a fluid-filled blister on her heel approximately 2 weeks ago

PAST HEALTH HISTORY

Medical / Surgical / Social History

- Type II Diabetes Mellitus (2008)
- Cerebrovascular accident
- Hypertension
- Osteoarthritis
- Thyroidectomy (multinodular goitre)
- Hysterectomy (1999)
- Asthma
- Chronic back pain
- Anxiety / depression
- Obese

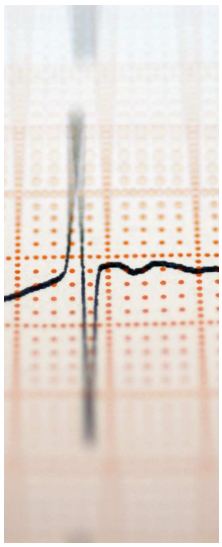
Allergies/Sensitivities

- Nil known allergies

Medications

- Aspirin
- Candesartan
- Lorazepam
- Calcitriol
- Amitriptyline
- Oxycodone
- Ferrous fumarate/Folic Acid
- Metformin
- Meloxicam
- Gabapentin
- Buprenorphine patch
- Thyroxine
- Paracetamol
- Diazepam
- Salbutamol inhaler

ASSESSMENT

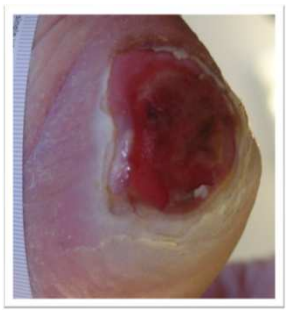


Baseline Observations

- Blood pressure 150/80mmHg
- Heart rate 88 bpm
- Respiratory rate 14
- Temperature 37.2°C
- Blood Sugar Level 12 mmol
- Weight 132kg
- Height 168cm

WOUND ASSESSMENT ON ADMISSION

26 July 2021



30 July 2021

6 August 2021

9 August 2021

WOUND ASSESSMENT

11 September 2021

25 September 2021

27 October 2021

WOUND ASSESSMENT

WOUND MANAGEMENT PLAN

- Implement pressure injury prevention & management plan
- Skin & wound hygiene
- Wound dressing plan
- Referrals

EVALUATION PLAN / OUTCOME

- Set treatment goals
- Aim for improvement within 2 weeks
- Reassess every 2 weeks to monitor progress
- Nutrition & hydration
- Repositioning & mobilisation

QUESTIONS & DISCUSSION

FAQ'S

- How do I address challenges with repositioning & pressure off-loading when the person has cognitive impairment or is at end-of-life?
- What is the role of sheepskin & heel booties?
- Should I rupture a fluid-filled blister on the heel?
- Should I debride a necrotic heel?
- Should all consumers have nutritional supplementation?
- What is the best dressing to use for
  - Suspected deep tissue injury
  - Stage 3 pressure injury on the heel
  - Deep cavity

SUMMARY

- Preserving skin integrity is the best way to prevent PIs & IAD from occurring
- There is a difference between PIs & IAD
- If the person is NOT incontinent, it is not IAD
- IAD & PI can co-exist
- Both IAD & PI must be assessed & monitored
- If either condition fails to improve or deteriorates, refer for specialist advice

