PRESSURE INJURY PREVENTION AND MANAGEMENT

POLICY AND PROCEDURE©

DOCUMENT SUMMARY/KEY POINTS

NSW Ministry of Health Policy Directive

Pressure Injury Prevention and Management

http://www0.health.nsw.gov.au/policies/pd/2014/pdf/PD2014_007.pdf

- The above linked document is a NSW Ministry of Health Policy Directive and requires mandatory compliance.
- This document needs to be read in conjunction with the above Ministry of Health Policy Directive
- Pressure injuries are any breach of skin integrity caused by unrelieved pressure on soft tissue compressed between bony prominences and any external surface for prolonged periods of time.
- All children are potentially at risk of developing a pressure related injury whilst an inpatient in hospital.
- Children who are at risk of developing pressure injuries need to be identified so that preventative measures can be taken.
- The focus of this policy is on screening to identify those most at risk and intervention strategies to prevent pressure injuries in patients assessed to be at risk.
- Prevention requires an on-going risk assessment, implementation of prevention strategies, analysis of the causal factors and the selection of and appropriate use of pressure relieving devices.
- All ward patients are to have a Risk Assessment on admission to ward and every three days thereafter, unless condition changes, through the Paediatric Risk Assessment Tool (PRAT) in PowerChart.
- The Braden Q Risk Assessment Tool is to be used routinely for all ICU patients

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1st October 2015	**Review Period:** 3 years
Team Leader:	SCHN Patient Safety Manager	**Area/Dept:** Clinical Governance Unit

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CHANGE SUMMARY

- Review to include information about the Glamorgan scale (as part of the Paediatric Risk Assessment Tool) and the Pressure Injury Prevention and Management Plan.
- PRAT tool implemented at SCH
- Implementation of the Pressure Injury Prevention and Management Plan

READ ACKNOWLEDGEMENT

- All clinical staff who assess patients for pressure areas should read and acknowledge they understand the contents of this document.

TABLE OF CONTENTS

1 Purpose

The purpose of this guideline is to inform healthcare professionals of the risks of pressure injury development and strategies to prevent pressure injuries occurring in patients admitted to the SCHN facilities. It will also give guidance on the management of any wound resulting from pressure, shear or friction.

The focus is on screening is to **identify** those most at risk and intervention strategies to **prevent** pressure injuries in patients assessed to be at risk.

This is supported by NSW Health State Policy: Pressure Injury Prevention and Management http://www0.health.nsw.gov.au/policies/pd/2014/pdf/PD2014_007.pdf

2 Pressure Injury Development

Pressure injuries are any breach of skin integrity caused by unrelieved pressure on soft tissue compressed between bony prominences (such as the heel, iliac crest, spinal occiput and sacrum) and any external surface for prolonged periods of time. Furthermore tissue ischemia, poor blood flow, friction and shear can all contribute to pressure injuries. Skin, subcutaneous fat, deep fascia, muscle and bone can all be damaged by this unrelieved pressure.

Intensity and duration of pressure, as well as the tissues ability to tolerate pressure are factors affecting the development of pressure injury development.

The prolonged pressure present on localised areas of tissue results in the occlusion of blood flow, preventing the supply of oxygen and nutrients to the tissue, resulting in tissue ischemia and re-perfusion injury, leading to cell destruction and tissue death.

Contributing factors to the development of pressure injuries include:

- Reduced activity
- Patients sitting/lying too long in the one place
- Patients sitting in wet clothing, a wet bed or a wet nappy for long periods
- Poor nutritional or fluid intake
- Reduced skin sensation
- Pressure or friction to any area of the body
- Depressed immune system
- Children who are extremely unwell
- Children with spina bifida, spinal cord injuries, neurological impairments or any other medical/surgical condition which restricts mobility have increased risk at developing pressure injuries

3 Identification / prediction of those at risk

Children who are at risk of developing pressure injuries need to be identified so that preventative measures can be taken.

The early recognition of which individuals are at risk of developing nosocomial pressure related injuries is considered to be an essential component in their care pathway[1] and it is acknowledged that effective prevention lies in early risk identification. [2]

To assist clinicians in identifying a patient at risk a pressure injury risk assessment scale or tool must be used [3]. A risk assessment scale is a checklist to determine a score according to a series of parameters considered to be risk factors. [4]

Validated risk assessment tools for children are useful for identifying those at risk and increasing awareness of potential pressure related skin injuries, however they, cannot encompass every possible situation. Clinicians should use their clinical knowledge, judgement and experience to protect skin and prevent tissue damage in conjunction with the screening tool.[5]

All inpatients should be screened on presentation which includes visual inspection of the skin to determine their general skin condition in relation to factors which puts them at higher risk of pressure injury development.

