Distinguishing Between Incontinence Associated Dermatitis (IAD) & Pressure Injuries (PI)

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Acknowledgement

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The work is part of the Hospital Acquired Pressure Injury (HAPI) project in SLHD and many of the photos are courtesy of Michelle Barakat-Johnson and Thomas Leong, SLHD.

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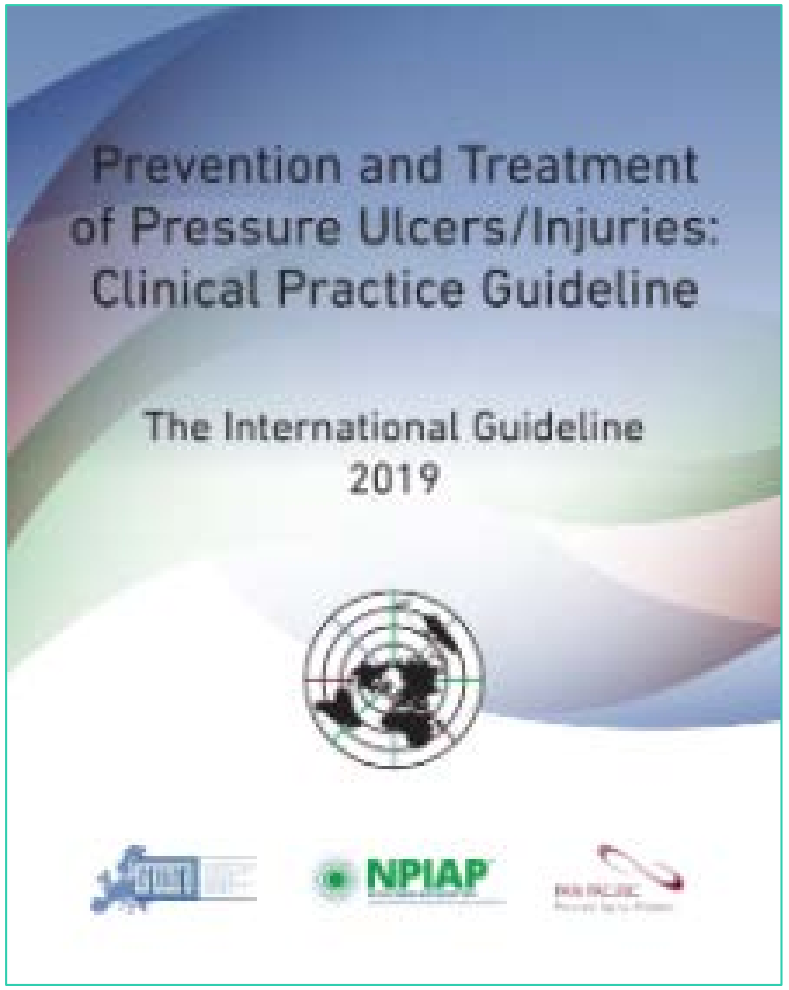
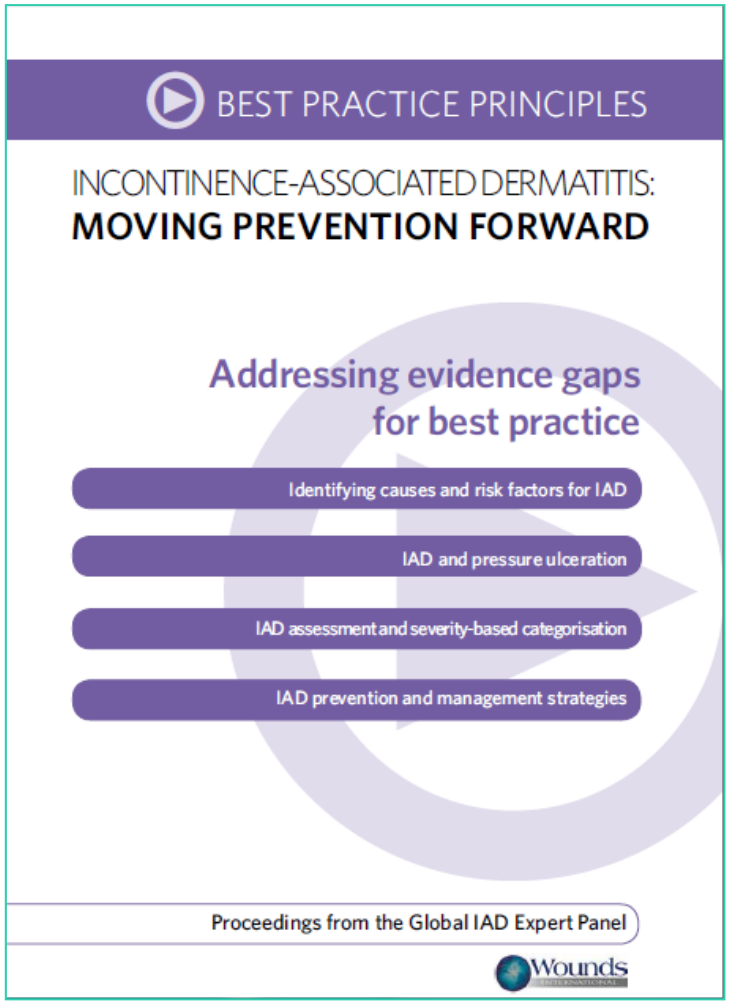
Aims

