# Pressure Injury Prevention and Management Clinical Guideline

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<th><strong>Owner (initiating the document):</strong></th>
<th>Dr Amanda Ling, Director Office of Safety and Quality in Healthcare</th>
</tr>
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<tbody>
<tr>
<td><strong>Contact name and number:</strong></td>
<td>Rachel Dennis (Ph: 9222 2197)</td>
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<td><strong>Approved by:</strong></td>
<td>Professor Bryant Stokes, A/Director General</td>
</tr>
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Acknowledgements

The WA Health Pressure Injury Prevention and Management Clinical Guideline was prepared for WA Health by WoundsWest on behalf of the WA Pressure Injury Forum, where it was agreed that WA Health would benefit from a state-wide clinical guideline for the prevention and management of pressure injuries. This clinical guideline is based on the South Australian Health Pressure Injury Prevention and Management Guideline.

Suggested Citation


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1. Introduction

1.1 Pressure injuries are largely preventable, and it is recognised that they are potentially life threatening. They also have consequences for: quality of life, infection, pain, alteration to sleep and mood, delayed healing and the provision of services.

1.2 The management of the risk factors for pressure injuries such as poor skin condition, pain, impaired mobility and poor nutritional status will have wider benefits beyond reduction of pressure injury, and support patient-centred holistic care and healthy ageing.

1.3 The most effective approach to pressure injury prevention and management includes:

- Timely screening and assessment to identify risk factors;
- The engagement of patients and their carers with their health care providers and the treatment offered; and
- Implementation of a care plan that is:
  - Tailored to the individual and reduces their risk factors;
  - Supported by systems of care that are focussed on prevention and optimising healing;
  - Comprehensive and inter-professional;
  - Delivered by a skilled, knowledgeable workforce who use techniques and materials supported by current evidence to optimise healing and prevent or delay complications; and
  - Inclusive of access to suitable equipment and products.

1.4 The WA Health Pressure Injury Prevention and Management Policy Directive and Clinical Guideline describe:

- Systems for the delivery of care that is in accordance with the Australian Commission on Safety and Quality in Health Care, Safety and Quality Improvement Guide Standard 8: Preventing and Managing Pressure Injuries, 2012.

1.5 The term ‘patient’ in this document is intended to also include consumers, clients, residents and other people, however titled, receiving healthcare from a clinician or other healthcare provider.
2. Governance and quality improvement

2.1 All policies, protocols or procedures are based on current agreed best practice guidelines and accreditation standards, and a system for their review is in place.

2.2 There are committees and work groups that have responsibility for monitoring and improving performance, and for conducting relevant quality improvement activities.

2.3 Pressure injuries that have developed or deteriorated during an episode of health care are reported via the Clinical Incident Monitoring System (CIMS).

2.4 Pressure injury data is monitored, analysed and acted upon by ward, unit and/or service-level work groups or committees.

2.5 Systems are in place to ensure that both staff expertise and resources such as equipment and products are available to enable the provision of best practice prevention and wound management.

3. Clinical practice – preventing and managing pressure injuries

Clinical practice for preventing and managing pressure injuries is summarised in the following flow chart, which outlines pressure injury risk assessment, preventative strategies, assessment and classification, treatment and monitoring and documentation.
FLOW CHART FOR PREVENTION AND MANAGEMENT OF PRESSURE INJURY

Assess all patients as soon as possible following admission to service and within a minimum of eight hours (or on initial visit for patients in the community)

Refer to guideline and/or product information for contraindications for therapies

CONDUCT PI RISK ASSESSMENT

Nutritional screening
Use a validated tool appropriate to the clinical setting (Grade B)

Is the patient at nutritional risk?

YES

Nutritional assessment
Use a validated tool appropriate to the clinical setting (Grade B)

NO

- Conduct a comprehensive risk assessment including assessment of:
  - Clinical history
  - Mobility and activity
  - Intrinsic and extrinsic risk factors
  - Psychosocial history
  - Continence
  - Cognition

- Use a validated pressure injury risk (PI) assessment scale (Grade B)
- Conduct a complete skin assessment (Grade C)

Does the patient have an existing pressure injury?

YES

Strategies for patients at high risk

- Use a high specification foam reactive (constant low pressure) support surface (Grade A)
- Implement skin protection strategies
- Provide high protein nutritional supplements (Grade B)
- Consider arginine supplements (Grade C)
- Consider more frequent repositioning (Grade A)
- Patient education

NO

Does the patient have high risk of pressure injury?