Risk assessments, including risk factors and at risk status, must be completed as soon as possible after admission but within a minimum of eight hours. This should also occur whenever there is a change in the patient's clinical condition.[6]

3.1 Screening tools

3.1.1 Glamorgan Scale Risk Assessment (used in the ward environment)

The Glamorgan Scale is accessed through PowerChart in AdHoc Charting – Paediatric folder – Paediatric Risk Assessment Tool (PRAT). The Glamorgan Scale is used in all inpatient areas except ICU on admission and every 3 days thereafter, unless their clinical condition changes. The tool is based on three known risk factors that can potentially increase the likelihood of developing a pressure area:

Glamorgan Scale Risk Factors:

- Mobility
- Other risk factors
- Objects pressing on the skin

Each question (Refer to Appendix 1) has a risk score associated with these answer and these correlates to the risk score category and the suggested care actions.

3.1.2 Braden Q risk assessment tool (used in the intensive care environments)

The Braden Q Risk Assessment Tool is to be used routinely for all ICU patients. This risk assessment tool composes of seven subscales:

- Mobility

- Activity
- Sensory perception
- Moisture
- Friction/ Sheering
- Nutrition
- Tissue perfusion/oxygenation).

All seven subscales are rated from 1 to 4 – The lower numbers representing HIGH RISK.

The range of possible total scores is 7 to 28 (Refer to Appendix 2).

3.2 Who is at risk?

Immobility has been shown to be a major cause of the development of pressure related injuries. Patients who cannot change their position, irrespective of age, are at risk of developing a pressure related injury.

This risk applies to patients who are bed or chair bound; those on operating theatre tables; on trolleys in the Emergency Department; attending a Radiology Department; on extended journeys in ambulances' or being cared for at home or in the community.

It is immobility or decreased mobility associated with disease that puts patient at risk **NOT** the disease itself.

All patients are potentially at risk of developing a pressure related injury whilst in hospital and factors which may increase the risk of developing pressure injuries include:

- Immobility/ inactivity resulting in prolonged or unrelieved pressure
- Impaired or absent sensation
- Shear/ friction forces e.g. due to sliding on bed sheets or uncontrolled body movement,
- Inadequate nutritional or fluid intake
- Prolonged exposure to moisture for example, diaphoresis or incontinence
- Unrelieved pressure or friction from medical devices
- Patients in pain are at increased risk. If pain is relieved they may move more often or are able to be moved more often
- Neonates with fragile skin from underdevelopment of stratum corneum
- Impaired cognition
- Impaired tissue perfusion and oxygenation
- Children under 36mths are at greater risk due to difference between head to body surface ratio

Consider early referral to Occupational Therapy, Physiotherapy, dietician, CNC for children at risk for review.

4 Education of families

Parent/ carers are an integral part of the child's care and can assist the healthcare teams prevent and manage pressure injuries. Parent/ carers should be informed of the risk of developing pressure injures whilst in hospital and be provided with information that will assist them to understand and participate in the development of effective and appropriate strategies to prevent pressure injuries.

Factsheets should be distributed to the parent/ carers who child is identified at risk: Link to Factsheet: http://www.schn.health.nsw.gov.au/files/factsheets/pressure_injuries-en.pdf

Suggested preventative strategies should be discussed with the parent/ carers, including inspecting their child's skin; repositioning and device management. These discussions should be documented on the Pressure Injury Prevention and Management Plan (Refer to Appendix 3).

5 Prevention

Prevention requires an on-going risk assessment, implementation of prevention strategies, analysis of the causal factors and the selection of and appropriate use of pressure relieving devices.

5.1 Skin Assessment

The patient's skin status is the most significant early indicator of the skin's response to pressure exposure and the ongoing risk of pressure injury.

Inspect the skin of all patients on admission and at each repositioning to identify indications of pressure injury including:

- Blanching response
- Localised heat
- Oedema
- Induration and skin breakdown.

Particular attention should be paid to areas of bony prominence which are at an increased risk for pressure injury due to pressure, friction and shearing forces.

What is a "comprehensive skin inspection?"

- It is a general visual check of the skin which includes examination of the entire skin surface to check skin integrity and identify any characteristics indicative of pressure damage/injury.
- On skin inspection check for areas of redness that do not blanch; areas of localised heat, oedema and skin breakdown.

- Check and monitor the skin beneath devices, prosthesis and dressings when clinically appropriate.

All at risk patients require a comprehensive skin assessment daily to prevent pressure injury development

Observation of skin recommended on each position change

Refer to local policy guidelines for frequency of skin inspection in relation to specific devices

Redistributing pressure

Prevention strategies should involve regular skin inspection, the use of pressure relieving devices as appropriate and redistributing pressure by repositioning patients frequently and safely.

