

Evidence-based best practice in maintaining skin integrity

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Abstract

The study reported here describes a 1 year programme to promote best practice in maintaining skin integrity, ensuring consistent clinical practices in relation to skin care, and managing skin breakdown. The analysis included baseline data on skin breakdown; comparisons of policy and practice with clinical guidelines and best practice locally, interstate and internationally; a quality improvement trial focusing on mobility, skin condition, diet and hydration, hygiene and elimination; and implementation of best practice, including analysis of the relative quality and clinical outcomes of products, practices and documentation strategies. Product evaluation by nurses and patients showed that all mattresses trialled were effective in minimising or preventing skin breakdown. All chair cushions were rated effective in preventing breakdown – some were easier to use than others, although all were rated highly by patients.

A retrospective chart audit indicated substantial improvements in consistent use of the Braden scale, and the number of risks identified. Completed risk assessments increased by 19.6% to 70%. Initial assessment increased from 16.5% to 44.6%, with identification of dietary insufficiency increasing from 3.4% to 10.6%. Hospital acquired pressure lesions were reduced from 6.4% to 5.8%. The most notable improvement (from 1.3% of patients to 43.9%) occurred in the completion of subsequent pressure risk assessments, with a modest increase in repositioning. The use of overlays and special mattresses increased, with heel raisers increasing from 11% to 82.4%. The project demonstrated the value of a comprehensive team approach to clinical care and demystified evidence-based practice (EBP).

Introduction

Maintaining skin integrity in hospitalised patients is one of the most fundamental and critical goals of nursing practice. Measures to prevent, restore or heal skin breakdown illustrate the convergence of clinicians' knowledge, critical thinking and caring skills. They are also instrumental to hospital risk management strategies, one of the most important elements of the current quality and safety agenda. High quality, safe care also relies on the use of best evidence as a defensible foundation for practice. Developing an institutional culture of evidence-based practice (EBP) helps ensure that clinicians participate in generating or using research findings as a basis for achieving quality improvements and clinical goals^{1,2} as well as enhancing their professional status and job satisfaction.

The study reported here outlines the development and impact of a comprehensive skin integrity programme. It was designed to reflect the commitment to developing an interdisciplinary EBP culture in one private hospital in Western Australia, primarily in generating clinically relevant research findings that would be useful to clinicians, managers and others involved in decision making for patient care.

The overarching objective of the programme was to promote best practice in maintaining patient skin integrity, ensuring consistency of clinical practices related to prevention and management of skin breakdown. Specific objectives were to:

- Conduct a scoping study of skin breakdown, and map current policies and practice in maintaining skin integrity.
- Compare current policies and practice with existing clinical guidelines and best practice in Western Australia, interstate and internationally.
- Develop a skin integrity quality improvement trial with a focus on:
 - maintaining best practice in preventing skin breakdown in relation to mobility, skin condition, diet and hydration, hygiene and elimination;
 - managing patients at risk for skin breakdown, including analysis of the relative quality and clinical outcomes of products, practices and appropriate documentation.

The findings of this initiative were expected to provide a basis for the development of policies and protocols for clinical care, discharge planning and staff development.

Pressure ulcers and other skin breakdowns are among the most significant adverse events causing duress for patients and their carers and compromising patients' recovery from illness or injury. From a management perspective, skin breakdown is challenging both clinically and economically, particularly in extending patients' length of hospital stay and placing a burden on acute and community care³⁻⁵. As the

population ages, the financial and quality of life burden can be expected to rise proportionately⁶.

Although clinical guidelines can help ensure quality and safety of patient outcomes, the absence of rigorously developed and contextually appropriate guidelines leaves many clinical practices based on the experiences and opinions of clinicians⁷. This is problematic in an EBP era, given the relative ease of adapting evidence from clinical trials in one setting to improve practice elsewhere. Many studies adopt a relatively narrow focus, placing disproportionate emphasis on the biomechanical aspects of care rather than comprehensive strategies for preventing wound breakdown based on local knowledge and conditions⁸⁻¹⁰. One exception is an innovative project in South Australia, which achieved positive results from a 13 member inter-institutional collaboration to evaluate implementation of evidence-based wound management guidelines and prevention and management of pressure ulcers¹¹.