YES

Preventative strategies

- Implement skin protection strategies
- Use constant low pressure redistribution support surfaces (Grade A)
- Regular repositioning (Grade A)
- Patient education

NO

IMPLEMENTATION PREVENTION PLAN

Pressure injury assessment
Use a validated pressure injury risk assessment scale (Grade C)

Pressure injury classification
Use NPUAP/EPIDAP pressure injury classification system

Pain assessment
Use a validated pain assessment tool (Grade C)

ASSESS EXISTING PI

Pain management
- Develop an individualised pain management plan including regular analgesia
- Consider topical opioids when debriding (Grade C)
- Electrotherapy (Grade B)

Wound management
- Debride the wound as indicated
- Treat infection - consider using iodine (Grade C)
- Select a wound dressing
- Consider negative pressure wound therapy (Grade C)

Additional management options
- Consider debridement
- Consider antibiotics

MONITOR AND DOCUMENT

Ongoing risk assessment
At least weekly pressure injury healing assessment

DOCUMENT
- All assessments
- All management plans
- All interventions

Ongoing risk assessment

Figure 1 – Reproduced from Pan Pacific Clinical Practice Guideline for the Prevention and Management of Pressure Injury, 2012, with permission from Australian Wound Management Association
3.1 Screening and assessment

3.1.1 On presentation, all patients will be assessed within eight hours for their risk of pressure injury and results documented. This assessment will include:

- Pressure injury risk assessment using the Braden Scale for adults (see Appendix A) and the Glamorgan Pressure Injury Screening Tool for paediatrics and neonates (see Appendix B).

- Skin assessment using the WA Health Comprehensive Skin Assessment Tool criteria which includes visual inspection (see Appendix C).

- Nutritional screening using a validated tool appropriate to the clinical setting or population. For example, the Mini Nutritional Assessment – Short Form (MNASF) or the Malnutrition Screening Tool (MST). These tools usually include assessment of:
  - weight, height and BMI
  - history or unintended weight loss or gain
  - food intake history
  - dental and oral health
  - swallowing difficulties.

- Assessment of the patient’s ability to feed self, and provision of assistance as required;

- Clinicians should use their clinical judgement in conjunction with pressure injury risk assessment findings to determine the patient’s overall level of risk.

3.1.2 The results of the assessment will determine level of risk.

Any patient with an existing pressure injury will be deemed to be at high risk.

- Using the Braden Scale for adults:
  - Very High risk - total Braden score of 9 or below
  - High risk – total Braden score of 10 to 12
  - Moderate risk – total Braden score of 13-14
  - At risk - Braden score 15 to18
  - If other major risk factors are present (advanced age, fever, poor dietary intake of protein, diastolic pressure below 60, haemodynamic instability) advance to the next level of risk.
• Using the Glamorgan Pressure Injury Screening Tool for paediatrics and neonates:
  o Very High risk – total Glamorgan score 20+
  o High risk – total Glamorgan score 15+
  o At risk – total Glamorgan score 10+.

3.1.3 For all patients, all assessments should be repeated and documented:
• If there is a change to health status or mobility; or
• A period of immobility; or
• Change to their environment; or
• If a pressure injury develops; and
• At least weekly for inpatients and residents.

3.1.4 In addition, for all inpatients at high or very high risk, skin assessment should be repeated and documented at least daily. Skin should also be inspected and findings documented:
• During usual care, and on every nurse-initiated positioning change; change;
• Pre-operatively, and repeated as soon as feasible after surgery; and
• On transfer between units, and discharge to facilitate discharge planning and handover.

3.1.5 Pressure injury risk assessment should be repeated whenever there is a change in the patient’s condition and when the patient is discharged.

3.1.6 For all patients with a pressure injury, screening, skin and nutritional assessment should be a routine part of the management of the pressure injury, to ensure that the care plan is current and effective in optimising healing and minimising risk of other pressure injury.

3.1.7 For all patients with a pressure injury, pain assessment should be undertaken using tools recommended in the Pan Pacific Clinical Practice Guideline for the Prevention and Management of Pressure Injury, 2012.

3.1.8 For all outpatients at high or very high risk, special consideration should be given to risk screening and re-assessment.

3.2 Prevention strategies
3.2.1 All patients identified as at risk should have evidence based prevention strategies implemented within eight hours, and the strategies reviewed at least daily. Patients at high risk or very high risk require interventions in place as soon as possible following presentation. All prevention strategies should be documented. Prevention strategies include but are not limited to:
• Correct fitting, removal and checking of devices/orthoses/anti embolic stockings and casts etc.;
- Re-positioning and/or mobilising routine, including careful manual handling;
- Selection and provision of support surfaces, aids, equipment/devices to redistribute pressure if possible. This includes their use in areas such as theatre, intensive care and emergency departments;
- Referral to other health professionals as clinically indicated for assessment and treatment;
- Management of pain if present;
- Skin protection, moisture reduction and optimal skin hygiene and temperature;
- Adequate nutrition and hydration, including nutritional supplements where indicated (with dietitian supervision if available);
- Continence management; and,
- Patient / Carer education.

3.3 Managing pressure injuries

3.3.1 A wound assessment should be undertaken as soon as possible and initial wound care provided. Following this, a comprehensive wound management plan should be developed and documented. Prevention and management strategies should consider the previous management that was in place prior to presentation.

