Guidance for pressure injury prevention and management in New Zealand

FEEDBACK DRAFT

Draft Guidance

November 2016

Contents

Introduction

This guidance has been developed to support organisations, such as hospitals, hospices, aged residential care facilities and home care providers, and their staff to ensure the highest standard of care is delivered to prevent and manage pressure injuries.

It is estimated that over 55,000 new pressure injuries (also known as a pressure ulcer or 'bedsore') happen each year in New Zealand causing a financial burden to healthcare services and requiring increased resources[1]. A pressure injury is defined as a 'localised injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear'[2]. Pressure injuries cause misery, pain, disability, hospitalisation and sometimes even death. Preventing pressure injuries before they develop or progress is a high priority. The purpose of this guidance is to establish the principles that should be followed in order to improve quality and ensure best practice for pressure injury prevention and management in all healthcare settings in New Zealand.

Every person in New Zealand should receive the best healthcare possible every time they access healthcare services. Everyone who provides healthcare services has an important role in making sure the principles in this guidance are followed, and in continually improving the healthcare people in New Zealand receive. Each of the six principles identifies what it means for organisations and staff. The principles also detail what people receiving care, their caregivers and representatives, and the public can expect of healthcare services in New Zealand with regard to pressure injury prevention and management.

The Accident Compensation Corporation (ACC) has worked with a panel of experts from across the healthcare sector, including the Ministry of Health (the Ministry), the Health Quality and Safety Commission (the Commission) and the New Zealand Wound Care Society (NZWCS), to develop this draft guidance. As no systemic review of pressure injury incidence and management in New Zealand populations has been undertaken this is an evidence-informed guidance rather than an evidence-based guideline.

[1] KPMG The case for investment in a quality improvement programme to reduce pressure injuries in New Zealand (2016)

[2] National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance Pressure Ulcers: Quick Reference Guide. NPUAP/EPUAP/PPPIA (2014)

There is good evidence that pressure injuries can be significantly reduced[3]. Some New Zealand healthcare providers have already shown a large reduction. There remain opportunities for other organisations to reduce the incidence of pressure injuries using bundles of care and clinical practice guidelines that detail at a practice level what action can be taken.

Pressure Injury Prevention Principles

The Expert Reference Panel (refer Appendix 2) has identified the following six principles to ensure appropriate pressure injury prevention initiatives occur.

Six principles to initiate and sustain change

1. **People first**: People have a right to access care, receive information and participate in shared decision-making about the care needed to prevent pressure injuries.
2. **Leadership**: Healthcare organisations need to demonstrate leadership by ensuring that systems and resources are in place to prevent pressure injuries.
3. **Education and training**: Healthcare workers at all levels require access to and support in attaining current knowledge and skills that will enable them to prevent pressure injuries.
4. **Risk assessment**: A pressure injury risk assessment is completed as part of an initial admission or referral, with further reassessments when a person's health status changes. 'At a glance' checks are done on an opportunistic basis.
5. **Care planning and implementation**: An individualised person-centred care plan, using evidence-based bundles of care is developed, documented, and implemented to reduce the risk of pressure injuries.
6. **Collaboration and continuity of care**: Care support, information, and resources move seamlessly with a person when a transfer between healthcare settings takes place.

[3] Demarre L; Van Lancker A; Van Hecke A; Verhaeghe S; Grypdonck M; Lemey J; Annemans L; Beeckman D. The cost of prevention and treatment of pressure ulcers: A systematic review. International Journal of Nursing Studies. 52(11):1754-74, (2015 Nov)

[3] National Clinical Guideline Centre. Pressure ulcer prevention. The prevention and management of pressure ulcers in primary and secondary care. National Institute for Health and Care Excellence. (2014)

[3] National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance Pressure Ulcers: Quick Reference Guide. NPUAP/EPUAP/PPPIA (2014)

On the following pages, each of the six principles is described, including:

- a definition of the principle and level of performance to be achieved
- a list of criteria under each principle; these outline what the principle means for an organisation, its staff, and for people who would and/or might benefit from pressure injury prevention
- practical steps to help achieve the principles.