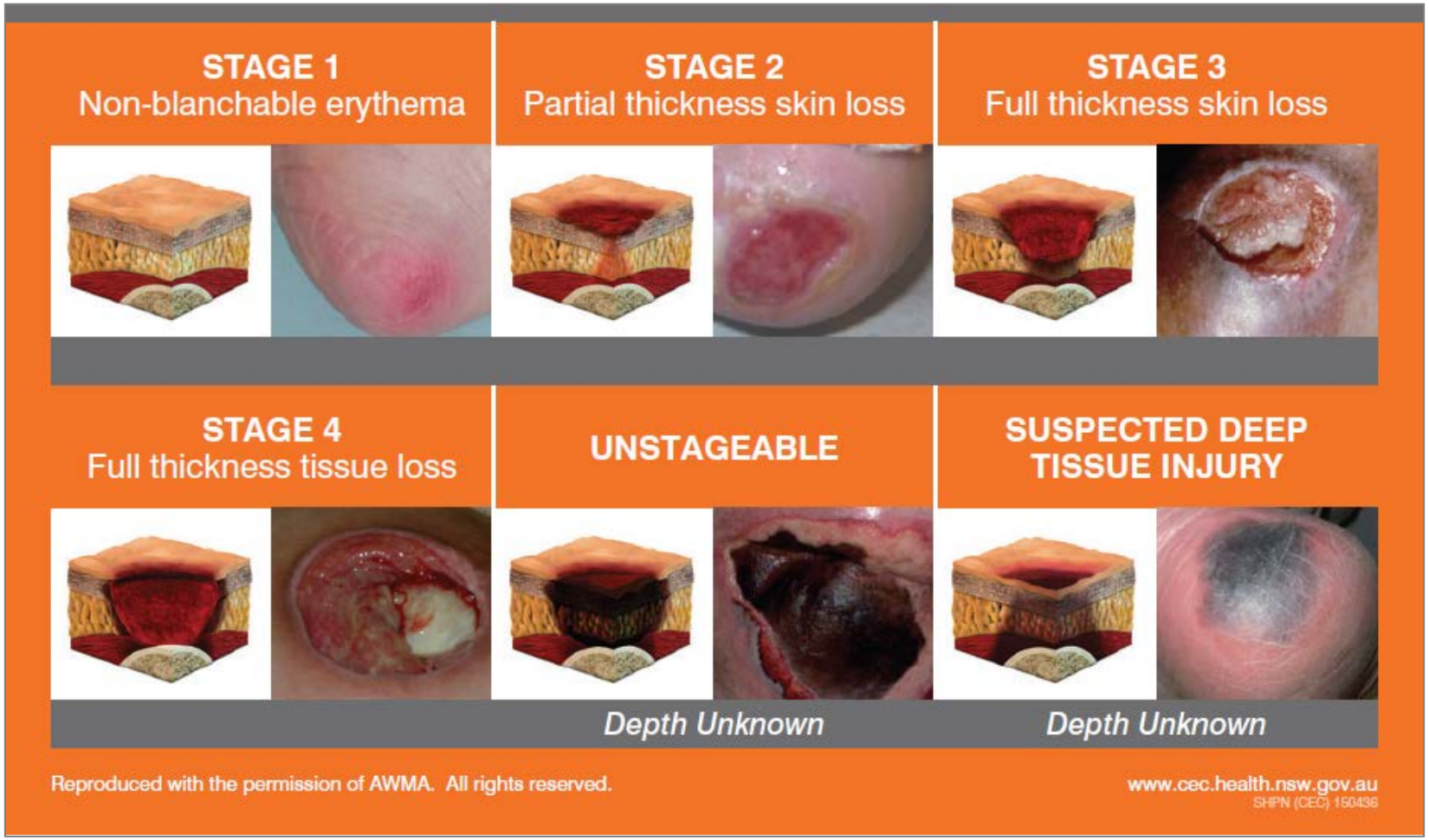
- To provide evidence based information to improve clinical knowledge about Incontinence Associated Dermatitis (IAD) and Pressure Injury (PI)
- To assist clinicians distinguish between IAD and PI

