CONTENTS

1 BACKGROUND

1.1 About this document

Pressure injuries are a common problem and represent a major burden of sickness and reduced quality of life. They can be painful, are costly, and often preventable complications for which many individuals are at risk due to aging, frailty, and multimorbidilty.[1,.2]

The *International Prevention and Treatment of Pressure Injuries: Clinical Practice Guideline* was published in December 2019. The guideline was a collaboration between three partner organisations – European Pressure Ulcer Advisory Panel (EPUAP), National Pressure Injury Advisory Panel (NPIAP) and the Pan Pacific Pressure Injury Alliance (PPPIA). The goal of the guideline is to provide an update of evidence-based recommendations for the prevention and treatment of pressure injuries.[3]

The Australian Commission on Safety and Quality in Health Care (ACSQHC) has designated pressure injuries as a Hospital Acquired Complication (HAC). HAC is a complication for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of a complication occurring.[4] Prevention of pressure injuries is the responsibility of all staff who work in health, regardless of location and position. Staff, patients and carers have a role to play in the prevention of pressure injuries.[5]

This Policy Directive is in accordance with the International Prevention and Treatment of Pressure Injuries: Clinical Practice Guideline, 2019.[3] and describes best practice to meet the ACSQHC, National Safety and Quality Health Service Standards (NSQHSS), Comprehensive Care Standard[5], The Comprehensive Care Standard describes the systems and strategies to provide comprehensive care and identify risk of harm including developing pressure injuries. This standard also aligns with the Partnering with Consumers Standard, which ensures that systems are in place to design, deliver and evaluate care in partnership with consumers.[5]

The Comprehensive Care Standard requires that:

- Systems are in place to support clinicians to deliver comprehensive care
- Integrated screening and assessment processes are used in collaboration with patients, carers and families to develop a goal-directed comprehensive care plan
- Safe care is delivered based on the comprehensive care plan, and in partnership with patients, carers and family. Comprehensive care is delivered to patients at the end of life.
- Patients at risk of specific harm are identified, and clinicians deliver targeted strategies to prevent and manage harm.[5]

Evidence-based approaches to pressure injury prevention and management include:

- Timely identification of risk factors
- A standardised and documented risk screening process to identify if an individual is at risk of developing a pressure injury and guide clinical decision making
- Regular skin assessment for individuals with identified risk factor/s

- Communication of identified risk
- Engaging with patients and their carer/s in a culturally appropriate manner
- Development, implementation and review of a plan of care that is:
    - Tailored to the individual's goal of care, preferences and addresses their risk factors
    - Supported by systems of care that focus on prevention to optimise healing
    - Multifactorial and interdisciplinary
    - Delivered by staff with appropriate skills and knowledge who use evidence-based prevention techniques and resources
    - Inclusive of access to appropriate products and equipment
- Systems to monitor and analyse pressure injury data, and to implement relevant quality improvement activities.[3]

It should be noted that even when prevention strategies are implemented to reduce the risk, in some cases pressure injuries are unavoidable, e.g. patients with skin failure in the end stages of life.[3]

Pressure Injury Prevention and Management resources are available on the Clinical Excellence Commission website for different care settings, including:

- A flowchart for the prevention and management of pressure injuries for inpatients. (Link to be added)
- A flowchart for the prevention and management of pressure injuries for residents of Multi-Purpose Service (MPS) long stay facilities and NSW Health Residential Aged Care (RAC) facilities. (Link to be added)
- A flowchart for the prevention and management of pressure injuries for of non-inpatients clients/consumers (community nursing services, ambulatory care or clinics). (Link to be added)

1.2 Key definitions

Active support surface

A powered support surface that produces alternating pressure through mechanical means, providing the capacity to change its load distribution properties with or without an applied load. This generally occurs through alternating of air pressure in air cells on a programmed cycle time. Also called an alternating pressure support surface or a dynamic support surface.[3]

Bony prominence

An anatomical projection of bone.[3]

Carers

People who provide unpaid care and support to family members and friends who have a disability, mental illness, chronic condition, terminal illness, an alcohol or other drug issue or who are frail aged.

Carers provide emotional, social or financial support.[6] Carers include parents and guardians caring for children.