All the criteria identified with each principle are considered necessary to demonstrate that the principle has been achieved. This guidance can be applied across all healthcare settings including hospitals, hospices, aged residential care facilities, and for care provided in people's own homes or any other care setting.

Prevention and management of pressure injuries guidance

Principle 1: People first

People have a right to access care, receive information and participate in shared decision-making about the care needed to prevent pressure injuries.

Criteria

People receive healthcare that reduces their risk of developing pressure injuries, whether living independently, receiving care at home, in long-term care or in hospital. People and their families/whānau and carers are informed so they can make the pressure injury prevention decisions that are best for them. This information is provided in a way that people can understand and act on.

What does the principle mean for people?

All people at risk of developing a pressure injury, and those who care for them, have access to information on how to recognise the risks, provide preventive measures and access support to reduce the occurrence of pressure injuries.

People and their families/whānau or other carers will be consulted on care planning and have the opportunity to ask questions about pressure injuries and prevention. Information provided should be comprehensive and available in a language the reader can understand.

What does the principle mean for the organisation?

Healthcare organisations ensure resources are in place so that people, family/whānau and carers have adequate information on the risk of developing a pressure injury and how they can be prevented..

What does the principle mean for staff?

All staff will have an understanding about their roles and responsibilities in providing information in relation to pressure injury prevention and management. The plans of care will be discussed and documented as per local and professional requirements. People and their families/whānau or other carers are encouraged to ask about preventative measures to avoid the development of a pressure injury.

Practical recommendations (not exhaustive)

When people come first the following take place:

1) People at risk of pressure injuries are supported to make informed choices, set agreed goals and discuss with their healthcare teams how their pressure injury prevention goals are achieved.
2) All information on a person's pressure injury prevention needs, including risk assessments, skin assessments, and care plan, is discussed and made available to that person and their family/whānau as appropriate.
3) Those who care for people at risk of developing pressure injuries have access to educational materials that will enable them to prevent and/or recognise pressure injuries.

Principle 2: Leadership

Healthcare organisations need to demonstrate leadership by ensuring that systems and resources are in place to prevent pressure injuries.

Criteria

Healthcare leaders demonstrate their organisation's commitment to preventing and managing pressure injuries by ensuring that people can access and receive timely interventions and appropriate resources to improve outcomes. Organisation leaders within each healthcare setting are responsible and accountable for developing and sustaining quality improvement plans to reduce pressure injuries.

What does the principle mean for people?

All people who are at risk of, or identified with, a pressure injury, regardless of their care setting, will be offered care that minimises the risks of pressure injuries.

What does the principle mean for the organisation?

Healthcare organisations encourage an interdisciplinary team vision and shared responsibility for pressure injury prevention, with cooperative approaches within and across the health and disability sector.

Appropriate and timely access to resources in accordance with assessed need is provided. Staffing levels are adequate to ensure provision of best practice in pressure injury prevention and management.

Healthcare organisation leaders will work with government agencies and other key stakeholders to ensure pressure injury prevention strategies remain effective, comprehensive and up to date at both a local and a national level.

Healthcare organisations regularly monitor their pressure injury prevalence to inform local quality improvement work and contribute to national surveillance.

All severe pressure injuries (stages three and above) are investigated, and reported to the Health Quality and Safety Commission via the serious adverse event (SAE) reporting system, with the aim of improving systems to gain better outcomes for patients. Investigations will be transparent and focus on systems issues, with the intention that learnings are used to prevent the development of pressure injuries.

What does the principle mean for staff?

Funders, managers, clinicians, and carers all have a shared responsibility to remain vigilant and involved in providing treatment and care in a way that minimises the risk of developing pressure injuries.

All staff have a responsibility to identify and raise any issues that impacts on the delivery of care relating to pressure injury prevention and management and on-going quality improvement.

Staff will know who the designated management representative for pressure injuries is or who to escalate an issue to, if needed.