Guideline & Best Practice Principles





Pressure injury classification



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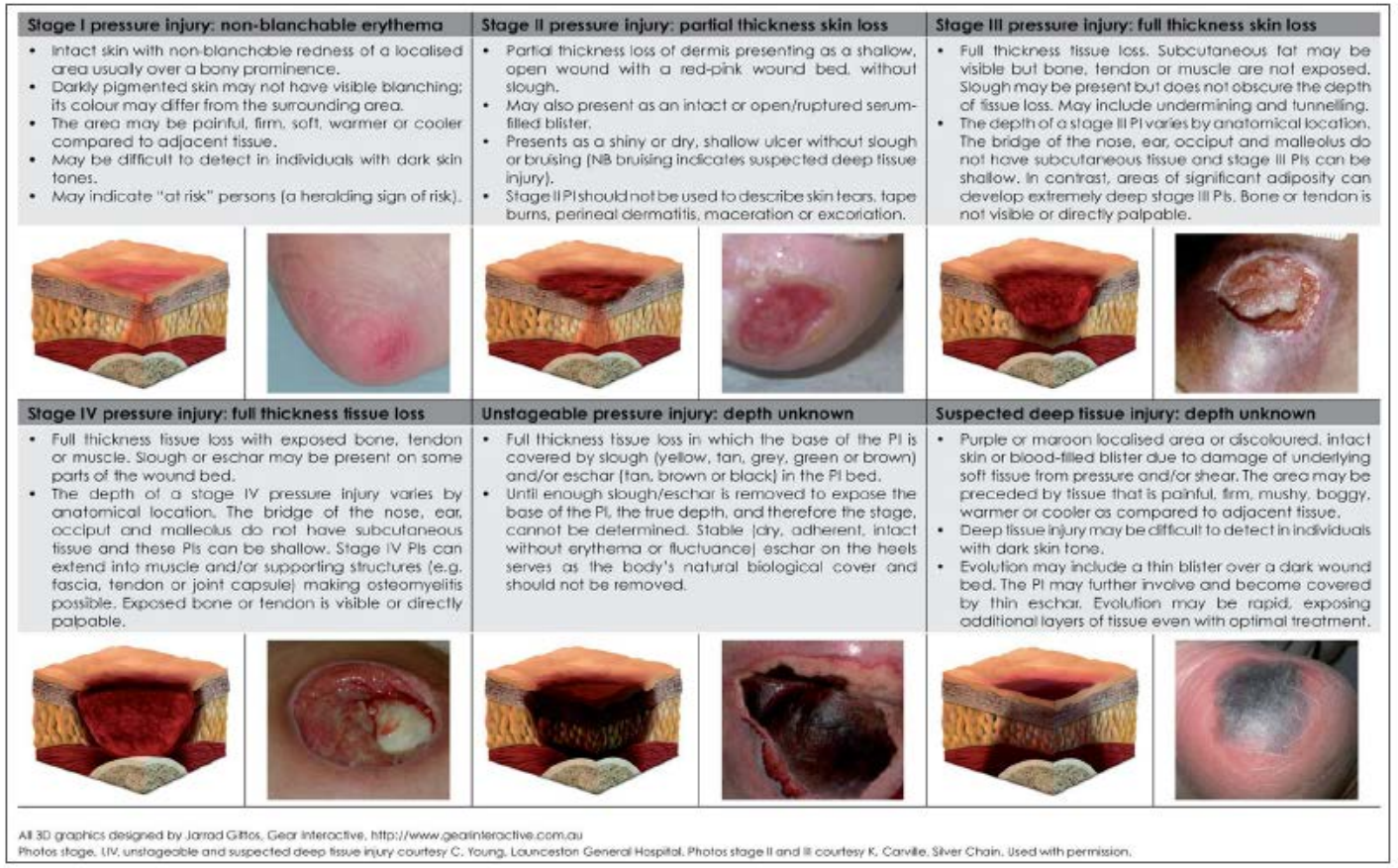
Pressure injury classification



Stage I pressure injury: non-blanchable erythema

- 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).

Stage II pressure injury: partial thickness skin loss

- 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.

Stage III pressure injury: full thickness skin loss

- 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

- 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.

Unstageable pressure injury: depth unknown

- 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.

Suspected deep tissue injury: depth unknown

- 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 Jarrad Gittos, Gear Interactive, http://www.gearinteractive.com.au
Photos stage, I/V, 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.

Based on National Pressure Ulcer Advisory Panel (NPUAP), European Pressure Ulcer Advisory Panel (EPUAP). Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. 2009, Washington DC: NPUAP cited in Australian Wound Management Association. Pan Pacific Clinical Practice Guideline for the Prevention and Management of Pressure Injury. Abridged Version, AWMA; March 2012. Published by Cambridge Publishing, Osborne Park, WA.

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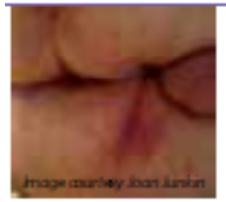
IAD severity categorisation tool

Clinical presentation	Severity of IAD	Signs**
	No redness and skin intact (at risk)	Skin is normal as compared to rest of body (no signs of IAD)
	Category 1 – Red* but skin intact (mild)	Erythema +/-oedema
 moderate  severe	Category 2 – Red* with skin breakdown (moderate-severe)	As above for Category 1 +/-vesicles/bullae/skin erosion +/- denudation of skin +/- skin infection

* Or paler, darker, purple, dark red or yellow in patients with darker skin tones