Another important focus of research has been the evaluation of equipment used to manage the risks of skin breakdown. A Cochrane Review of physical aids for wound prevention indicates that using mattresses with certain characteristics (e.g. foam surfaces) can reduce the incidence of pressure ulcers in people at risk, but this research found insufficient evidence to draw conclusions on a wider range of preventive measures in different settings, a conclusion also drawn by other researchers¹²⁻¹⁶. Research by the Royal College of Nursing (RCN) in the UK and the National Institute for Clinical Excellence (NICE) has provided a basis for equipment guidelines which have been adopted by NSW Health¹⁷. However, although comprehensive, the RCN recommends contextualising the guidelines for local circumstances, resources, services, policies and protocols as well as patients' preferences and circumstances¹⁸.

Documentation of skin integrity is another under researched area that should be based on contextualised knowledge. Inconsistent documentation or inadequate use of admission, transfer and discharge data have the potential to lead to omissions of assessment, a lack of detection of risks, inappropriate care and/or discontinuities in maintaining healthy skin care^{9, 19-21}. The three major reasons for poor documentation have been identified as – variable use of different risk assessment and grading tools; the inappropriate generalisation of risk assessment data to different patient groups; and the inability of practitioners to gauge the specific nature of the risk¹⁶.

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Another problem with existing research has been the disproportionate focus on randomised clinical trials (RCTs), which may compromise ethical standards of care. Despite the merits of RCTs, there is a need for different types of evidence, including explanations of patient/provider perceptions and organisational factors which will help ensure that no patient's needs are excluded from care²²⁻²³.

Method

Study design

The study gathered data on clinicians' knowledge and current practices in skin maintenance and its documentation, and analysed clinical indicator data for the hospital involved. These were compared with data from a review of best practice in maintaining skin integrity. Implementation of quality improvement processes was informed by a nurse and patient evaluation of equipment, by the introduction of a consistent documentation system and by a comprehensive staff education programme. Specific steps were as follows:

- Literature search for EBP in the management and prevention of pressure ulcers.
- Evaluation of current nursing admission and discharge documentation of skin integrity.
- Development of an audit tool to evaluate current admission documentation as a baseline against which to monitor improvements.
- Analysis of pre-project and post-project chart audit of private patients with a length of stay greater than 2 days to determine improvements in assessment and intervention of pressure lesions on admission and acquired in hospital.
- Interactive staff education and development sessions conducted at intervals on all shifts.
- Pressure reducing equipment trial, with evaluation by patients and clinical staff.

Staff education

Prior to the introduction of the formal project, an education programme was initiated to reflect skin integrity as a major priority in the hospital's strategic clinical goals. First, staff attended an in-house wound care/pressure prevention education sessions conducted by an external wound management specialist (Dr Keryln Carville).

Following the workshop, a copy of the *Wound Care Manual*²⁴ was purchased for each clinical unit as a primary reference tool. Two clinical staff members from the private hospital (co-located with the public hospital) were then sponsored to attend the wound management/pressure prevention master

classes conducted through Silver Chain Nursing Association. They participated in ongoing staff development sessions provided to nurses on all three shifts, to enhance awareness of skin care and wound prevention. The staff development sessions were supplemented by newsletters and inclusion of agenda items related to clinical improvements in this area in the management committee.

Project planning

Funding for a comprehensive programme in maintaining skin integrity was secured from Medibank Private. A project team was identified to oversee project planning and implementation, which included the quality/risk manager and clinical nurse specialists (CNS) from both the private and public hospital, the executive project manager who coordinated the study, the admissions/discharge coordinator, a clinical professor, and two other clinical nurses who assisted with data collection and analysis. The team liaised with the policy manager to gather and analyse current policies and to maintain ongoing communication between policies and practices, particularly in making the transition to best practice protocols. This step was based on recent research demonstrating the link between using best practice protocols and a reduction in medical patient mortality²⁵. Best practice data were collected from a literature search of MEDLINE, CINAHL and Joanna Briggs Institute databases (Appendix 1).