- Appropriate positioning and use of appropriate support surfaces to help reduce shear and friction.
- Employ appropriate manual handling techniques in line with Occupational health and safety guidelines when repositioning and transferring patients.
- Provide transfer assistance devices e.g. overhead handle to promote independent patient transferring and to reduce shear forces and friction.

  Skin care

  Do not vigorously rub or massage the patients' skin.
- Develop and implement an individualised continence management plan where appropriate.
- Use a pH appropriate skin cleanser and dry thoroughly to protect the skin from excess moisture
- Use water based skin emollients to maintain skin hydration.

5.2 Positioning and repositioning

Patients at risk of pressure injury should be suitably positioned to redistribute pressure, minimise friction and shear forces, and reposition regularly.

Recommendations:

- Where possible the preferred method of repositioning is for the patient to do so independently if able.
    - Reminders to reposition to the patient and/or carers may be necessary.
    - Equipment can be used to promote independent mobility e.g. using bed rails, bed ladder or overhead bed pole.
- It is recommended for patients who are unable to reposition themselves that the repositioning timeframe (including turning) is every 2 hours.

- Positions may include; side lying, left side lying, right side lying, prone, seated in a bed or seated in a chair.
- Consider more frequent, smaller shifts in position to redistribute pressure for patients who cannot tolerate frequent and/or major changes in body position. Frequent minor changes using alterations in mattress (using electric bed) can help to redistribute pressure.
- Monitor the patient's level of pain and ensure appropriate pain relief is provided to encourage and support mobility.
- Repositioning should be performed regardless of the support surface on which the patient is managed.
- For high risk patients, limit time spent sitting in bed with head elevated >30 degrees to no more than 2 hours due to prolonged pressure on sacrum.
- Head of bed should be raised in conjunction with a knee block or pillow under knees for smaller children to prevent shear forces on sacrum
- When repositioning the patient in any position always check the positioning of heels and other bony prominences.
- For high risk patients heels and sides of ankles (lateral malleolus) should be suspended off the bed using pillows or blanket under the calf /knee
- When examining, repositioning and transferring patients, the use of proper techniques and devices is mandatory. This prevents staff injury, and reduces friction and shearing forces to the patient.

Please consider using: hover mats/ pat slides/ slide sheets/ hoist and/ or slings. For further information on transferring and moving patients, refer to the Manual Handling and Ergonomics Procedure or contact Physiotherapy for assistance/advice on transferring patients and repositioning.

5.3 Prevention Strategies for Device Related

There are a multitude of different medical devices / equipment that are required as a component of a patient's treatment. It is important to recognise that any foreign object that comes into direct contact with the patient's skin has the potential to cause a pressure injury and vigilance in inspection and monitoring of the patient's skin that is in contact with such devices is paramount in preventing a pressure injuries.

Strategies to help prevent device related pressure injures include:

- Repositioning devices as appropriate e.g. monitoring electrodes, probes, oxygen delivery
- Regular inspection & repositioning of the patient to ensure that they are not inadvertently lying on devices (e.g. tubing, monitoring cables)
- Protective barriers between the device & patients skin e.g. Hydrocolloid dressings under nasogastric tubing, oxygen tubing, CPAP masks, drainage tubing,

- Use of padding to soften hard surfaces; under cast padding under splints; foam padding on IV arm boards
- If objects require the use of tape to secure to the patient ensure that the tapes are not applied too tightly and that the appropriate tapes are utilised (where possible utilise an adhesive tape that has some stretch or elasticity.
    - Use the minimal amount of tape/strapping to safely secure the device but allow for maximal visualisation of the patient's skin.
- Utilise the correct size equipment appropriate to the patients anatomical size (nasal cannula, nasogastric tubing)

5.4 Pressure Redistributing Equipment

Pressure redistribution surfaces are support surfaces on which patients are placed to manage pressure load to tissue, microclimate, moisture shear and/or friction. Pressure redistribution surfaces are designed to reduce interface pressure through increasing the body surface area or alternating the area of the body in contact with the support surface (i.e. pressure reduction and pressure relief).

At SCHN, all patients are to be nursed on static pressure relieving mattresses now standard for all beds and cots.

Patients deemed at high risk, should be nursed on a high grade pressure redistributing mattress or cushion that is appropriate for the patients weight, age and condition. These mattresses can be hired through State contractor vendors (Refer to Appendix 4).

Some pressure relieving devices have minimal immersion and redistribution of pressure for weights under 25kg. It is important to ensure weight is considered when selecting an appropriate mattress.

For pressure relieving devices to be effective there must be **minimal layering in-between the person and the device.** For some high risk and very high risk patients the use of a pressure relieving device may allow a decrease in overnight turning frequency to 3- 4 hourly to ensure adequate sleep patterns, this should be assessed on an individual basis.