Practical recommendations (not exhaustive)

Organisations will have:

1) A designated senior management sponsor who is responsible for ensuring criteria are met
2) Pressure injury prevention and management policies and procedures
3) Interdisciplinary collaboration regarding pressure injury prevention and management
4) Data collection processes on the frequency and severity of pressure injuries[4]
5) Set targets for reducing the onset and development of pressure injuries which are regularly reviewed and revised and acted upon to achieve continuous quality improvement.
6) Assessment tools, care plans, audit tools and staff education programmes
7) Information and publicised resources which are available to people.
8) Pressure injury prevention 'champions' within healthcare organisations to facilitate prevention strategies in care settings and the infrastructure to support this role.
9) Mechanisms that facilitate access to specialist advice, equipment and resources in a timely manner to support care delivery.
10) Referral pathways (including an exploration of technology requirements for such items as telehealth resources) that support the safe transfer of people and information between services that ensures continuity of care.
11) Adverse event reports that investigate and identify factors which have led to pressure injury development and to support learning to ensure such injuries do not recur.

[4] Health Quality & Safety Commission report: Developing a national approach to the measurement and reporting of pressure injuries (12 September 2016). See: http://www.hqsc.govt.nz/our-programmes/other-topics/new-projects/pressure-injury-prevention/measurement/

Principle 3: Education and training

Healthcare workers at all levels require access to and support in attaining current knowledge and skills that will enable them to prevent pressure injuries.

Criteria

Healthcare professionals, unregulated staff, and carers have access to education or educational resources based on current evidence that enables them to deliver care that prevents pressure injuries.

What does the principle mean for people?

People have confidence in the knowledge and abilities of healthcare professionals to be able to prevent pressure injuries and receive information on how to recognise and avoid the development of pressure injuries.

What does the principle mean for the organisation?

Healthcare organisations will provide time, opportunities and a supportive learning environment for education and training, and provide the necessary knowledge and skills for healthcare professionals, unregulated staff and carers in the prevention and management of pressure injuries[5]. Systems to record education and training will be available and maintained, with any unmet educational or training needs identified and subsequently met.

What does the principle mean for staff?

All staff can demonstrate current knowledge and skills in the delivery of care to people who are at risk of developing pressure injuries, including assessment, identification, prevention and management.

Staff are supported to identify their educational and training needs and keep a record of their professional development.

[5] Cox J, Roche S, Van Wynen E. The effects of various instructional techniques on retention of knowledge about pressure ulcers among critical care and medical-surgical nurses. Jnl Con Ed in Nursing.2011;42(2): 71-8

Practical recommendations (not exhaustive)

Access to education and training, appropriate to role, skill and care setting, on pressure injury prevention, identification, and management including:

1) Understanding of the physiology of skin and pathophysiology of pressure injuries
2) Understanding risk factors associated with the development of pressure injuries
3) Perform skin assessment as part of an overall clinical assessment and recognise early signs and symptoms of pressure injury development
4) Accurate, consistent and documented staging of pressure injuries based on an international staging classification system (See Appendix 3)
5) Understanding of treatment options for pressure injuries, including self-management, equipment, devices and dressings
6) The ability to develop, implement and evaluate individualised care plans based on identified risk
7) When it is appropriate to request specialist advice and how to do this
8) Information leaflets on risk factors, prevention, early identification, who and when to report any concerns to, and treatment options or support available for people at risk.

Principle 4: Risk assessment

A pressure injury risk assessment is completed as part of an initial admission or referral, with further reassessments when a person's health status changes. 'At a glance' checks are done on an opportunistic basis.

Criteria

Clinical judgment supported by a structured risk assessment to identify risks for developing pressure injuries is completed as soon as possible after admission or transfer appropriate to the care setting[6]. A reassessment is completed regularly at appropriate intervals based on the care setting, individual risk or when health conditions change to identify any developing pressure injuries, deterioration of existing pressure injuries or changes in skin integrity (See Appendix 3).

Formal skin integrity assessment, as part of a structured risk assessment, is supplemented by opportunistic 'at a glance' assessments as a part of daily care, when it is possible to view pressure areas, such as during moving, showering, and treatment.

All pressure injury risk and formal skin integrity assessments are clearly documented, including any barriers to assessments. Where a risk assessment or skin inspection has been refused, the reason is explored with the person and the discussion is documented in the person's clinical record.

What does the principle mean for people?