Classification of pressure injuries

The classification of pressure injuries based on the National Pressure Ulcer Advisory Panel (NPUAP) and European Pressure Ulcer Advisory Panel (EPUAP) definitions cited in the Australian Wound Management Association *Pan Pacific Clinical Practice Guideline for the Prevention and Management of Pressure Injury, 2012.*[7]. Link to website to be added.

NSW public health facility

Any clinical unit or service that delivers healthcare services. Health facilities include hospitals, multi-purpose services, emergency services, ambulatory care services, Aboriginal Medical Services and community health services.

Pain

An unpleasant sensory and emotional experience associated with a pressure injury. Patients may use different words to describe pain including discomfort, distress and agony.[8]

Plan of care

Outlines the care needs, types and frequency of services required and the service provider details to mitigate identified risk factors.

Pressure Injury

Localised damage to the skin and/or underlying tissue, as a result of pressure or pressure in combination with sheer. Pressure injuries usually occur over a bony prominence but may also be related to a medical device or other object.[3]

Pressure injury risk identification

A process to support identification of an individual's risk of developing a pressure injury.

Risk screening

A process to support identification of an individual's risk of developing a pressure injury. [3]

Skin assessment

Examination of the entire skin surface to check integrity and identify any characteristics indicative of pressure damage/injury. This entails assessment for erythema, blanching response, localised heat, oedema, induration and skin breakdown. The skin beneath devices, prosthesis and dressings are to be checked when practical.

Staff

Any person working within the NSW Health system including clinicians, contractors, students and volunteers.

2 GOVERNANCE

Health services are to have a senior manager and/or a governance group responsible for monitoring compliance with the health service pressure injury policies, procedures and protocols, ensuring there are systems and processes in place to monitor and analyse pressure injury data and conduct/support relevant quality improvement activities.[5]

3 PARTNERSHIP WITH PATIENTS AND/OR CARERS

Health services are to have systems in place to partner with consumers and carers in care, to the extent that they choose. Education is to be provided to patients and their carers of their identified pressure injury risk factors, and appropriate prevention and management strategies. This is to be supplemented with written information and other resources appropriate to the patient group and communicated in a way that supports effective partnerships and is easy to understand and use.

Document partnering with patients and carers in the medical record when developing care/management plans.

Information to support the ongoing care and management of risk factors is to be provided on transition of care/discharge.[5]

4 CLINICAL PRACTICE – PREVENTING AND MANAGING PRESSURE INJURY

4.1 Risk identification

Health services are to have systems and processes in place (appropriate for their patient populations) to identify risk factors and support care planning and decision-making processes.

All patients must have pressure injury risk screening performed as early as possible on admission. This means:

- Within 8 hours of presentation to a health facility for inpatient and Multi-Purpose Service (MPS) long stay facilities and NSW Health Residential Aged Care (RAC) facilities.
- At the first home visit or presentation for non-inpatient (community nursing services, ambulatory facilities or clinics with clients at high risk) services.

Risk screening must consider the three primary predictors of pressure injury development:

1) Mobility/activity - which can be restricted by the following but is not limited to physical limitations, excessive weight, underweight, sensory deficit, cognition, affect, motivation, medication/anaesthetic or pain.
2) Perfusion – related to diabetes, peripheral vascular disease, venous congestion, respiratory disease, organ failure, medication.
3) Skin status:
    a) General skin status relating to factors which may make the skin more vulnerable to pressure injury development, e.g., moisture, dryness, oedema

b) Pressure injury status including current, and previous pressure injuries.[9]

If a patient has a history of or current pressure injury, they will be at risk of developing pressure injuries.

When pressure injury risk factor/s are identified through the initial screening process, the patient is to have a skin assessment attended and documented. Ongoing, regular skin assessment are to be attended. See table 1 below.

In some situations, the patient may be unsuitable to undergo a full skin assessment and the clinician must record in the medical record the reason why the skin assessment was not undertaken. In clinical situations when the risk of doing a skin assessment is outweighed by other risks to the patient, the assessment is to take place as soon as practical after the risk is mitigated. Risks include:

- Clinical instability i.e. spinal cord injury, unstable fractures, active bleeding
- Medical device patency i.e. extracorporeal membrane oxygenation (ECMO), intra-arterial lines/sheaths
- Dressing wear time i.e. severe burn injury, negative pressure wound therapy
- Challenging behaviours i.e. delirium, aggression
- Potential for psychological trauma i.e. sexual assault, cultural sensitivity
- Imminent death.