The following should NOT be used as pressure relieving devices:

- Water-filled gloves under heels – These are not effective due to the small surface area of the heel and the water-filled glove is unable to redistribute any pressure
- Sheepskins Doughnut-type device, may impair lymphatic drainage and circulation and may contribute to pressure injuries

6 Special considerations

6.1 The Intensive Care Environment

Given the high incidence and severe consequences of pressure injuries, prevention is essential in the care of the ICU patient. Effective prevention should be based on the correct identification of patients at risk

The main contributing factors in the ICU environment include[10]:

- Immobility
- Impaired level of consciousness
- Poor peripheral blood flow
- Low cardiac output state
- Inotrope and vasoconstrictor use

Patients should have pressure areas assessed second hourly and be repositioned fourth hourly where possible. However if the patient is haemodynamically unstable with repositioning pressure area care should be negotiated with the medical officer in charge.

Consider referral to Occupational Therapist +/- Physiotherapist for complex patients at high risk of pressure injuries.

6.2 Operating Suite

Surgery lasting 2 hours or longer has been linked with pressure related injuries. As the length of time on the Operating Suite bed increases, so does the prevalence of pressure injuries. Patients who have been on the operating table for more than 2.5 hours have double the risk of developing a pressure ulcer and this quadruples the risk if surgery continues for more than 4 hours.

In order to provide optimal patient care, the multidisciplinary team needs to be aware of these potential problems. Appropriate intervention and adequate implementation should be a central part of the strategic plan for pressure injury prevention. Anaesthetised patients positioned prone over extended periods of time on specialised frames may be at risk of developing pressure injuries on uncommonly seen areas such as the face (forehead, tip of nose, chin) chest and iliac crest.

The assessment of pressure injury prevention should be carried out in the preoperative, intraoperative and postoperative phases.

Research suggests that pressure injuries that originate from the Operating Theatre do not appear for 1-4 days post- operatively, this highlights the importance of pressure injury assessment and the application of a strategic plan during the entire patient journey in the operating suite.

Postoperative Management

In the postoperative phase a complete assessment of altered tissue/skin integrity is required. Any discrepancy should be documented in the patient's notes, entered into IIMS and communicated to the team.

Skin integrity is to be incorporated into the recovery room nursing report.

6.3 Orthopaedic patient

Patients in traction, skin, spinal or skeletal traction are considered to be high risk due to their immobility and presence of fixed medical devices.

Patients in plaster casts, Hip Spica's and braces should have areas that are at risk of friction/ sheering injuries regularly monitored and assessed.

- Factsheets should be distributed to the parent/ carers who child is identified at risk: http://www.schn.health.nsw.gov.au/files/factsheets/pressure_injuries-en.pdf

Links relevant Policy:

- Orthopaedic Traction: Care and Management: http://chw.schn.health.nsw.gov.au/o/documents/policies/guidelines/2014-9099.pdf
- Spica Cast: Inpatient Care: http://chw.schn.health.nsw.gov.au/o/documents/policies/guidelines/2012-9033.pdf
- Preoperative/ Postoperative Care of Scoliosis/ Kyphosis: http://chw.schn.health.nsw.gov.au/o/documents/policies/guidelines/2008-8113.pdf

7 Documentation

All wards patient identified at risk must have a Pressure Injury Prevention and Management Plan completed (Refer to Appendix 3).

All new pressure injuries must be reported into the Incident Information Management System (IIMS) and in the patient's healthcare record.

The appearance of the injury is to be documented in the medical record at the time of the initial assessment, at each dressing change and following any change in the treatment with rationale for such.

Documentation in the clinical record should include:

- Time and date of injury leading to the pressure injury
- Actual or probable cause why pressure injury developed
- Dimensions and subsequent changes in size (length, width, depth)
- Pressure injury staging. (Note: stage does not change from initial assessment in pressure injury wounds) (Refer to Appendix 4)
- Characteristics of wound bed (red, granulation tissue, necrotic, sloughy).
- Exudate type and amount (serous, haemoserous, purulent).
- Odour
- Pain associated with wound or at dressing change
    - **At SCH**, a Wound Assessment and Management Plan (Form S0056) needs to be completed.

8 Wound management

Correct identification of tissue loss and wound depth will assist in selecting the correct product to manage the wound. The frequency of dressing changes will dictate an individualised wound management plan and the frequency of such dressing changes will be directed by the clinician co-ordinating the patients care, but must take into consideration the dressing properties and the stage of wound healing.

The choice of dressing will be determined by the individual needs of the patient and the wound and the type of dressing used may differ as the healing process progresses.