3.3.2 Care is aimed at optimising healing and prevention of complications of existing pressure injury(s). Care can include prevention strategies (see 3.2), assessment; documentation and monitoring of wound(s); wound management; pain management; nutritional interventions; pressure redistribution; maintenance of mobility and promotion of circulation; and consultation with or referral to relevant health disciplines.

3.3.3 Use of a pressure injury healing scale is recommended. A wound chart should include, but not be limited to:
- Classification of the stage of pressure injury;
- Anatomical location;
- Duration;
- Dimensions;
- Clinical appearance;
- Exudate;
- Condition of wound edges;
- Surrounding skin;
- Pain – during and between wound care; and,
- A photographic record in accordance with local policy.
3.3.4 Wound management is provided or supervised by health professionals with skills, knowledge and equipment to provide treatments in accordance with the Pan Pacific Clinical Practice Guideline for the Prevention and Management of Pressure Injury, 2012.

These include but are not limited to:

- Advanced assessment;
- Employment of infection control principles including Aseptic Non Touch Technique (ANTT);
- Wound bed preparation (including debridement);
- Skin and wound hygiene;
- Selection of wound dressings;
- Treatment of infection;
- Topical applications and irrigation; and,
- Other interventions such as electrotherapy, topical negative pressure wound therapy and hyperbaric oxygen treatments.

3.3.5 Reassessment should occur at each dressing change. Wound management should be reviewed if healing is not proceeding in a timely and orderly manner.

3.3.6 Collaboration with other health professionals for their assessment and contribution to care planning and management should occur as clinically indicated. This may occur via telephone or ehealth. Consider referral to, or consultation with:

- Nurse Practitioner, CNC Wound Management, Stomal Therapist and/or a nurse with specialist skills in wound management for: assessment of stage 3, 4, unstageable or SDTI pressure injury; uncontrolled pain; or no response to management in one to two weeks;
- Vascular surgeon for assessment if compromised arterial circulation is suspected;
- Occupational Therapist review of activities of daily living (ADL) and home setting including seating, aids/equipment and strategies used during activity;
- Podiatrist for collaborative assessment of pressure injuries of the foot requiring offloading and footwear;
- Dietitians for nutrition assessment and management, particularly if identified at nutritional risk e.g. Braden score less then 3 and according to validated nutritional screening tools;
- Plastic surgeon assessment of stage 3, 4, unstageable or SDTI pressure injury;
- Infection Disease Control specialist for concerns about infection and associated management;
• Pain specialist when existing pain management strategies are not effective;
• Physiotherapist for review of mobility and/or optimising transfer and appropriate manual handling techniques;
• Clinical psychologist / psychiatrist for mental health needs; and,
• Social worker or discharge coordinator for complex discharge planning.

3.3.7 Pain is assessed at least every shift using a validated tool, and a pain management plan is developed with the patient including timing of analgesics, care with dressing changes, manual handling, repositioning and support surfaces.

3.4.8 Provide (or consider) nutritional support to optimise healing and tissue repair.

3.4 Care planning and documentation
3.4.1 All patients who are identified as being at risk will have a management plan documented and communicated during handover at the end of that shift in an acute or residential care setting, and within one week for community services. Management plans include strategies aimed at:

• Preventing the development of pressure injury(s) (section 3.2); and
• Optimising healing and preventing complications of existing pressure injury(s).

3.4.2 The management plan will include, but not be limited to:

• Patient and carer education and involvement;
• Input from the inter-professional team about additional assessment, recommendations and treatment (refer to section 3.4.7);
• Wound management strategies; and,
• Discharge planning and strategies.

3.5 Discharge planning
3.5.1 Discharge planning for those with an existing pressure injury requires communication with all members of the health care team, the patient and carer/s regarding the ongoing management of the patient.

3.5.2 Clinical handover should encompass stage and progress of the pressure injury, inclusive of:

• Previous and current management;
• Goals of care; and
• Planned follow-up.
4 Clinical practice – providing products, equipment, devices, pharmaceuticals to support prevention and wound management

4.1 All health services should ensure that a safe environment is provided through service design, planning and regular audit of the environment and equipment, particularly support surfaces such as beds, trolleys, theatre tables and chairs.

4.2 Storage and procurement processes should ensure that appropriate products, equipment, devices, dressings, topical applications and pharmaceuticals are readily available for consumer and staff use.

4.3 Staff training in the safe and effective use and monitoring of products, equipment, devices, dressings, topical applications and pharmaceuticals is available.

5 Reporting pressure injury incidents

5.1 All pressure injuries should have an ‘alert’ sticker placed in the integrated patient notes. WA Health recommends the use of the Pressure Injury or Skin Tear Alert Sticker (see Appendix D). The sticker should include the following information:

- Stage of pressure injury;
- Location of pressure injury; and
- Whether the pressure injury was present on admission.

5.2 All new pressure injuries, stage 2 and above, and those that have significantly deteriorated (progressed to the next stage of pressure injury) since admission, should be reported via the WA Health Clinical Incident Management System (CIMS).