A pre-intervention retrospective chart audit of documentation of skin integrity and management was undertaken on 236 charts over a 3 month period, and compared with 207 charts post-project collected over a similar length of time. Audit data included the incidence of skin breakdown, use of an assessment tool, the relationship between recording risk and the incidence of pressure lesions on admission, during hospitalisation and at discharge. Descriptive statistics were analysed using SPSS (v14), including independent samples *t* tests, frequencies, crosstabs and correlations. Data on assessment of risk, incidence and management of skin breakdown were also linked to variance rates and outcome data as per the Australian Council on Healthcare Standards monthly clinical indicator reporting.

Equipment trial

Equipment from Huntleigh Health Care and River Abilities was secured free of charge for the trial by the CNS of the private hospital which was selected as the site for the study. Other devices were loaned from the Independent Living Centre for a nominal charge. Equipment included the following:

- *Alpha X-Cell alternating cell overlay mattress*: a pressure relieving mattress overlay system for medium/high risk

patients. Alternating systems are effective in relieving pressure as the individual cells gently inflate and deflate over a 10 minute cycle. The period of deflation allows the skin to re-oxygenate and perfuse, thus preventing breakdown and enhancing healing.

- *Harvest Supreme alternating cell overlay mattress*: a pressure relieving mattress overlay system for medium/high risk patients.
- *ProCair 5000 alternating cell overlay mattress*: a comfortable pressure relieving mattress for medium/high risk patients.
- *ProCair 8000 premium alternating mattress*: a replacement mattress for patients at high risk of developing pressure ulcers or with existing ulcers.
- *Pentaflex mattress*: a pressure reducing foam mattress made from high density contoured foam, suitable for those patients deemed medium to high risk. This mattress was trialled on all patients, including medical and surgical patients. When used with high risk patients, repositioning needs to occur more frequently than with an alternating system.
- *Regency chair*: a supportive chair with gel and foam seat cushioning on a steel framed mobile base. Manually operated gas assist tilt allows the chair to recline into a lying position. Also features fold down arms and swing away wings to allow side transfers.
- *Deluxe air bed*: a lightweight mobile air and foam combination chair designed to assist in pressure reduction. It has a manually operated (hydraulic) gas assist reclining backrest and tilt mechanism and reclines to a sleeping position. The drop down arm rests and swing away wings facilitate side transfers.
- *Vicair liberty cushion*: a lightweight cushion utilising fluid air technology. Suitable for users at low to medium risk.
- *Relax gel cell cushion*: a cushion made from gel and air that needs to be inflated with the pump provided and then deflated once the patient has been positioned. To adjust the correct pressure, the nurse is required to place two fingers under the patient's buttocks once they are positioned and then deflate until there is approx 1.5cm of air between the patient and the base of the cushion.
- *Airtech cushion*: a pressure reducing cushion for patients up to medium risk. The cushion is pumped by means of the integrated pump prior to patient positioning, then deflated to the correct pressure once the patient has been seated.
- *Gel cell cushion*: a cushion made of gel for high risk patients. It is ready to use.

- *Relax duogel cushion*: a cushion made from foam and gel for medium to high risk patients and requires no preparation prior to use.

The CNS publicised the equipment trial at the ward level during a series of meetings. Each piece of equipment was left in the ward with a sheet to record use, evaluation of the nurses' perceptions of effectiveness and ease of handling, and any feedback from patients using the device. A display folder was also created for the staff room with photos of each piece of equipment with provision for staff feedback and comments. In addition, a rating sheet for staff and patient input was included on the charts of 21 patients on whom the equipment was used during the trial. Feedback was sought on the effectiveness of the equipment in preventing skin breakdown, ease of handling, cleaning, transporting patients, positioning or other general comments on any aspects of the equipment. At monthly intervals, consultative meetings were held with a reference group of registered and enrolled nurses using the equipment to communicate progress of the project and to encourage group feedback on the equipment.