**If the patient is not incontinent, the condition is not IAD

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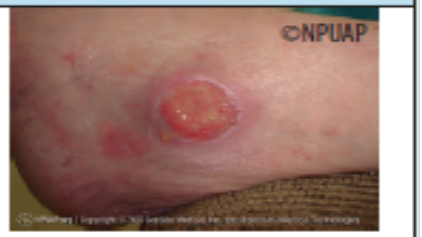
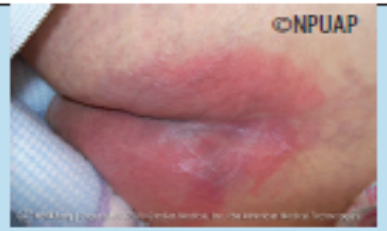
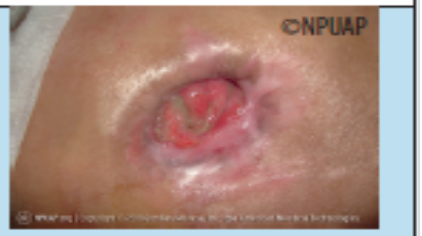
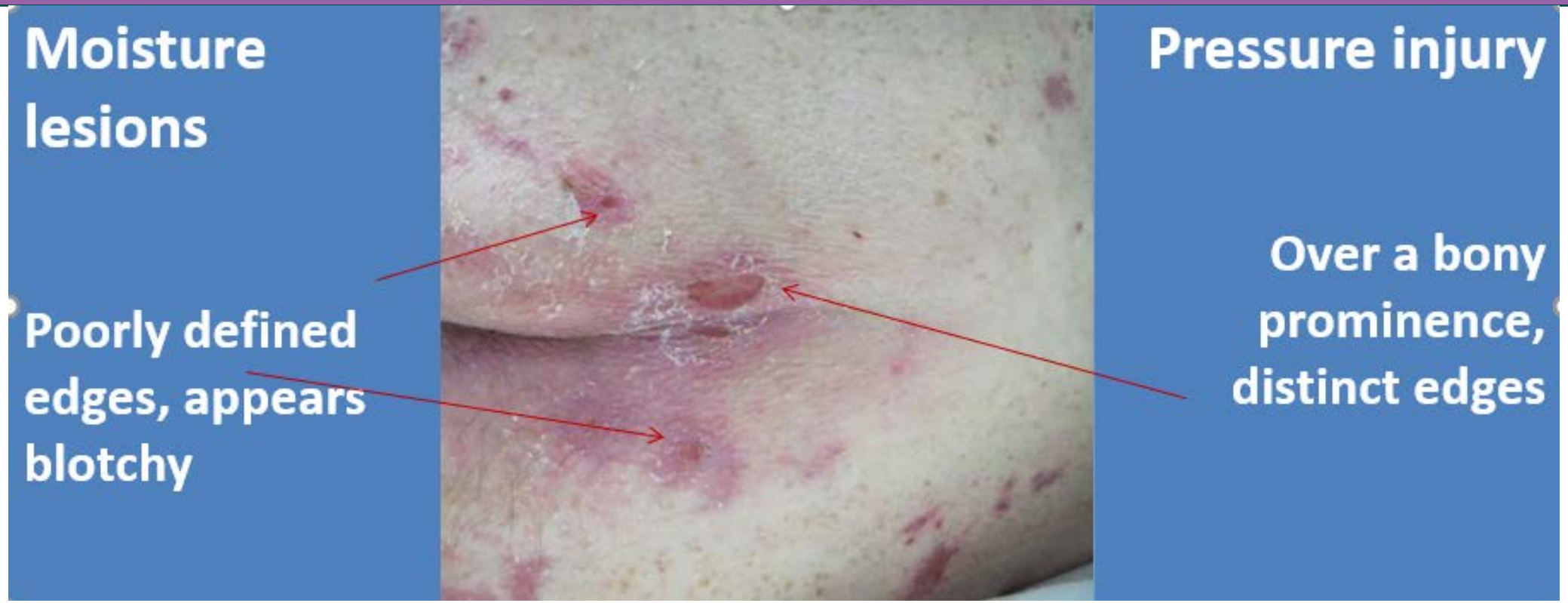
Distinguishing IAD from pressure injury

Parameter	IAD	Pressure injury
History	Urinary and/or faecal incontinence	Exposure to pressure/shear
Symptoms	Pain, burning, itching, tingling	Pain
Location	Affects perineum, perigenital, peristomal area; buttocks; gluteal fold; medial and posterior aspects of upper thighs; lower back; may extend over bony prominence	Usually over bony prominence or associated with location of a medical device
Shape/edges	Affected area is diffuse with poorly defined edges/ may be blotchy	Distinct edges or margins 
Presentation/depth	Intact skin with erythema (blanchable/non-blanchable), with/without superficial/ partial-thickness skin loss 	1. Presentation varies from intact skin with non-blanchable erythema to full-thickness skin loss 2. 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

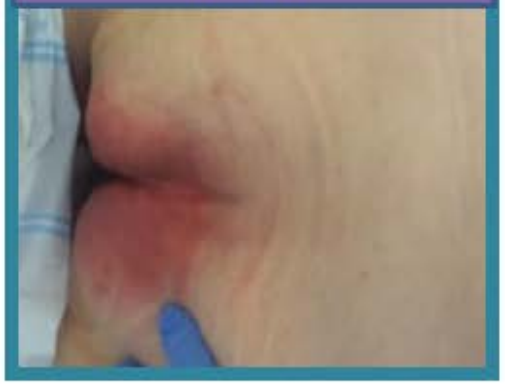
Distinguishing IAD from PI

Sometimes it's confusing to know which is which. Here is an example of a patient who has moisture lesions as well as a pressure injury