5.3 Where a pressure injury arises during care, or an existing pressure injury significantly deteriorates (progressed to the next stage of pressure injury), a review of the care plan by the medical officer along with the Nurse Practitioner or Senior Nurse and other relevant staff (e.g. Dietitian, Physiotherapist, Occupational Therapist), is required within 24 hours and a management plan agreed. Alternative methods of obtaining advice may need to be used at sites where allied health and other specialist staff are not available on site in these timeframes (e.g. via telephone or ehealth).

5.4 For community care, all pressure injuries that occur during the episode of care are to be noted in the case record and reported to the General Practitioner or Nurse Practitioner within 24 hours. A re-assessment of risk and interventions is conducted, then the care plan modified.
6 Communicating with patients and carers

6.1 Information should initially be provided to the patient and carer at the time of assessment and care planning, and throughout the episode of care.

6.2 A management plan is then devised in collaboration with patient and carer where possible, and their involvement and preferences are documented.

6.3 Information should include (but not be limited to) written information. This information should be provided in a format that ensures its accessibility to the patient and takes account of health literacy principles.

6.4 Patient information should include, but not be limited to:

- Their risk factors for developing pressure injury, and what can be done to reduce those risks;
- How to inspect skin and recognise skin changes;
- Body sites that are at greatest risk of pressure damage;
- How to care for skin (e.g. hygiene and moisture);
- How to ensure adequate nutrition (e.g. choosing food from the five food groups);
- Use of support surfaces and devices;
- Methods for pressure redistribution including movement and positioning;
- What their treatment schedule is and what they need to do; and
- Who and when to ask for further advice or assistance (e.g. independent living centres).

6.5 Patients and carers should be informed, and involved in, all aspects of care.

7 Other recommended sources of information


• Evidence based practice guidelines for the dietetic management of adults with pressure injuries, 2011, Trans Tasman Dietetic Wound Care Group, Dietitians Association of Australia.


• Australian Charter of Healthcare Rights.


• Pressure Area Care: Management 2012. The Joanna Briggs Institute.


• DAA Evidence Based Practice Guidelines for Nutritional Management of Malnutrition in adult patients across the Continuum of Care, 2009. Dietitians Association of Australia.
## Appendix A – The Braden Scale

### BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK

<table>
<thead>
<tr>
<th>Patient's Name</th>
<th>Evaluator's Name</th>
<th>Date of Assessment</th>
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### SENSORY PERCEPTION
**ability to respond meaningfully to pressure-related discomfort**

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<tr>
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<tbody>
<tr>
<td>Unresponsive (does not move, flinch, or groan to painful stimuli) due to diminished level of consciousness or sedation. OR</td>
<td>Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness. OR</td>
<td>Has a sensory impairment which limits the ability to feel pain or discomfort over 1/3 of body.</td>
<td>Responds to verbal commands, has no sensory deficit which would limit ability to feel or voice pain or discomfort.</td>
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### MOISTURE
**degree to which skin is exposed to moisture**

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<tr>
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<tbody>
<tr>
<td>Skin is kept moist almost constantly by perspiration, urine, etc.</td>
<td>Skin is often, but not always moist. Lines must be changed at least once a shift.</td>
<td>Skin is occasionally moist, requiring an extra from change approximately once a day.</td>
<td>Skin is usually dry, linens only require changing at routine intervals.</td>
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### ACTIVITY
**degree of physical activity**

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<tr>
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<tr>
<td>Confined to bed.</td>
<td>Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.</td>
<td>Walks occasionally during the day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.</td>
<td>Walks outside room at least twice a day and inside room at least once every two hours during waking hours.</td>
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### MOBILITY
**ability to change and control body position**

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<tr>
<td>Does not make even slight changes in body or extremity position without assistance.</td>
<td>Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.</td>
<td>Makes frequent though slight changes in body or extremity position independently.</td>
<td>Makes major and frequent changes in position without assistance.</td>
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### NUTRITION
**usual food intake pattern**

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<tr>
<td>Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement. OR is IDPO and/or maintained on clear liquids or J/N's for more than 5 days.</td>
<td>Rarely eats a complete meal and generally eats only about 1/3 of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement. OR receives less than optimum amount of liquid diet or tube feeding.</td>
<td>Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) and 3 servings of fruits and vegetables per day. Occasionally will refuse a meal, but will usually take a supplement when offered. OR is on a tube feeding or TPN regimen which probably meets most nutritional needs.</td>
<td>Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.</td>
</tr>
</tbody>
</table>

### FRICTION & SHEAR

<table>
<thead>
<tr>
<th>1. Problem</th>
<th>2. Potential Problem</th>
<th>3. No Apparent Problem</th>
</tr>
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<tbody>
<tr>
<td>Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequent slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contracture or agitation leads to almost constant friction.</td>
<td>Moves freely or requires minimum assistance. During a move, skin probably slides to some extent against sheets, chair, restraints or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.</td>
<td>Moves in bed and in chair independently and has sufficient musculature strength to lift up completely during move. Maintains good position in bed or chair.</td>
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Total Score: [Blank]
## Appendix B - Glamorgan Pressure Injury Screening Tool