The dressing selection will be made in consultation with the medical officer, wound care nurse consultant/specialist when indicated and in line with Wound Assessment and Management Guidelines:
http://chw.schn.health.nsw.gov.au/o/documents/policies/guidelines/2014-9040.pdf

Selecting the wound dressings is based on:

- Comprehensive ongoing clinical assessment,
- Management of pain, malodour, exudate and infection,
- Wound size and location
- Cost and availability
- Patient preference

Practice points for wound dressings:

Other characteristics that are likely to influence wound dressing selection may include:

- Condition of surrounding skin
- Ease of application and removal
- Ability to maintain moisture balance
- Ability to absorb exudate and odour
- Pain experienced on dressing changes
- Infection control and ability to maintain bacterial balance
- Cosmetic effect
- Skill and knowledge of the health professional
- Accessibility and cost effectiveness
- Suitability of dressing location to wound location

9 References

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Appendix 1: Glamorgan Scale

Glamorgan Tool

Mobility	Score
Child cannot be moved without great difficulty or deterioration in condition / deep sedation	20
Unable to change his/her position without assistance /cannot control body movement	15
Some mobility, but reduced for age	10
Normal mobility for age	0
Other Risk Factors	**Score**
Significant anaemia (Hb <9g/dl)	1
Persistent pyrexia (temperature > 38.0ºC for more than 4 hours)	1
Poor peripheral perfusion: (cold extremities/ capillary refill > 2 seconds / cool mottled skin)	1
Inadequate nutrition: (discuss with dietician if in doubt)	1
Low serum albumin (< 35g/l)	1
Weight less than 10th centile	1
Incontinence (inappropriate for age)	1
N/A - Not aware of the above	0
Devices	**Score**
Devices / equipment / objects / hard surface pressing or rubbing on skin	10

Glamorgan Scale Care Actions

Risk Score	Category	Suggested Action
Mobility 10+	**At Risk**	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.
Devices 10+	**At Risk**	Reposition equipment/ devices at least every 2 hours Ensure equipment / objects are not pressing on the skin
Mobility 15+	**High Risk**	Inspect skin with each positioning. Reposition child 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.
Mobility 20+	**Very High Risk**	Inspect skin at least hourly. Move or turn if possible, before skin becomes red. Use an age and weight appropriate pressure redistribution surface for sitting on/ sleeping on Consider using specialised pressure relieving equipment.

Appendix 2 – Braden Q Scale

Category	4	3	2	1
Mobility	*No Limitations:* Makes major and frequent changes in position without assistance.	*Slightly Limited:* Frequent, slight changes in body or extremity position independently.	*Very Limited:* Makes occasional slight changes in body or extremity position. Unable to completely turn self independently.	*Completely Immobile:* Does not make even slight changes in body or extremity position without assistance.
Activity	*No Impairment:* Walks outside the room at least twice a day and inside the room at least once every 2 hours. -All patients too young to ambulate.	*Walks Occasionally:* Walks short distances, with or without assistance. Spends majority of each shift in bed or chair.	*Needs Assistance:* Ability to walk severely limited or non-existent. Cannot weight bear and/or must be assisted into char or wheelchair.	*Confined to Bed:*
Sensory Perception	*No Impairment:* Responds to verbal commands. Has no sensory deficit that would limit ability to feel or communicate pain or discomfort. -Baby responds appropriately to touch.	*Slightly Limited:* Responds to verbal commands but cannot always communicate discomfort or need to be turned; some sensory impairment that limits ability to feel pain or discomfort in one or two extremities.	*Very Limited:* Responds to only painful stimuli. Cannot communicate discomfort except by moaning or restlessness, has a sensory impairment that limits the ability to feel pain or discomfort over half the body.	*Completely Limited:* Unresponsive (does not moan, flinch, or grasp) to painful stimulus due to diminished level of consciousness, sedation or limited ability to feel pain over most of the body surface.
Moisture	*Rarely Moist:* Skin is usually dry; Routine nappy changes; Linen only requires changing every 24 hours.	*Occasionally Moist:* Skin is occasionally moist; Requiring linen change every 12 hours	*Very Moist:* Skin is often, but not always, moist; Linen must be changed at least every 8 hours.	*Constantly Moist:* Skin is kept moist almost constantly by perspiration, urine drainage etc. Dampness is detected every time patient is moved or turned.
Friction – Sheer	*No Apparent Problem:* Able to completely lift patient during a position change; Moves independently Sufficient muscle strength to lift up completely during move; Maintains good position in bed or chair at all times.	*Potential Problem:* Moves feebly or requires minimum assistance; During a move, skin probably slides to some extent against sheets, chair, restraints, or other devices; Maintains relative good position in chair or bed most of the time but occasionally slides down.	*Problem:* Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance.	*Significant Problem:* Spasticity, contracture, itching or agitation leads to almost constant thrashing and friction
Nutrition	*Excellent:* Is on a normal diet providing adequate calories for age. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.	*Adequate:* Is on tube feedings or TPN, which provide adequate calories and minerals for age or eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement if offered.	*Inadequate:* On a liquid diet or a tube feedings/TPN, that provided inadequate calories and minerals for age or albumin <3mg/dl or rarely eats a complete meal and generally eats only about half of any food offered. Protein intakes include only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement.	*Very Poor:* NBM and/or maintained on clear liquids, or IVF for more than 5 days OR albumin <2.5MG/DL Never eats a complete meal; Rarely eats more than half of any food offered; Protein intake includes only 2 servings of meat or dairy products per day; Takes fluids poorly. Does not take a liquid dietary supplement.
Tissue Perfusion & Oxygenation	*Excellent:* Normotensive; O_2 sat. >95%, normal Hb, cap refill <2 seconds.	*Adequate:* Normotensive; O_2 sat may be <95%, Hb <10mg/dl, cap refill >2 seconds, serum pH is normal	*Compromised:* Normotensive; O_2 sat <95%, Hb; <10mg/dl, Cap refill >2 seconds, serum pH is <7.40.	*Extremely Compromised:* Hypotensive or patient does not physiologically tolerate a position change