THANK YOU

info@woundservice.com.au
P: 07 3289 3102
www.woundservice.com.au

Scan the QR code to complete evaluation

REFERENCES

Wilson, L., Kapp, S., & Santamaria, N. (2019). The direct cost of pressure injuries in an Australian residential aged care setting. *International Wound Journal, 16*, 64-70. doi:10.1111/iwj.12992
Graves, N., & Zheng, H. (2014). Modelling the direct health care costs of chronic wounds in Australia. *Wound Practice and Research, 22*(1), 20-24, 26-33.
Australian Wound Management Association. (2012). *Pan Pacific Clinical Practice Guidelines for the Prevention and Management of Pressure Injury.* Osborne Park, WA: Cambridge Media.
Stechmiller J, Cowan L, Whitney J et al. Guidelines for the prevention of pressure ulcers. *Wound Repair and Regeneration 2008. 16: 151 - 168.*
Bergquist-Beringer, S. And Davidson, J. (2006) National Database of Nursing Quality Indicators (NDNQI) Pressure Ulcer Training Version 3, accessed on 15/5/09 from https://www.nursingquality.org/ndnqipressureulcertraining/module3/default.aspx
National Pressure Ulcer Advisory Panel (NPUAP) (2007) Pressure Ulcer Staging System, accessed on 6/5/09 http://www.npuap.org/resources.htm
Fleck, C. (2007) Suspected deep tissue injury, *Advances in Skin and Wound Care,* vol. 20, no. 7, pp. 413 – 415.
National Institute for Clinical Excellence, *The use of pressure-relieving devices (beds, mattresses and overlays) for the prevention of pressure ulcers in primary and secondary care. 2004, London: Royal College of Nursing.*
Royal College of Nursing, *The management of pressure ulcers in primary and secondary care: A clinical practice guideline. 2005, London: Royal College of Nursing and National Institute for Health and Clinical Excellence.*
Whitney A, Phillips L, Aslam R et al. Guidelines for the treatment of pressure ulcers. *Wound Repair and Regeneration 2006. 14: 663-679.*
Santamaria, N., Gerdtz, M., Kapp, S., Wilson, L., & Gefen, A. (2017). A randomised controlled trial of the clinical effectiveness of multi-layer silicone foam dressings for the prevention of pressure injuries in high-risk aged care residents: The Border III Trial. *International Wound Journal, 15*, 482-490.
European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. (2019). *Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline.* International Guideline. Haesler, E. (ed). EPUAP/NPIAP/PPPIA.
Nguyen, K. H., Chaboyer, W., & Whitty, J. A. (2015). Pressure injury in Australian public hospitals: a cost-of-illness study. *Australian health review : a publication of the Australian Hospital Association*, *39*(3), 329–336. https://doi.org/10.1071/AH14088
Kapp, S., & Santamaria, N. (2017). The financial and quality-of-life cost to patients living with a chronic wound in the community. *International wound journal*, *14*(6), 1108–1119. https://doi.org/10.1111/iwj.12767
Royal Commission into Aged Care Quality and Safety. (2019). *Interim Report: Neglect.* Volume 1. Commonwealth of Australia.

REFERENCES

Beeckman, D., Campbell, J., Campbell, K., Chimentao, D., Coyer, F., Domansky, R., Gray, M., Hevia, H., Junkin, J., Karadag, A., Kottner, J., Arnold Long, M., McNichol, L., Meaume, S., Nix, D., Sabasse, M., Sanada, H., Yu, P., Voegeli, D., & Wang, L. (2015). Proceedings of the Global IAD Expert Panel. Incontinence-associated dermatitis: moving prevention forward. *Wounds International.* www.woundsinternational.com

Campbell, J., Gosley, S., Coleman, K., & Coyer, F. (2016). Combining pressure injury and incontinence-associated dermatitis prevalence surveys: an effective protocol? *Wound Practice and Research, 24*(3), 170-177.

Rippon, M., Colegrave, M., & Ousey, K. (2016). Incontinence-associated dermatitis: reducing adverse events. *British Journal of Nursing, 25*(18), 1016-1021.
Wilson, L., Kapp, S., & Santamaria, N. (2019). The direct cost of pressure injuries in an Australian residential aged care setting. *International Wound Journal, 16*, 64-70. doi:10.1111/iwj.12992
Graves, N., & Zheng, H. (2014). Modelling the direct health care costs of chronic wounds in Australia. *Wound Practice and Research, 22*(1), 20-24, 26-33.
Australian Wound Management Association. (2012). *Pan Pacific Clinical Practice Guidelines for the Prevention and Management of Pressure Injury.* Osborne Park, WA: Cambridge Media.
Santamaria, N., Gerdtz, M., Kapp, S., Wilson, L., & Gefen, A. (2017). A randomised controlled trial of the clinical effectiveness of multi-layer silicone foam dressings for the prevention of pressure injuries in high-risk aged care residents: The Border III Trial. *International Wound Journal, 15*, 482-490.
European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. (2019). *Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline.* International Guideline. 3rd edition, Haesler, E. (ed). EPUAP/NPIAP/PPPIA.
European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. (2025). *Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline.* International Guideline. 4th edition, Haesler, E. (ed). EPUAP/NPIAP/PPPIA.