The skin assessment is to include a comprehensive head to toe assessment, focusing on skin overlying bony prominences including the sacrum, heels, hips, pubis, thighs and torso. The occiput for neonates, young children and critically unwell patients requires careful attention.[1]

Patients are to be reviewed to identify risk factors if there is a change to a patient's health status or mobility, pre-operatively, as soon as feasible after surgery, postnatally prior to leaving the birthing setting, at transition of care, prior to discharge and if a pressure injury develops. If risk factors are identified the plan of care is to be reviewed and skin assessment attended.

Table 1 outlines identification of risk factors, skin assessment requirements and care plan review requirements based on the care setting.

	Inpatients	Multi-Purpose Service (MPS) long stay facilities and NSW Health Residential Aged Care (RAC) facilities.	Non-inpatients (community nursing services, ambulatory care or clinics with clients at high risk)
First pressure injury screening and skin assessment to guide clinical decision making	1. Screened as soon as possible (or within 8 hours of presentation) (if the patient is transferred from the Emergency Department prior to 8 hours, the admission assessment can be completed on the ward). 2. Skin assessment for patients with identified risk factors	1. Screened within 8 hours of presentation 2. Skin assessment for residents with identified risk factors	1. Screened at the first home visit or presentation 2. Skin assessment (if practicable) for consumers with identified risk factors
Patient with identified risk factor/s	Skin assessment and plan of care reviewed daily, and: • If there is a change in health status or mobility • Pre-operatively, and as soon as feasible after surgery • Postnatally, prior to leaving the birthing setting • Transition of care • Prior to discharge • If a pressure injury develops (a wound assessment and management plan must be documented)	Skin assessment daily and plan of care reviewed regularly (on agreed review date), and: • If there is a change in health status or mobility • When clinical change impacts on the needs, goals or preferences of the consumer • Transition of care • If a pressure injury develops (a wound assessment and management plan must be documented)	Skin assessment and review of plan of care monthly (as a minimum) and: • If there is a change to health status or mobility • Transition of care • If a pressure injury develops (a wound assessment and management plan must be documented)
Patient with no identified risk factor/s	Reassess: • If there is a change to health status or mobility • Post operatively • Postnatally, prior to leaving the birthing setting • Transition of care • Prior to discharge • If a pressure injury develops	Reassess: • If there is a change to health status or mobility • Transition of care • If a pressure injury develops	Reassess: • If there is a change to health status or mobility • Transition of care • If a pressure injury develops
Pressure injury/ies present - skin assessment and pain assessment	Additionally, is to occur at each patient care intervention and/or positioning change	Additionally, is to occur at each patient care intervention and/or positioning change	Additionally, is to occur at each home visit/appointment

NB. Community nursing services who are not the primary care provider for clients/consumers identified as at risk for pressure injury must provide education to the client/consumer and/or carer or primary care provider, so that they are aware and understand the risk and their responsibility for ongoing monitoring of skin integrity and plan of care.

People with spinal cord injury are at life-long high risk for pressure injury development. The plan of care is to be reviewed regularly particularly if there is a change in health status or mobility.

4.2 Plan of care

For patients who are at risk for pressure injury the plan of care needs to:

- Be developed with them, or their carer (when able) and documented in their medical record.
- Be communicated during handover at the end of every shift in an acute, MPS long stay facility or NSW Health RAC facility, and within twenty-four hours of initial home visit for community services.
- Have risk communicated, e.g. through the use of patient journey boards and care boards.
- Be verbally communicated during bedside handover, intentional rounding, safety huddles and at transition of care.
- Be communicated via documentation in the medical record.
- Include strategies aimed at preventing pressure injury/injuries and optimising healing and preventing complications of current pressure injury/injuries.
- Document how the patient and/or carer are involved in the pressure injury prevention care planning process.
- Have input from the interdisciplinary team about additional assessment, recommendations and treatment.
- Document appropriate prevention and management strategies as outlined in 4.3 and 4.4.