### Paediatric Pressure Injury Risk Assessment Scale

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Score</th>
<th>Date and time of assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(If data such as serum albumin or haemoglobin is not available, write NK – not known and score 0)</td>
<td></td>
<td>(reassess at least daily and every time condition changes)</td>
</tr>
<tr>
<td>Child cannot be moved without great difficulty or deterioration in condition / general anaesthetic</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Unable to change his/her position without assistance / cannot control body movement</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Some mobility, but reduced for age</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Normal mobility for age</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Equipment / objects / hard surface pressing or rubbing on skin</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Significant anaemia (Hb &lt; 90g/l)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Persistent pyrexia (temperature &gt; 38.0°C for more than 4 hours)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Poor peripheral perfusion (cold extremities/ capillary refill &gt; 2 seconds / cool mottled skin)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Inadequate nutrition (discuss)</td>
<td>1</td>
<td></td>
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</table>
with dietician if in doubt)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Score</th>
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<tbody>
<tr>
<td>Low serum albumin (&lt; 35g/l)</td>
<td>1</td>
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<tr>
<td>Weight less than 10(^{th}) centile</td>
<td>1</td>
</tr>
<tr>
<td>Incontinence (inappropriate for age)</td>
<td>1</td>
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**Total score**

**ACTION TAKEN**
(Yes or no – document in child’s nursing record)

**Signature**

<table>
<thead>
<tr>
<th>Risk score</th>
<th>Category</th>
<th>Suggested action</th>
</tr>
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<tbody>
<tr>
<td>10+</td>
<td>At risk</td>
<td>Inspect skin at least twice a day. Relieve pressure by helping child to move at least every 2 hours. Use an age and weight appropriate pressure redistribution surface for sitting on/ sleeping on.</td>
</tr>
<tr>
<td>15+</td>
<td>High risk</td>
<td>Inspect skin with each positioning. Reposition child / equipment/ devices at least every 2 hours. Relieve pressure before any skin redness develops. Use an age and weight appropriate pressure redistribution surface for sitting on/ sleeping on.</td>
</tr>
<tr>
<td>20+</td>
<td>Very high risk</td>
<td>Inspect skin at least hourly. Move or turn if possible, before skin becomes red. Ensure equipment / objects are not pressing on the skin. Consider using specialised pressure relieving equipment.</td>
</tr>
</tbody>
</table>
Using numbers, indicate on the diagram above any red areas or pressure injuries, then using the box below describe the lesion, the date it was first observed, and the outcome (resolved or not resolved) on resolution, completion of this form, transfer or discharge (whichever comes first).

<table>
<thead>
<tr>
<th>Lesion number</th>
<th>Date lesion first observed</th>
<th>Brief description of lesion (also document in child’s nursing record)</th>
<th>Outcome (resolved / not resolved)</th>
<th>Date of reassessment</th>
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</table>
Guidance on using the Glamorgan Scale

The Glamorgan scale was developed using statistical analysis (chi square and regression analysis) of detailed patient data from children aged 3 days to 18 years. It is therefore suitable for use with children from birth to 18 years, and may be suitable for pre-term neonates.

A child’s risk of developing a pressure injury should be assessed on admission and every time his/her condition changes. For example, a child may be admitted as a day case for a minor operation. Initially they are fully mobile, and have nothing pressing or rubbing on the skin. They may then have an intravenous cannula sited (potentially cannula pressing on the skin – score 15), and then have a general anaesthetic (immobile, cannot be moved during the operation – score 20). This child is then at risk of skin damage from the cannula pressing (unless action is taken to adequately pad it) and at risk of skin damage from lying on a hard surface without moving during the operation (unless action is taken to place a pressure distributing surface between the child and the theatre table such as an air-filled mattress overlay). On return to the ward the child will have limited mobility (score 10 - a soft hospital mattress may be adequate to prevent pressure damage).

Mobility

- **Child cannot be moved without great difficulty or deterioration in condition** – such as a ventilated child who does not maintain oxygen saturations if the position is changed, or who may become hypotensive in a certain position. Children with cervical spine injuries are limited in the positions they can lie in. Some children with contracture deformities are only comfortable in limited positions.

- **General anaesthetic** – a child who is on the theatre table may not have their position changed during an operation.

- **Unable to change his/her position without assistance** – a child may be unable to move themselves, but carers can move the child and change his/her position (this does not cause any deterioration in the child’s condition).

- **Cannot control body movement** – the child can make movements but these may not be purposeful, and the child is unable to consciously change his/her own position.

- **Some mobility but reduced for age** – the child may be able to make purposeful movements and may have limited ability to change their own position but this is limited. For example – a child with developmental delay, or a child in traction who is able to make limited movements, or a child on bedrest.