Braden Q Scale Care Actions

Risk Score	Suggested Care Actions	Assessment
Low Risk (Score 22-28)	Position must be changed every 2-4 hours. Continue to reassess daily	Initially only, unless condition changes
Medium Risk (Score 17-21)	Position must be changed every 2 hours. The use of pressure relieving devices and mattresses is recommended	Weekly, unless condition changes
High Risk (Score 11-16)	Position must be changed every 2 hours. Use of specialty beds or mattresses	Daily, unless condition changes.
Very High Risk (Score 7-10)	Area assessed every shift. Position must be changed every 2 hours. Use of specialty beds or mattresses.	Every shift, until condition improves

Appendix 3 – Pressure Injury Prevention and Management Plan

EXAMPLE ONLY

NSW Health | The Sydney children's Hospitals Network

Family Name:		MRN:	
Given Name:		☐ Male ☐ Female	
D.O.B:	M.O:		
Address:			
Facility:			
Prevention and Management Plan - Ward Areas	Location/Ward:		
	COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE		

For all patients who are at risk and those with an existing Pressure Injury

The eMR Pressure Injury Risk Assessment Tool is to screen patients at risk and should be used to complement clinical judgement. To minimise the risk and severity of pressure injuries, patients need to be regularly repositioned and pressure relieving support surfaces or mechanically varying pressures beneath the patient should be utilised. Any alterations to skin integrity must be escalated and monitored

Assessment	Glamorgan Score	Date	Comments
Mobility and Other Risk Factors Score			
Devices in situ			

Skin inspection: Patients at *risk* and if there is a change to health status or mobility should have a skin inspection daily

Results of Skin Assessments must be clearly documented in the patient's clinical progress notes. If more frequent skin inspections are required, document in patient's clinical progress notes.

Date							
Initials							

Interventions Strategy Plan

Pressure Relieving Support	*Describe and Document Interventions*	*Date and Initials*
Patient Positioning (e.g. supine; side lying; sit in bed/ chair)		
Patient Repositioning	Repositioning Frequency:	
	Manual Handling Equipment:	
Pressure Relieving Devices (e.g. Alternating pressure mattresses/ wedges/ foam/gel pads/ cushions)		
Referrals (e.g. Physio/ OT/ Plastic/ Dietician/ Orthotics)		
Medical Devices	Devices in-situ:	
	Skin Inspection Frequency:	
	Repositioning Device Frequency (if applicable):	
Family/ Carer Specific Requests *Risks must be discussed		
Prevention plan discussed with parent/ carer	Yes ☐ No ☐ If No (Please state why)	
Pressure injury prevention factsheet provided to parent/ carer	Yes ☐ No ☐ If No (Please state why)	