Peoples' needs will be assessed by healthcare professionals, unregulated staff or carers on admission or transfer of a care setting, including home based care settings, to assist with the development of a plan of care. This will include:

- Questions on health, nutrition, mobility, bowel and bladder function
- A full skin inspection to identify any skin changes, especially around bony areas
- Assessment of any equipment, for example wheelchair, mattress or cushion, already in use or required
- Advice on self-management in the prevention of pressure injuries

[6] National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance Pressure Ulcers: Quick Reference Guide. NPUAP/EPUAP/PPPIA (2014)

- A discussion on the plan of care required, treatment options and frequency of reassessments
- A discussion on any concerns identified or skin changes noted

What does the principle mean for the organisation?

Healthcare organisations provide clear policies and procedures to ensure risk and skin assessments are conducted in a comprehensive, consistent manner, and are clearly documented. Processes are available that facilitate access to specialist advice as required. Risk assessment and reassessment completion rates are monitored and procedures evaluated for effectiveness.

What does the principle mean for staff?

Staff have the responsibility of performing a risk assessment as soon as possible after admission or transfer to a new ward, service or healthcare facility and re-assessment completed with any change in condition. Based on clinical judgement and the risk assessment, healthcare professionals and paid carers develop plans of care to prevent pressure injuries.

Staff have the responsibility for maintaining their knowledge and skills in undertaking a pressure injury risk assessment and to participate in identifying areas for improvement related to assessment and pressure injury incidence.

Practical recommendations (not exhaustive)

Risk assessments will include:

1) A skin inspection, paying careful attention to areas over bony prominences and areas in contact with equipment and devices
2) Assessment of risk factors including mobility, relevant co-morbidities, cognition, nutrition, bladder and bowel function
3) Consistent staging, in accordance with standard protocols on the development or progression of a pressure injury, and documented in the clinical notes
4) Needs assessment around positioning and equipment requirements
5) Referral pathways to appropriate professionals or specialists
6) Supports required for self-management or home-carer management
7) Documentation in the clinical notes including stage and appearance of existing pressure injuries and any specialist referrals made
8) An evaluation of whether the risk has increased or decreased, and any existing care plans evaluated and revised if required
9) Monitoring of compliance of risk assessment completion in relation to pressure injury incidence and opportunities for improvements identified
10) Providers are encouraged to develop ways to supply bedside prompts to family/ whanau and carers that ensure pressure injury risk is elevated.

Principle 5: Care planning and implementation

An individualised person-centred care plan, using evidence-based bundles of care is developed, documented, and implemented to reduce the risk of pressure injuries

Criteria

An individualised care plan is developed based on the risk assessment, identified risk factors and clinical judgement. The care plan is documented, and implemented to reduce the risk of development or progression of pressure injuries, using evidence-based bundles of care[7]. The multidisciplinary team contributes to the plan of care and its regular re-evaluation, responding to changes in care requirements based on individual need. People participate in making decisions about their own health care, where they or people who care for them are able to understand these decisions.

Where a care plan has not been applied or followed, for example, due to personal choice or restricted access to services, the reason is explored with the person, documented in the person's clinical record and the plan is revised to improve health outcomes.

What does the principle mean for people?

People can expect to be consulted on their care requirements and participate in making decisions about their care. People can expect to receive consistent care in accordance with their agreed care plan including

- Skin care and changes in position and frequency
- Access to the care or equipment they need to prevent pressure injuries
- Dietary and hydration advice and support.

What does the principle mean for the organisation?

Healthcare organisations provide a pressure injury prevention strategy that includes access to and implementation of all elements of an evidence based bundle of care.

[7] Whitlock J. SSKIN bundle: preventing pressure damage across the health-care community. Brit Jnl Comm Nursing. 2013 Supplement, pS32

Healthcare organisations ensure pressure relieving equipment is available and accessible to meet a person's identified need.

Ongoing monitoring of the effectiveness of implementing the care plan occurs and contributes to quality improvement.

What does the principle mean for staff?

Staff have responsibility for implementing and evaluating a plan of care based on an individual's risk of pressure injury. Care plans are developed in accordance with an evidence-based care bundle (see Appendix 4: SSKIN Bundle of Care).

Staff have the responsibility of maintaining their knowledge and skills in developing and reviewing a plan of care and to participate in identifying areas for improvement related to implementation of care plans and pressure injury incidence.