- **Normal mobility for age** – the child has the same ability to move as a normal healthy child of that age. For example, a 1 week old infant is able to move his/her limbs but is not able to roll over; a 1 year old is able to roll over, bottom shuffle or crawl, sit up and pull up to standing.

Objects on the skin

- **Equipment / objects / hard surface pressing or rubbing on the skin** - Any object pressing or rubbing on the skin for long enough or with enough force can cause pressure damage. For example, wings of IV cannula, pulse oximeter probes, plastic namebands on young infants, oxygen or CPAP masks, ECG electrodes, ET tubes, NG tubes, tight
clothing, arm sling with knot pressing on neck, plaster casts and splints, arm pressing on cot sides.

The above risk factors are responsible for skin damage through pressure, friction or shear. If a child is fully mobile and does not have anything pressing or rubbing on the skin, they will not develop a pressure injury.

Other risk factors

The risk factors below increase the child’s risk of developing a pressure injury if the child has reduced mobility or objects pressing or rubbing on the skin, but if they occur in a mobile child with nothing pressing or rubbing on the skin it will not cause a pressure injury to develop.

- **Significant anaemia** (Hb <90g/l) – if the haemoglobin has been measured during this admission and is below 90g/l – score 1. If the haemoglobin is 90g/l or above, or the haemoglobin is unknown, score 0.

- **Persistent pyrexia** (temperature >38.0°C for more than 4 hours) – score 1. If temperature is less than 38°C, or pyrexia lasts less than 4 hours – score 0.

- **Poor peripheral perfusion** (cold extremities / capillary refill > 2 seconds / cool mottled skin) – in a child in a warm environment (i.e. not due to low environmental temperature) – score 1.

- **Inadequate nutrition** (discuss with a dietician if in doubt) – child who is malnourished (this does not include children who are just starved prior to surgery) – score 1. A child who has a normal nutritional intake scores 0.

- **Low serum albumin** (<35g/dl) – score 1. If serum albumin is 35 or above, or has not been measured – score 0.

- **Weight less than 10th centile** – score 1 - this can be calculated by plotting the child’s weight and age on a growth chart. If the child is above the 10th centile score 0.

- **Incontinence** (inappropriate for age) – score 1 – for example, a 4 year old child who needs to wear nappies during the day and night. Normal continence – score 0 – for example, a 5 year old who is dry during the day but may be occasionally incontinent during the night, a 12 month old who needs to wear nappies during the day and night. Incontinence itself does not increase risk of pressure injuries, and any pressure injuries may occur on parts of the body other than the nappy area. A child who is inappropriately incontinent may have physical or developmental problems that reduce their self care ability, mobility, or sensory awareness. Moisture lesions should not be confused with pressure injuries.

Document the total score, however scores for individual risk factors should be acted on.

If the child scores 10 or higher, he/she is at risk of developing a pressure injury unless action is taken to prevent it. This action may include normal nursing care, such as positioning, frequent changes of position (document how often position is changed), lying the child on a soft hospital mattress or on an air-filled mattress overlay, changing the position of pulse oximeter probes, ensuring the child is not lying on objects in the bed such as tubing or hard toys, or encouraging mobilisation.
Suggested action is indicated in the table, however nurses should also use their own discretion and expertise, and if necessary seek advice from a wound care specialist if a high specification pressure redistributing surface is considered. Document action taken in child’s records.

The diagram of the child can be used to indicate the position of any skin lesions. If lesions are near to, or may be associated with any equipment such as CPAP mask, nasogastric tube or splint, these should also be indicated. The skin lesions indicated in the diagram should be numbered so that they can be referred to in the table below the diagram. In the table the lesions can be described more fully, with the date they were first observed and the outcome.

Permission

WA Health has permission to use the Glamorgan Paediatric Pressure Injury Risk Assessment Tool and has permission to modify the wording as long as the meaning is not changed.
## Appendix C - WA Health Comprehensive Skin Assessment Tool

**Comprehensive Skin Assessment**

<table>
<thead>
<tr>
<th>Health Service:</th>
<th>Medical Rec No:</th>
</tr>
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<tbody>
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<td></td>
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</tbody>
</table>

**Surname:**

**Forename:**

**Sex:**

**D.O.B.:**

Complete initial skin assessment within 8 hours of presentation. Document any impaired skin characteristics using the tool below, carry out actions if required and sign as per the reverse side of this document. Reassess the skin daily and whenever there is a change in the patient’s condition, and upon transfer/discharge.

A skin assessment should include an actual observation of the entire body surface, including all wounds*, inspection of hair, nails, skin folds and web spaces on hands and feet, systematically from head to toe.

*If patient has compression bandaging, or topical negative pressure therapy – leave intact, assess the skin at next dressing change.