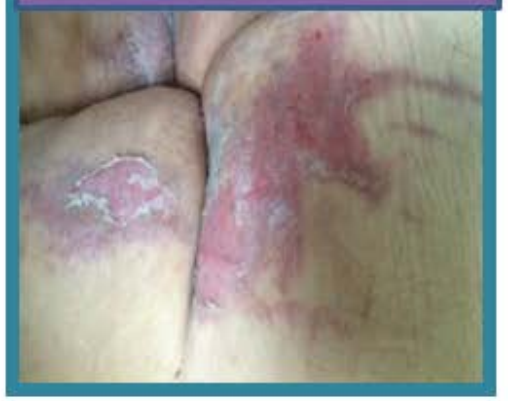


Distinguishing IAD from PI

IAD - Category 1 skin intact



IAD - Category 2



IAD - Category 2

Stage 1 pressure injury

Stage 2 pressure injury

Unstageable pressure injury

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Distinguishing IAD from PI

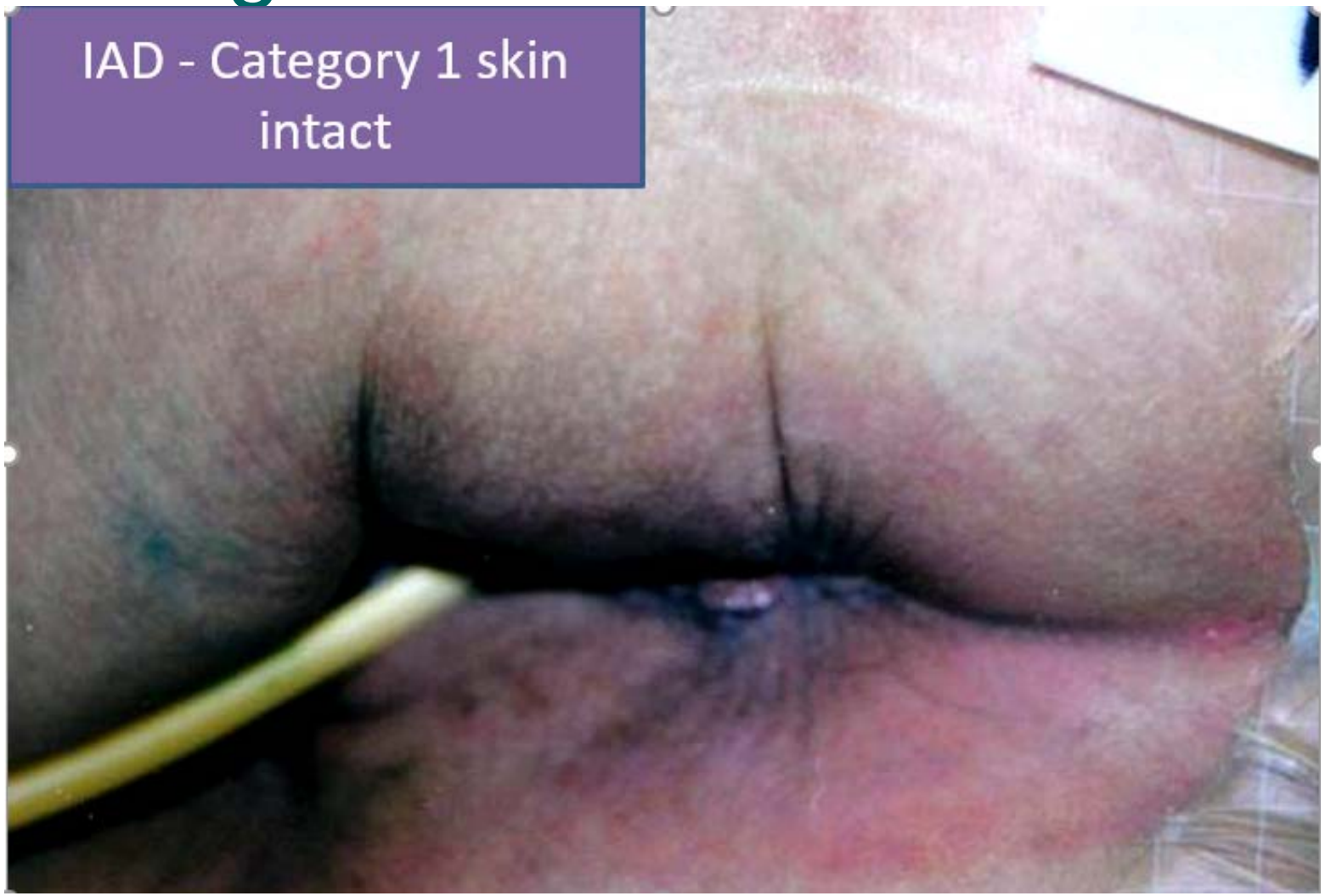
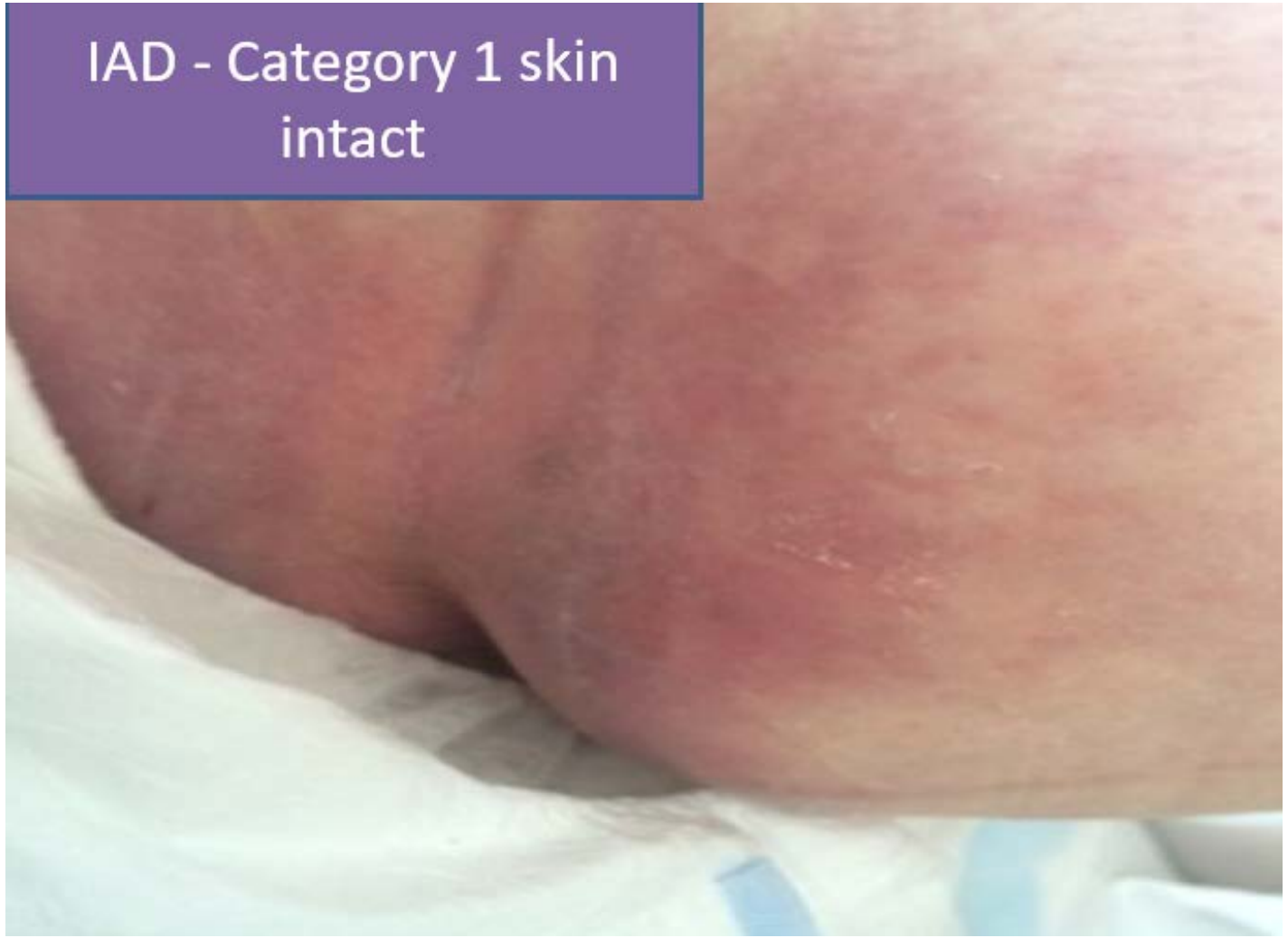