Practical recommendations (not exhaustive)

A care plan is devised and implemented to reduce the risk of pressure injury and/or manage an existing pressure injury. All plans of care are documented, evaluated and people educated around self-management.

The care plan includes components like those in an evidence based bundle of care, for example the SSKIN bundle (see Appendix 4). The bundle of care can be adapted based on care settings, however will always include:

1) Clinical assessment and skin inspection
2) Support surface and equipment requirements
3) Maintaining movement including frequency of position changes
4) Incontinence and moisture management
5) Nutrition and hydration support
6) Reassessment plan, evaluation and revision of care plan
7) Monitoring of compliance of care plan implementation in relation to pressure injury incidence and opportunities for improvements identified
8) Documentation of all assignments above as well as document and describe the stage of any pressure injury present.

Principle 6: Collaboration and continuity of care

Care support, information, and resources move seamlessly with a person when a transfer between healthcare settings takes place.

Criteria

Continuity of care will be maintained across different care settings and interdisciplinary teams, with safe and effective transfer of information based on the individual's needs.

Information about structured risk assessment, skin assessments, stages of any existing pressure injuries and prevention strategies are documented in the care plan and move with the patient irrespective of who is providing their care[8].

Collaboration across sectors on pressure injury prevention, pressure injury management to enable best use of resources and promote seamless care is undertaken. Benchmarking of the incidence of pressure injuries between organisations is developed and maintained to support the achievement of national best practice.

What does the principle mean for people?

People can expect to receive continuity of care when being transferred between wards or from one facility to another. Person centred care plans will be documented, implemented and transferred with people across all care settings.

What does the principle mean for the organisation?

Systems are in place to ensure care plans and information are shared, and plans for timely access to interventions are in place to ensure people, family/whānau and carers experience seamless continuing prevention of pressure injuries while being transferred.

When people are transferred from one healthcare setting to another, their pressure injury status on transfer is recorded by both referring and receiving wards or facilities.

[8] Institute for Clinical Systems Improvement. Pressure Ulcer Prevention and Treatment. 3rd Ed, ICSI, 2014

What does the principle mean for staff?

All staff communicate proactively to ensure that people being transferred between healthcare settings have seamless care during the transfer and continuity of care at the receiving setting.

All relevant records of risk assessments, skin integrity assessments, staging of any existing pressure injuries and supporting information, such as mobility and nutritional needs, are provided to healthcare settings to which they are to be transferred.

When a person is considered to be at risk, any interventions, such as specialist equipment, are transferred with the person where appropriate or the receiving facility is informed of requirements **before** transferring. The level of specialist equipment should be the same at both the discharging and receiving ward, unit or facility, until review indicates this equipment is no longer appropriate.

Practical recommendations (not exhaustive)

To ensure continuity of care the following should occur:

1) Person centred care plans are used to inform handovers, transitions of care and discharge plans
2) High-risk patients are identified, and pressure injury planning is undertaken in collaboration with staff responsible for the patient's care during transfer.
3) Where specialist equipment is leased, arrangements are in place (such as changing cost codes with the equipment company) to facilitate transfers.
4) Discharge summaries, care home admission letters and any referrals for specialist input are communicated across health care settings
5) Healthcare providers showing consistently good results in pressure injury prevention and management communicate openly, collaborate across sectors and share their learnings with other providers to support the achievement of national best practice.

Appendix 1: Development of this Guidance document - Methodology

This guidance was developed with the advice and support of a panel of expert members, nominated by a range of organisations, whose expertise in pressure injury prevention made them outstanding contributors (see Appendix 2: Membership of the Expert Reference panel). The external expert reference panel has met three times throughout the development of this guidance. After the first meeting, ACC drafted the guidance document using advice and support from the Expert Reference Panel. Over the next two meetings this draft was reviewed on and at the time of the final panel meeting the guidance was virtually complete. The guidance document had a further peer review by members of the panel who provided comprehensive feedback to ensure that it is clear, accurate, and fit for the New Zealand context. The guidance document is now being shared with the sector for feedback. Once all the feedback is collated the panel will meet again to discuss and agree the final guidance document.

In developing the initial draft guidance document existing comprehensive national and international evidence reviews for the development of clinical best practice guidelines were identified. (The Expert Reference Panel acknowledges the enormous amount of work undertaken by the Pan Pacific Pressure Injury Alliance and the National Institute for Health and Care Excellence in the UK).