### Skin Characteristics

<table>
<thead>
<tr>
<th>Description</th>
<th>Impaired skin characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Cooler than normal</td>
</tr>
<tr>
<td></td>
<td>Warmer than normal/hot</td>
</tr>
<tr>
<td></td>
<td>Hot very inflamed</td>
</tr>
<tr>
<td>Moisture</td>
<td>Dry</td>
</tr>
<tr>
<td></td>
<td>Moist to touch</td>
</tr>
<tr>
<td>Turgor</td>
<td>Normal (&lt; 3 seconds)</td>
</tr>
<tr>
<td></td>
<td>Impaired (&gt; 3 seconds)</td>
</tr>
<tr>
<td></td>
<td>Oedema</td>
</tr>
<tr>
<td></td>
<td>Induration</td>
</tr>
<tr>
<td>Integrity</td>
<td>Fragile</td>
</tr>
<tr>
<td></td>
<td>Pressure injury</td>
</tr>
<tr>
<td></td>
<td>Flake / scale</td>
</tr>
<tr>
<td></td>
<td>Rash</td>
</tr>
<tr>
<td></td>
<td>Wound</td>
</tr>
<tr>
<td></td>
<td>Scarring</td>
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<tr>
<td></td>
<td>Callus</td>
</tr>
<tr>
<td></td>
<td>Cellulitis</td>
</tr>
<tr>
<td></td>
<td>Known skin disorder - Specify type:</td>
</tr>
<tr>
<td>Colour</td>
<td>Taking into account the person’s natural skin colour e.g. caucasian or darker skin tone</td>
</tr>
<tr>
<td></td>
<td>Note areas of: pallor, cyanosis, bruising, jaundice, blanching, persistent redness, mottled skin, bluish or purple tones. Describe appearance &amp; location:</td>
</tr>
<tr>
<td></td>
<td>Numbness / change</td>
</tr>
<tr>
<td></td>
<td>Burning</td>
</tr>
<tr>
<td></td>
<td>Itching</td>
</tr>
<tr>
<td></td>
<td>Pain</td>
</tr>
<tr>
<td>Medical devices insitu (circle or describe)</td>
<td>Mark location on diagram.</td>
</tr>
<tr>
<td></td>
<td>e.g. Masks, ETT, NGT, tracheostomy, cervical collars, cannulae, IV, PEG tube, splints/anti-embolic devices / cast, SPC, IDC, drainage tubes, transfer equipment, other.</td>
</tr>
</tbody>
</table>

### Identify the location using the code provided:

- **C WH D M I O L Fr Pi Fl Fr Rd Sc Ca Ce**
- **Whole of body**
- **Right**
- **Left**

---

*Appendix C continues on the next page.*
### Actions:
- Implement skin protection strategies
- Initiate pressure redistribution support surface
- Undertake wound assessment if required
- Initiate patient and family/carer education
- Discuss the patient's skin integrity and skin protection strategies with the patient/carer

### Initiate referral to (as required):
- Wound Care Nurse/CNS/CNM/NP(Wound Mx)
- Stomal Therapy Nurse
- Medical Officer
- Allied health
- Other

### Initial skin assessment completed:
- Skin intact (or able patient states skin intact)

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Comments</th>
<th>Signature and designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Print Name</td>
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</tbody>
</table>

### Re-Assessment:

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Skin intact Y/N</th>
<th>New issue, deterioration or action (describe)</th>
<th>Signature and designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Print Name</td>
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</tbody>
</table>
Appendix D - Pressure Injury or Skin Tear Alert Sticker

The Pressure Injury or Skin Tear Alert Sticker

![Pressure Injury or Skin Tear Alert Sticker](image)

Figure 2 – The WA Health Pressure Injury or Skin Tear Alert Sticker

Guidelines for Clinical Use

The following sticker is being introduced on your ward/unit to improve reporting of pressure injuries and skin tears. It has been introduced to:

- Alert staff of an identified pressure injury or skin tear
- Ensure each injury is appropriately classified (e.g. severity rating) and clearly documented in the notes – to support clinical coders.
- Ensure injuries are accurately coded so that the hospital does not lose funds in relation to the new ABM/ABF model.
- Improve reporting of injuries to inform prevention strategies for the future
When a Pressure Injury or Skin Tear is identified, please complete the WA Health Pressure Injury or Skin Tear Alert sticker as shown in figure 1 and place it in the integrated patient notes.

**Frequently Asked Questions**

Q1: Can I report multiple pressure injuries on the one sticker?
- No, please use one sticker per injury

Q2: Can I leave sections of the sticker blank?
- No, please complete all sections of the sticker

Q3: What if I am not sure? Who do I call for support in relation to classifying an injury?
1. First point of call is your Shift Coordinator, CNS / SDN / CNM Ward Leader,
2. [Insert local clinical resource/ manual details] or adopt attached Nursing Practice Standards for pressure injury classification 18 and 19
3. [Insert local clinical resource/ manual details] or adopt attached Nursing Practice Wound Management, pages 16-20
4. If needed, contact [Insert local clinical resource/ wound care service] on page or phone or email ****

Q4: When is a new sticker required?
- Each time a new pressure injury or skin tear is identified
- Each time a patient is admitted with a pressure injury (only once per admission)
- If the classification of a pressure injury changes (e.g. changes from Stage II to III)
- A new sticker is not needed on transfer from ward to ward.
- A new sticker is needed each admission/ discharge or transfer between sites.
- If in doubt it is better to complete another sticker rather than not have one done.