Photo courtesy of Dr Jill Campbell

Distinguishing IAD from PI



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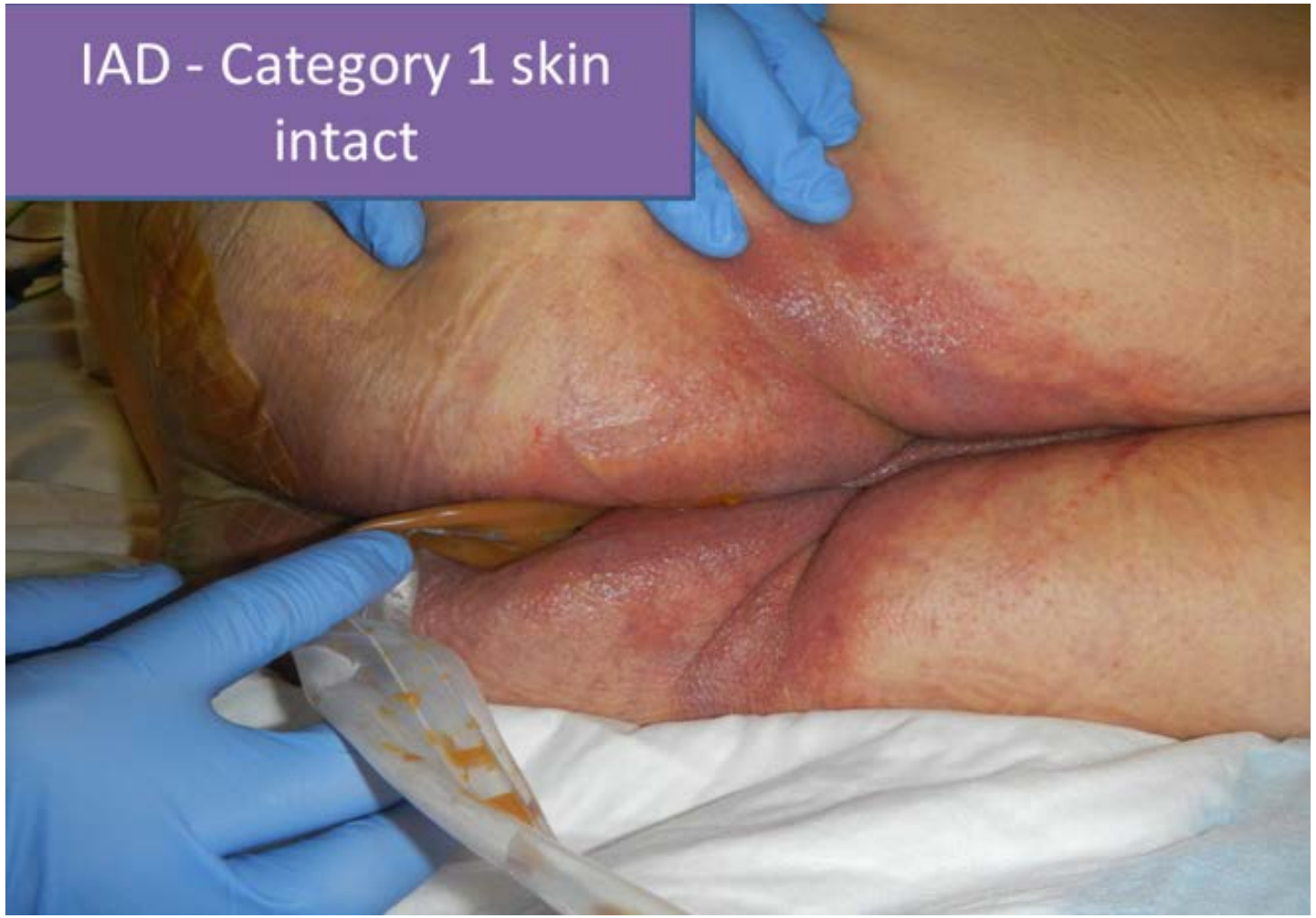
Distinguishing IAD from PI