The Expert Reference Panel mostly based this guidance on two clinical practice guidelines; available on the internet (refer to Bibliography), and their evidence reviews, as well as more pragmatic guidelines developed by clinicians for clinicians. Both of these two guidelines are supported by extensive systematic reviews of the scientific literature on the development of pressure injuries and their prevention. The Expert Reference Panel considered that, as there is nothing specifically different about the provision of pressure injury prevention and management care to New Zealand populations, commissioning a further systematic review would change little and unnecessarily delay implementation of pressure injury prevention strategies. This guidance is therefore an evidence-informed guidance rather than an evidence-based guideline.

Appendix 2: Membership of the Expert Reference Panel

This clinical guidance was developed with the advice and support of a panel of expert members nominated by a range of organisations whose expertise in pressure injury prevention made them outstanding contributors. They were selected by their own organisations to provide perspectives from a range of clinical disciplines and care settings , as well as providing a consumer perspective for frail elderly people at risk of pressure injuries. The panel also drew on the experience of regional initiatives around New Zealand and the recommendations of the regional pressure injury prevention hui held in June and July 2016. The composition of the panel and their respective organisations is shown below.

Name	Role	Organisation
Julie Betts	Nurse Practitioner	Waikato DHB
Sean Bridge	Senior Injury Prevention Specialist	ACC
Helen Delmonte	Allied Health Manager	Mercy Parklands Hospital & Retirement Home
Robin Griffiths	Chair, Senior Medical Advisor	ACC University of Otago
Andrew Jull	Associate Professor School of Nursing Senior Research Fellow, National Institute for Health Innovation Nurse Advisor Quality & Safety	University of Auckland Auckland District Health Board
Heather Lewis	Clinical Nurse Specialist	Middlemore Hospital
Jo Millar	Chair of Health Nation Advisory Group, Consumer Representative	Grey Power
Pamela Mitchell	Nurse Consultant, Wound Management	Christchurch Hospital
Lea-Anne Morgan	National Clinical Manager	Access Home Health
Debbie Palmer	Senior Enrolled Nurse	Atawhai Assisi Home & Hospital
Cormac Peirse	Clinical Manager	Ryman Health Care
Carmela Petagna	Senior Portfolio Manager, Quality Improvement Programmes	Health Quality & Safety Commission
Marie Press	Nurse Director, Medical and Community Health	Hutt Valley District Health Board
Robin Sekerak	Brain Injury Specialist	ABI Rehabilitation
Bridget Smith	Planning & Improvement Manager	InterRai
Ginette Spence	Project Manager	ACC
Paul Watson	Principal Advisor, Nursing	Ministry of Health