4.3 Prevention Strategies

Patients with identified risk factors for pressure injury (either with or without current pressure injury) are to have:

- Evidence based prevention strategies implemented as a priority within two hours of risk identification.
- Prevention strategies reviewed for their effectiveness at least at every patient intervention.

Prevention strategies are to be targeted care actions/interventions based on the risk factor identified:

Repositioning and/or mobilising schedule with a system to prompt repositioning using appropriate manual handling. Patients are to be educated and encouraged to perform independent, pressure relieving manoeuvres when able.

- A 30-degree side lying position is to be used when repositioning individuals in bed. The head of the bed is to be elevated no greater than 30-degrees unless medically necessary to facilitate breathing and/or prevent aspiration and ventilation-associated pneumonia.[3]

Mattress support surface which meets the patient's individualised care plan requirements (i.e. weight, moisture, temperature, width).

Seating support surfaces which meet the individualised requirements.

Other pressure redistribution and offloading equipment **(**i.e. Operating room/procedural suite beds, trolleys, wheelchairs/chairs) and repositioning devices or aids according to individualised requirements and goals of care

Reduction of pressure and shear:

- Active support surfaces are to be used during care, including emergency departments, operating room, intensive care and, and during transportation.
- Heels are to be offloaded completely to distribute the weight of the leg along the calf.
- Prophylactic dressing can be used to reduce shear and friction (note dressing products do not reduce pressure)
- Appropriate manual handling techniques are to be used
- Devices/orthoses/compression therapy, casts/splints and other devices are to be correctly fitted, have their pressure checked and be removed regularly.

Pain Management

Education of patients/carers on the importance of regular repositioning and other appropriate prevention strategies which apply to their identified risk factors

Skin protection and moisture reduction through an appropriate skin care regimen:

- Skin is to be kept clean and hydrated
- Skin is be protected from moisture with a barrier product
- Vigorous massage or rubbing of the skin is to be avoided; this can damage the skin due to friction

Continence management:

- A continence management plan is to be developed that facilitates individualised toileting, change of continence aids, and regular skin care.
- Highly absorbent incontinence products are to be used to protect the skin in individuals with or at risk of pressure injuries who have urinary and /or faecal incontinence.
- Skin is to be cleansed promptly after each incontinence episode.

Adequate nutrition and hydration, is to be provided, including high protein supplements where indicated (with dietitian supervision if available).[8]

Referral to health disciplines are to be made as clinically indicated for additional assessment and treatment.

NB: In the case an unstable spinal or pelvic fracture, the active support surfaces are contra-indicated. This is regardless of the patient having identified risk factors for the development of pressure injury or if they have an existing pressure injury. Patients with an unstable spinal or pelvic fracture are to stay on the appropriate non-powered support surface and receive regular pressure relief through lifting, as per protocols.

4.4 Management of Pressure Injuries

1) *Classification and assessment* of pressure injuries is to occur when a pressure injury is identified, serial wound management and on transfer of care (at the next dressing change). Pressure injuries are classified using the EPUAP/NPUAP 2009 classification system.
2) *Plan of care* - patients with a pressure injury are to have a plan of care that addresses individual risk factors and includes wound assessment and management. The plan of care is to be reviewed by the multidisciplinary care team within twenty-four hours of pressure injury development wherever possible. If a pressure injury develops or an existing pressure injury significantly deteriorates (progresses to a more severe stage of pressure injury) the patient must be reviewed.
3) *Wound Management* is to be provided or supervised by staff with skills, knowledge and equipment to provide treatment in accordance with best practice.
4) *Documentation* of the pressure injury in the health care record e.g. on a Wound Chart. Pressure injuries are to be notified through the incident reporting and management system if the injury was acquired during the current episode of care. Documentation of the wound must include a pressure injury stage/classification.
5) *Wound reassessment* is to occur on a regular basis. The wound is to be reviewed by a clinician with expertise in wounds and/or other health disciplines if the pressure injury is not healing as anticipated, i.e. 25% reduction in four weeks.[3]
6) *Consultations* are to occur in a timely fashion with clinicians with expertise in wounds, medical or other health disciplines for their assessment and contribution, planning, and management. The use of virtual health to facilitate the consultation and reduce the need for patient or clinicians to travel is to be considered.
7) *Pain* is to be assessed and managed using best practice guidelines at least every shift/home visit (using a validated tool) and documented.
8) *Nutritional management* is to be provided in accordance with NSW Health Nutrition Care Policy.