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Distinguishing IAD from PI

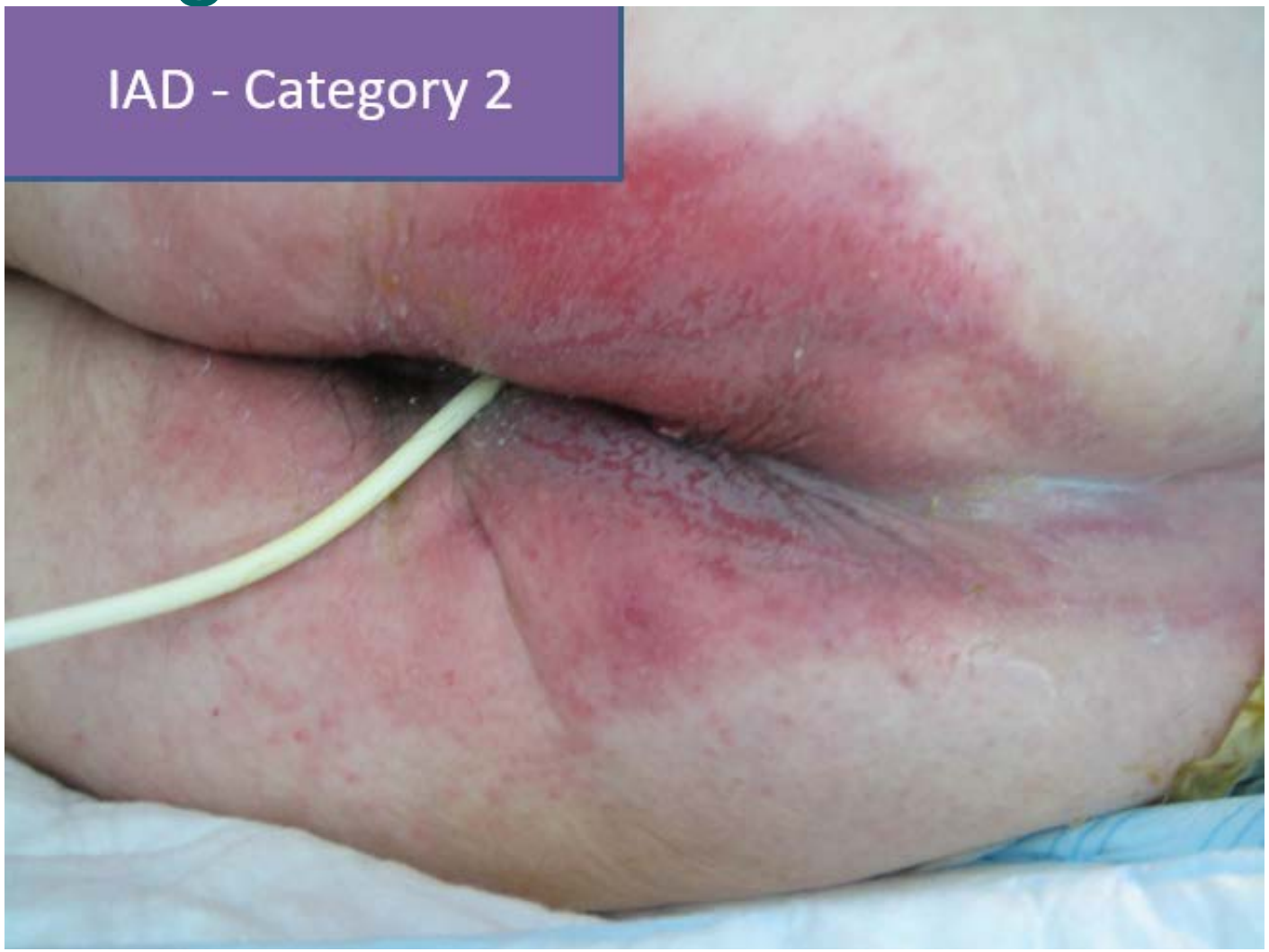
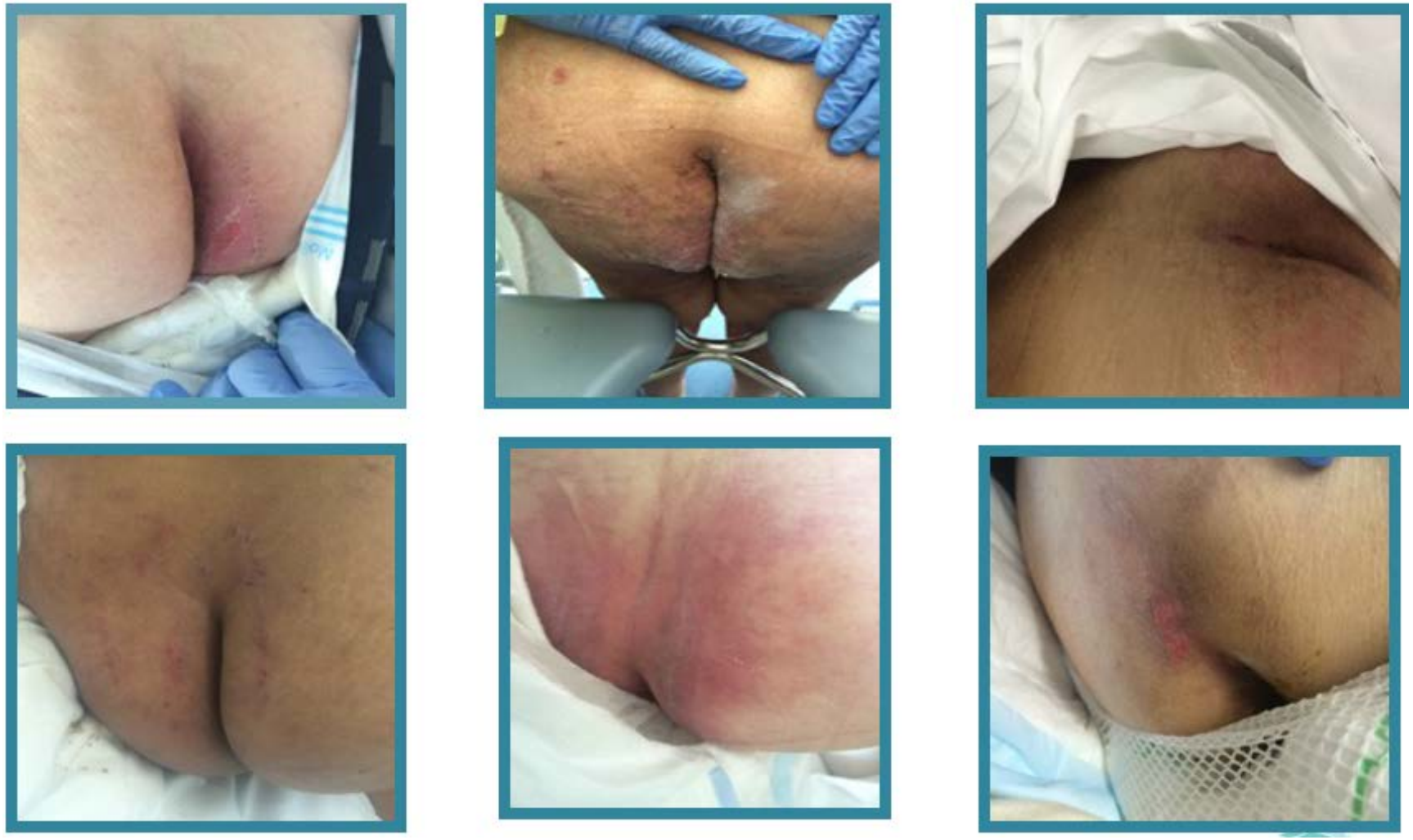