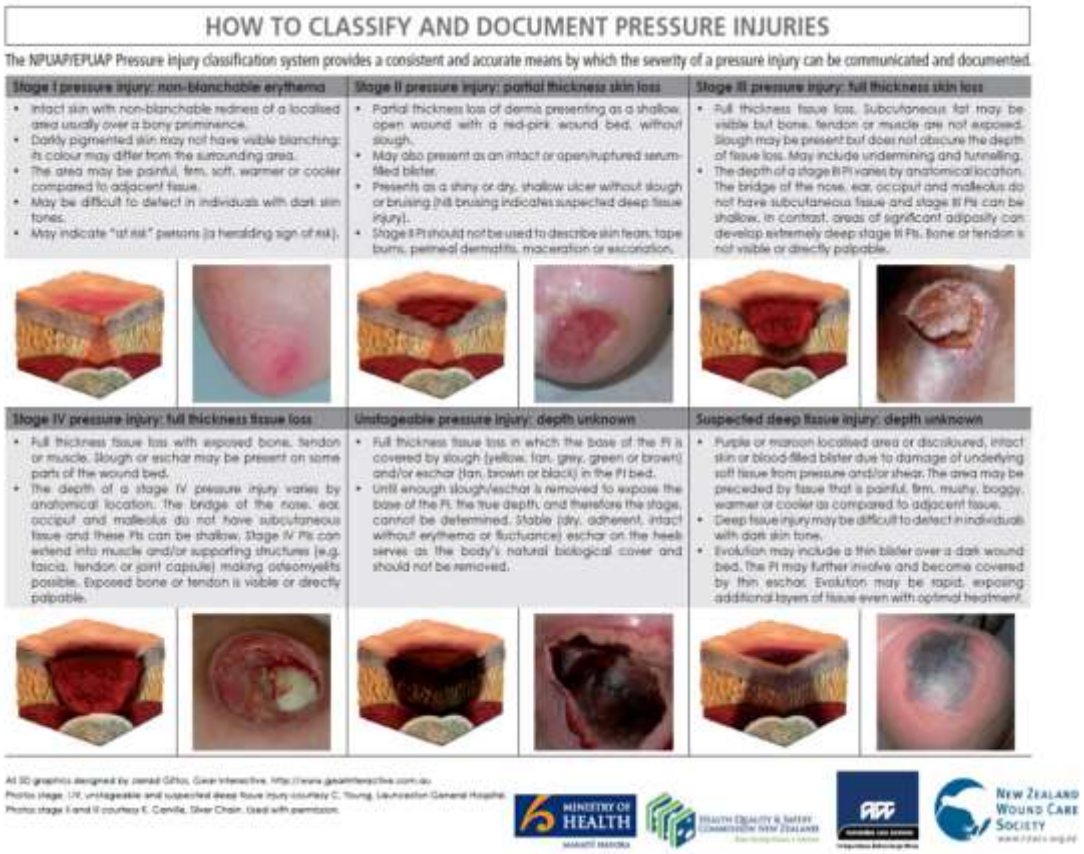
The Terms of Reference for the panel were as follows:

- Provide operational and clinical input into the best practice guidance for initial assessment and prevention.
- Provide advice on a consultation process that provides the best way to disseminate the developed material.
- Engage peers throughout the development process, and strive to achieve consensus on best practice guidance.

The panel agreed the following:

- Evidence for clinical effectiveness in terms of risk assessment and prevention was adequate and no further review of the scientific literature was necessary prior to drafting the guidance.
- While we do not have a completed picture of the severity and incidence of pressure injuries being sustained by people in New Zealand, there is sufficient evidence of an appropriate quality to justify action to prevent and manage pressure injuries.
- There is significant variation in practice. This means in some areas clinical best practice is being actively pursued and achieved, but there are areas where improvements can be made.
- A flexible approach was needed in terms of preventing pressure injuries.
- Local solutions may be determined by the care setting.
- This guidance is considered as part of an overall approach to prevention of injury particularly in the frail elderly and should be read in conjunction with the falls prevention guidance.
- Timely access to resources for pressure injury prevention such as mattresses, skin supports and equipment is vitally important for effective prevention.
- A lack of training is a barrier to the provision of best practice care whether this be at an undergraduate level or in postgraduate clinical training programmes.
- A multi-disciplinary approach to pressure injury prevention is essential with commitment from all health professionals.
- The causes of pressure injury are complex and multi-factorial, and that prevention does not simply focus on skin care but also on management of continence, nutrition and moving of patients in a way that avoids further skin damage.
- Timely, regular and structured assessments of vulnerable skin areas for the development of pressure injuries is necessary in order to prevent pressure injuries in those who are high risk.

Appendix 3: Classification system



When reporting pressure injuries it is very important to record which of the four stages[9] has developed as this can assist your organisation and others to identify areas to prioritise for quality improvement work and, amongst other things, ensure the correct information is recorded in the national minimum dataset.

There is an internationally accepted classification system which enables pressure injuries to be described accurately. Refer to the following document: National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014[10].

[9] While six stages described for classification purposes only 4 are stages and two categories of unstageable – one where the injury is present, but depth unknown and the other where it is not clear whether an injury is yet present.

[10] Available at: http://www.npuap.org/wp-content/uploads/2014/08/Quick-Reference-Guide-DIGITAL-NPUAP-EPUAP-PPPIA-Jan2016.pdf

Stage 1 Pressure Injury: Non-blanchable erythema of intact skin

Intact skin with a localised area of non-blanchable erythema, which may appear differently in darkly pigmented skin. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Colour changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.