9) *Prevention* of additional pressure injuries - patients with a pressure injury are at a high risk of the injury worsening or developing other pressure injuries. See section 4.3 on prevention strategies.

4.5 Transition of Care

Transition of care for a patient with a pressure injury, or at risk of developing a pressure injury, requires timely communication with health care providers taking over/resuming care, the patient and/or their carer's, other community or residential services, equipment suppliers, and appropriate allied health clinicians. Communication is to include:

- Individual's goal of care (healing, maintenance, or palliation).
- Classification and management of the pressure injury.
- Wound management.
- Ongoing prevention strategies.
- Follow-up care.

Prevention strategies are to be used during road transport or transition of care for patients with an existing pressure injury, or at risk of developing a pressure injury.

5 RESOURCES FOR PREVENTING AND MANAGING PRESSURE INJURY

All health services are to have:

- Systems in place so that adequate expertise and resources (including products and equipment) are readily available and accessible to provide best practice in pressure injury prevention and management.
- The necessary equipment for transport of individuals at risk of or with a pressure injury.

All pressure injury prevention equipment is to be purchased in accordance with NSW Health Procurement Guidelines and used in accordance with:

- The manufacturers' instructions.
- NSW Health Infection Control Policies.
- NSW Health Workplace Health & Safety.

6 EDUATION AND TRAINING

Clinical staff providing care to patients at risk of or with pressure injuries should undertake training in pressure injury prevention and management. Health organisations may choose to use My Health Learning modules.

Health services are to have:

- Induction and ongoing training programs related to pressure injury prevention and management available to support staff in the delivery of quality care.

- Health professionals available to support pressure injury prevention and management.
- Targeted education available for:
    - Clinical coders on pressure injury classification.
    - Auditors who conduct audits related to pressure injury prevention and management.
- Systems in place to monitor education resources and records of training for staff on preventing and managing pressure injuries.

7 REPORTING

7.1 Pressure injury incidents

Hospital/health service acquired pressure injuries are to be notified in the local incident reporting and management system and communicated to the admitting medical team and primary care provider. This includes pressure injuries that have deteriorated (progressed to a more severe pressure injury) since admission. Unstageable Pressure Injuries require review for definitive staging. Where this is likely to occur after the transition of care, the health service should communicate with the new care provider to confirm staging.

Pressure injury incidents are investigated, recommendations reported and monitored in accordance with the NSW Health Policy on incident management. When a pressure injury occurs or deteriorates during an episode of care, the patient and/or carer are informed in accordance with NSW Health Open Disclosure Policy.

Stage 3, stage 4, suspected deep tissue or unstageable hospital/health service acquired pressure injuries are to involve a clinician with expertise in wound management on the Incident Review Team, where possible.

7.2 Auditing and reporting

Health services are to have systems in place to:

- Identify pressure injuries that develop during the episode of care.
- Review pressure injury data regularly, at a minimum quarterly.
- Ensure pressure injury data is communicated to the health service executive and those responsible for governance of clinical care.
- Analyse pressure injury data to inform care, quality improvement activities and monitor progress.

8 REFERENCES

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8) International Association for the study of pain. Accessed March 2020. https://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698
9) Coleman S, et al. Patient risk factors for pressure ulcer development: Systematic review. International journal of Nursing Studies. 50 (2013) 974-1003.

9 RELATED LITERATURES, DOCUMENTS AND RESOURCES

1) NSW Procurement Guidelines
2) The related NSW Health polices and guideline (i.e. incident management, nutrition care, open disclosure, infection control and workplace health and safety) can be found at: http://www.health.nsw.gov.au/policies/pages/default.aspx
3) Leading Better Value Care Standards for Wound Management September 2019 http://eih.health.nsw.gov.au/__data/assets/pdf_file/0010/558352/NSW-Health_Wound-Standards_September-2019.PDF
4) Australian Commission on Safety and Quality in Health Care March 2018 https://www.safetyandquality.gov.au/sites/default/files/migrated/Pressure-injury-short-clinician-fact-sheet.pdf