Photo courtesy of Dr Jill Campbell

IAD reported as PI



Photos courtesy of Michelle Barakat-Johnson SLHD

Differentiating IAD from PI

It is often difficult for clinicians to correctly identify IAD and to distinguish it from PI (Stage 1 or 2).

If the person is not incontinent, the condition is not IAD.

Refer to the ‘Distinguishing IAD from Pressure Injury’ guideline to assist in correctly diagnosing in order to determine the best treatment strategy

References

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Best practice principles used with permission from Wounds International.

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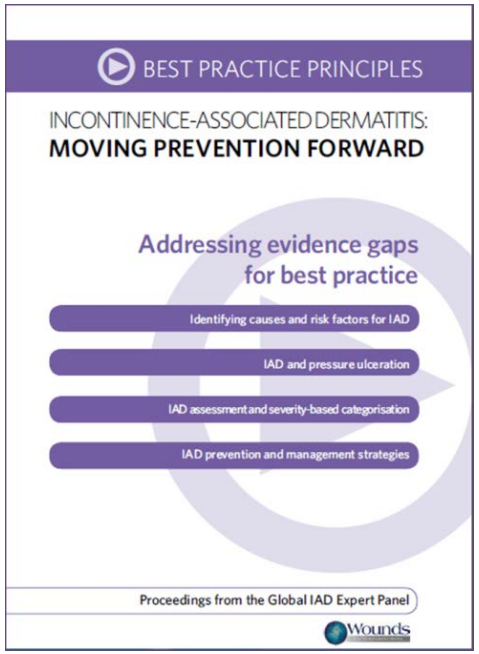

Questions

Maree Connolly
Improvement Lead | Clinical Excellence Commission

T 0429590862
E maree.connolly@health.nsw.gov.au
W cec.health.nsw.gov.au

1 Reserve Road, St Leonards NSW 2065

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