Stage 2 Pressure Injury: Partial-thickness skin loss with exposed dermis

Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe Moisture Associated Skin Damage (MASD) including Incontinence Associated Dermatitis (IAD), Intertriginous Dermatitis (ITD), Medical Adhesive Related Skin Injury (MARSI), or traumatic wounds (skin tears, burns, abrasions).

Stage 3 Pressure Injury: Full-thickness skin loss

Full-thickness loss of skin, in which adipose (fat) is visible in the ulcer and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunnelling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is recorded as an Unstageable Pressure Injury.

Stage 4 Pressure Injury: Full-thickness skin and tissue loss

Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunnelling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.

Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss

This is where the depth of the ulcer is obscured by slough or eschar in the bed of the wound or where damaged skin hides extensive underlying soft tissue damage associated with pressure injury. Full-thickness skin and tissue loss in which the extent of tissue damage within the ulcer cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on an ischemic limb or the heel(s) should not be removed.

Deep Tissue Pressure Injury: Persistent non-blanchable deep red, maroon or purple discoloration

Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin colour changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures are visible, this indicates a full thickness pressure injury (Unstageable, Stage 3 or Stage 4). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.

The four stages, Stage 1 to Stage 4, are not merely a matter of progression over time, progression can be prevented.. Recognition and management of a Stage 1 pressure injury with non-blanchable redness is an excellent opportunity to recognise a vulnerability, and prevent the development of greater skin and subcutaneous tissue loss. People providing care to people susceptible to the development of pressure injuries should check vulnerable areas (buttocks, heels, spine) regularly, and provide skin care that prevents the circulatory changes that result in a Stage 1 pressure injury. Stage 1 pressure injuries may develop within hours of becoming immobilised and progression to a Stage 2 with skin loss or blistering should be avoided. Progression to Stage 3 or 4, where there is complete skin loss and loss of subcutaneous tissue should be classified as “never events”.

Appendix 4: SSKIN Bundle of Care

A bundle of care organised around the SSKIN risk factor modification approach is included in the pressure injury prevention plan. This includes:

Skin

Avoid positioning the patient on an area of redness or where the skin does not appear to have recovered fully from previous loading.

Keep the skin clean and dry using a skin cleanser and moisturiser and in areas of moisture a barrier cream.

Do not massage or rub skin that is at risk of pressure injury as any high friction massage can cause mild tissue disruption or provoke an inflammatory reaction, especially in frail older adults.

Support surfaces

Equipment such as support surfaces including bed, chairs, and cushions will need to be established appropriate to the setting of care and the needs of the patient, as well as the specific risk factors for the development of pressure injuries. Principles include:

- Support surfaces are individualised based on the risk factors identified and the patient's needs.
- Support surfaces are an adjunct to repositioning and overall skin care, rather than a treatment in itself, and repositioning should continue.
- Seat based stretchable or breathable cushions conformance body contours should minimise heating and accumulation of moisture. A selection of seating support surfaces may depend on continence or other problems for seated patients.

Keep moving

All patients are encouraged to mobilise where it is appropriate for them to do so and provided with the appropriate supports and aids to enable them to do so safely.

Repositioning should aim to relieve or redistribute pressure on a vulnerable area. Frequency of repositioning will depend on the condition of the patient and identified barriers to regular movement.

During repositioning it is essential to avoid subjecting the skin to pressure and sheer force, so use manual handling aids to reduce friction and sheer. Do not drag the patient while repositioning. Slide sheets can also be used to spread the pressure on the individual's skin during repositioning.

Repositioning techniques are conducted in a safe manner for both the patient and the carer. Use a mechanical lift with a split leg sling when transferring from bed to a wheelchair or bedside chair, and remove the sling immediately.

Incontinence

If incontinence is an issue, an individualised continence management plan is established.

This includes:

- Cleanse the skin properly following episodes of incontinence
- Protect the skin from exposure to excess moisture with a barrier cream
- Use a skin moisturiser to hydrate the skin
- If a Stage 1 injury still appears to be developing despite intervention, consider additional therapy such as microclimate control dressings or electrical stimulation.

Nutrition

Where nutritional deficiency and malnutrition is identified, individuals are referred to a dietetic or nutrition team for a comprehensive nutrition assessment.

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