Q5: Do I still need to fill in an Incident form?
- Yes please complete an Incident form for all hospital acquired pressure injuries if one has not already been completed.
- You do not need to fill in an Incident form if the patient is admitted to hospital with the injury already present. [if this is relevant or the same in each health service]

Q6: Who do I call for general enquiries with the sticker or feedback regarding its use and implementation?

- [Add site specific contact person responsible for the implementation, consider a coding contact person and clinical contact person]
- WoundsWest on 1300Wounds or email WoundsWest@health.wa.gov.au

Suggested CIMS Reporting of Pressure Injuries

- Clinical staff should be encouraged to report all hospital acquired pressure injuries stage II and above because harm has occurred to the patient as a result of care delivery.

- Clinical staff can report stage 1 hospital acquired pressure injuries and should be guided by their local policy regarding the reporting of stage 1, reversible or near miss events

- Clinical staff should as a priority report any pressure injuries that meet the above likely SAC 1 event criteria according to their local guidelines on major clinical incidents (see examples below).

- Clinical staff should be provided with education to ensure that patient assessment documentation on admission includes a skin assessment and that any existing pressure injuries present on admission are reported and clearly documented so that they are not mistaken for hospital acquired pressure injuries and incorrectly reported as an incident later in the admission.

- It is understood that it can be difficult to determine the final severity of a HAPI at the time it is first found. Therefore it is reasonable to submit multiple incident forms for the same patient should their condition change. Particularly if the patient now meets the SAC 1 criteria.

Examples of events which suggest that the pressure injury may be classified as a SAC 1 event are as follows:

- Examples of Significant increase in level of care
  1. Where the hospital acquired pressure injury (HAPI) directly causes an increased length of stay for more than 7 days
  2. Where the HAPI directly results in a higher level of care required such as; admission to ICU, high dependency unit or referral to a tertiary centre is required to manage complications of the injury
3. Where an additional or unplanned procedure/ surgery (anaesthetic) is directly required to treat the HAPI

- Examples of Significant complication causing permanent disability
  4. HAPI resulting in Amputation,
  5. HAPI resulting in permanent significant scarring,
  6. HAPI resulting in loss of function to limb or organ
  7. HAPI resulting in paralysis

- Examples of Death or permanent disability
  8. HAPI causing infection leading to sepsis and death
  9. HAPI causing blood loss directly leading to anaemia and or hypovolemia and death

Contact Information

For further information, or general enquiries, regarding the WA Health Pressure Injury or Skin Tear Alert sticker and its use and implementation please contact:

- Your local coding office on site; or
- The Clinical Coding Team at the Department of Health, coding.query@health.wa.gov.au
- WoundsWest on 1300Wounds or email WoundsWest@health.wa.gov.au
ICD-10 Codes to be used

Please code as follows -

**Pressure Injury or Skin Tear Alert**

Please use one sticker per skin injury

<table>
<thead>
<tr>
<th>Was patient admitted to hospital with the skin injury?</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Indicate the skin injury (please circle):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pressure Injury Stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I, II, III, IV, Unstageable</td>
<td></td>
<td></td>
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<tr>
<td>• STAR Skin Tear Category</td>
<td></td>
<td></td>
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<tr>
<td>1a, 1b, 2a, 2b, 3</td>
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<td></td>
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<tr>
<td>Anatomical location of injury:</td>
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<tr>
<td>Has a wound management plan been completed?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Has a pressure management plan been completed?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Signature, name, and designation</td>
<td>Date</td>
<td>Time</td>
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**Code Onset Flag**

<table>
<thead>
<tr>
<th>Value</th>
<th>Code</th>
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<tbody>
<tr>
<td>No</td>
<td>1</td>
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<tr>
<td>Yes</td>
<td>2</td>
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</table>

**Pressure Injury**

<table>
<thead>
<tr>
<th>Value</th>
<th>Code</th>
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<tbody>
<tr>
<td>I</td>
<td>L89.0</td>
</tr>
<tr>
<td>II</td>
<td>L89.1</td>
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<tr>
<td>III</td>
<td>L89.2</td>
</tr>
<tr>
<td>IV</td>
<td>L89.3</td>
</tr>
<tr>
<td>Unstageable</td>
<td>L89.9</td>
</tr>
</tbody>
</table>

**Skin Tear**

Please code as ACS rules for non traumatic versus traumatic skin tear.
References


2. Australian Commission on Safety and Quality in Health Care, National Safety and Quality Health service Standards: Preventing and Managing Pressure Injuries Standard 8; www.safetyandquality.gov.au


Acknowledgement

The WA Health Pressure Injury or Skin Tear Alert Sticker was initially developed by Fremantle Hospital and Royal Perth Hospital.