DOCUMENTATION MUST BE LEGIBLE USING BLACK PEN Page 1 of 2

Paediatric Pressure Injury Prevention and Management Plan

M12X

barcode

Pressure Injury Prevention and Management Plan

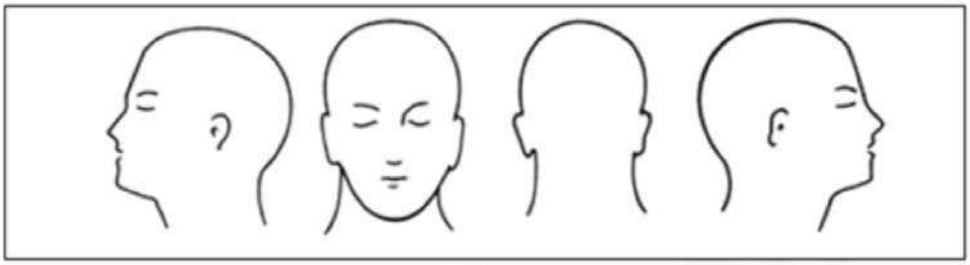
EXAMPLE ONLY

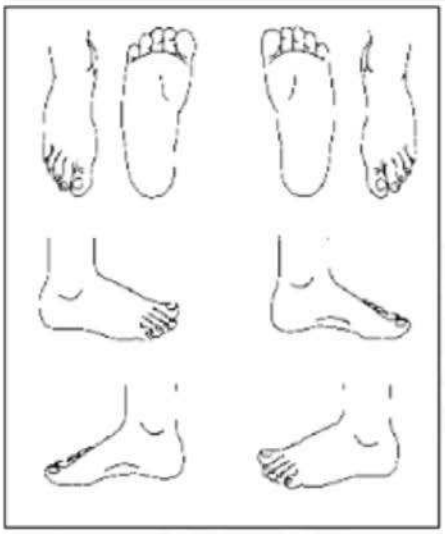
NSW Health | The Sydney children's Hospitals Network

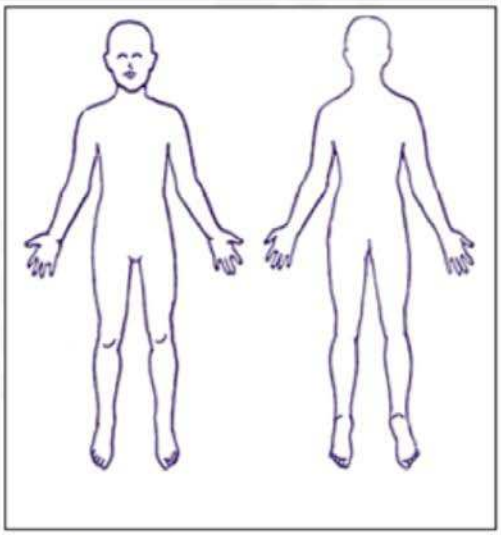
Family Name:		MRN:
Given Name:		☐ Male ☐ Female
D.O.B:	M.O:	
Address:		
Facility:		
Prevention and Management Plan - Ward Areas	Location/Ward:	
	COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE	

If patient has a pre-existing pressure injury, a Wound Assessment Form MUST also be completed to monitor the wound breakdown.

Indicate on the below diagrams any red areas or pressure injuries of concern.







Stage of injury	Definition of Injury
Stage I	Intact skin; reddened area that is fixed and does not blanch under pressure.
Stage II	Partial thickness loss of skin; may be a shallow open wound or intact serous blister.
Stage III	Full thickness tissue loss; Subcutaneous fat may be visible but bone tendon or muscle not exposed.
Stage IV	Full thickness tissue loss, exposed tendon, muscle and/or bone.
Unstageable Pressure Injury	Depth unknown. Full thickness tissue loss with the base covered by slough and / or eschar.
Suspected Deep Tissue Pressure Injury	Depth unknown. Purple or maroon area, or discoloured intact skin or blood filled blister.

barcode

Paediatric Pressure Injury Prevention and Management Plan

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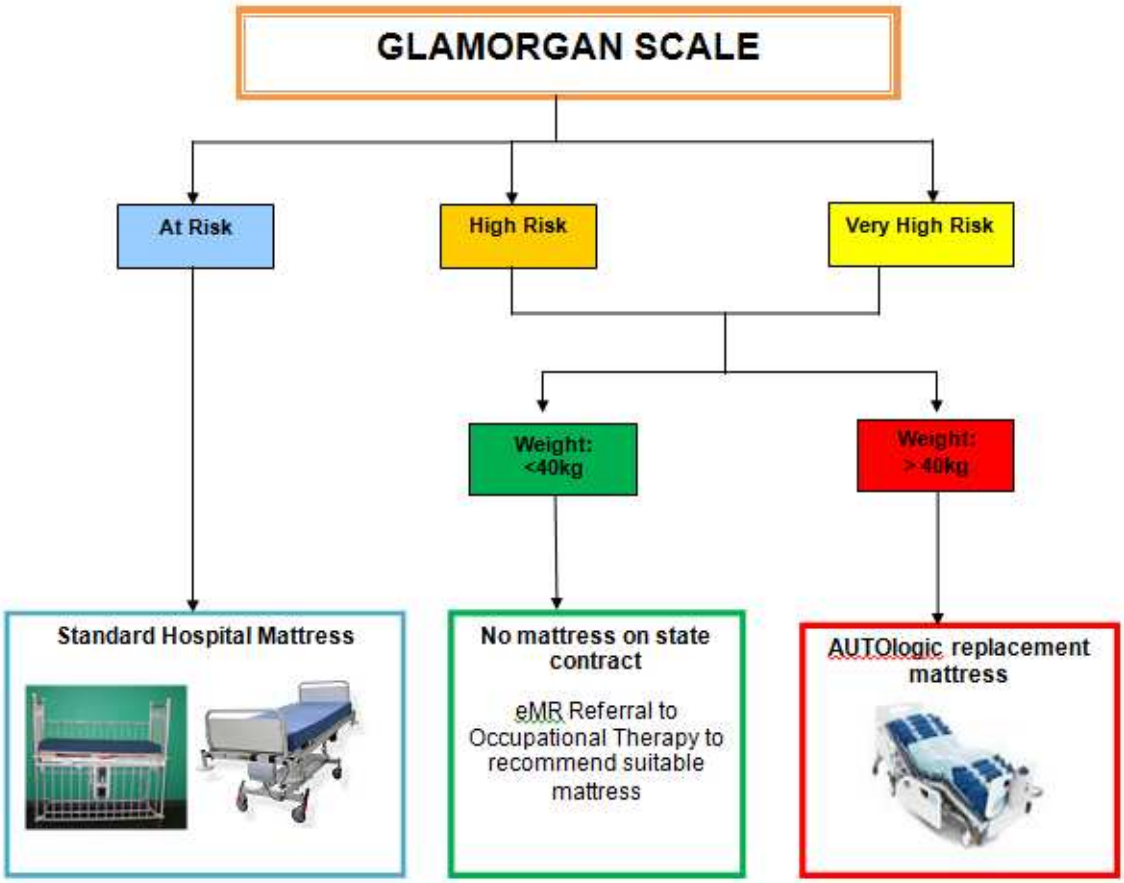
DOCUMENTATION MUST BE LEGIBLE USING BLACK PEN Page 2 of 2

Appendix 4 – Choosing & Hiring a Pressure Redistributing Mattress at SCH



At SCH Call: Huntleigh Healthcare 24hr number 1800 00 7368.

Provide:

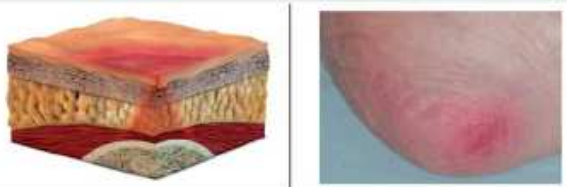
- hospital site number
  - **SCH: ZSYD002**
  - **CHW:**
- Ward
- Cost Centre
- Patient's MRN
- Mattress type
- Contact name
- Contact telephone number for the ward

NB: There will be patients that will require individual assessment and clinical judgement, that may necessitate the use of equipment beyond the equipment prescribed here.
Clinicians should use their clinical knowledge, judgement and experience to support this process.

Appendix 5 - Staging of Pressure Injuries

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).

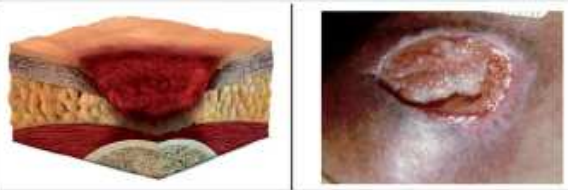


Stage II pressure injury: partial thickness skin loss

- 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.

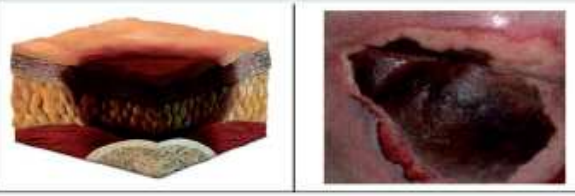


Stage IV pressure injury: full thickness tissue loss

- 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.

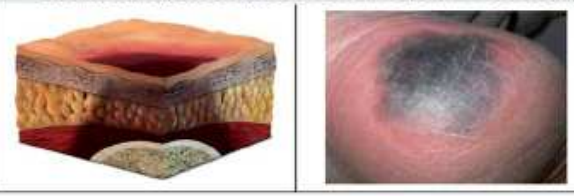
Unstageable pressure injury: depth unknown

- 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,IV, unstageable and suspected deep tissue injury courtesy C. Young, Launceston General Hospital. Photos stage II and III courtesy K. Carville, Silver Chain. Used with permission.

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 Press Injury. Abridged Version, AWMA; March 2012. Published by Cambridge Publishing, Osborne Park, WA.