Chart audit data

The audit tool was developed, pilot tested with several patient charts, then refined by the project group in weekly consensus conferences (Appendix 2). Chart audit data were analysed using SPSS (v14). Descriptive statistics (frequencies, cross tabulations) were used to measure pre-and post-programme results. Independent samples two-tailed *t* tests for equality of means were conducted for age and length of stay, with no significant differences found between the two data sets.

Findings

Equipment trial

Feedback from the nursing staff included 65 comments documented in the staff evaluation folder and 21 comments provided in the patient charts. These were categorised as either positive or negative for patient preference/satisfaction and nurse preference/satisfaction.

The Vicair cushion was rated least satisfactory, with five negative comments from nurses and two from patients, primarily because of difficulty in positioning. The Regency chair attracted mixed responses, with an equal number of favourable comments from nurses (6) as negative comments, again on the basis of positioning. The Duogel cushion received only favourable ratings; four from nurses and two from patients. The Harvest Supreme mattress received four favourable responses from patients, but mixed ratings from nurses, with five commenting on its ease of operation, but four concerned about the need for an alarm if the CPR cord

is accidentally detached. The Deluxe air bed was seen as comfortable by two patients and rated positively by nurses, with the exception of the foot plates which got in the way of the hoist. The Alpha XCell mattress was very highly rated for comfort by patients (3) and nurses (6), but it was also noted that, like the Harvest Supreme, this piece of equipment needed an alarm if the CPR cord was dislodged. These ratings were also reflected in the nurses' comments on the patient charts.

Chart audit findings

The chart audit data showed that all had evidence of a nursing history being taken on admission. As per best practice guidelines (Appendix 1), and a critique of different scales¹⁸, the Braden Scale was adopted to assess risks to skin integrity in conjunction with the preventative programme and local, contextual factors.

Evaluation of pre- and post-project analyses of chart data indicated substantial improvements in all areas measured, and consistent use of the Braden scale with a corresponding improvement in the number of risks identified post-project. Skin integrity risks identified at the time of initial assessment increased from 16.5% to 44.6%. These, and subsequent in-hospital risk assessments, improved by 19.6% to achieve an assessment rate of 70%. Dietary insufficiency identified at time of assessment increased from 3.4% to 10.6%. The advent of improved risk identification and ongoing staff development facilitated an increase in the provision of preventive pressure management strategies, with subsequent assessments increasing to 43.9% (Figure 1).

A shift in the type of preventive management strategy provision was the next most significant change following the project. The application of transparent film dressing to heels was the most widely used strategy prior to the project, and its use dramatically decreased. The use of specialised equipment such as heel raisers became the primary preventive management strategy, increasing from 11% to 82.4%. The use of specialist overlays and mattresses was also significantly increased; a modest increase from 20.3% to 23.7% in the practice of repositioning patients was evident (Figure 2).

The incidence of acquired pressure lesions for hospitalised patients reduced from 6.4% to 5.8%. Marked improvement was also noted in relation to documenting identified lesions appropriately so that ongoing review and assessment could be conducted. Pre-project audit findings had identified that 2.1% of patients who acquired pressure lesions had received only initial treatment, with no evidence of follow-up assessment or detailed progress of healing. Post-project audit results confirmed that all patients who acquired lesions had

appropriate documentation to facilitate ongoing assessment and care provision (Figure 3).

The occurrence of Stage II lesions in particular was markedly lower (Figure 4). Whilst the frequency of Stage I lesions remained the same, this may in part be attributed to an increased awareness and reporting by staff. As indicated in Figure 4, no patients acquired Stage III or IV lesions. Prior to the development of the skin integrity programme, the hospital initiated a falls prevention programme as part of its quality/risk management initiatives²⁶. This programme resulted in a major reduction in hospital falls, which was also a component of managing skin integrity.

Discussion

This research project has resulted in immediate improvements to quality and safety of patient care, while helping to demystify the processes involved in implementing an evidence-based best practice protocol for maintaining skin integrity. In addressing an area of interest to all nurses on all wards,

Figure 1. Use of risk assessment tool, assessment of risk pre- and post-project.

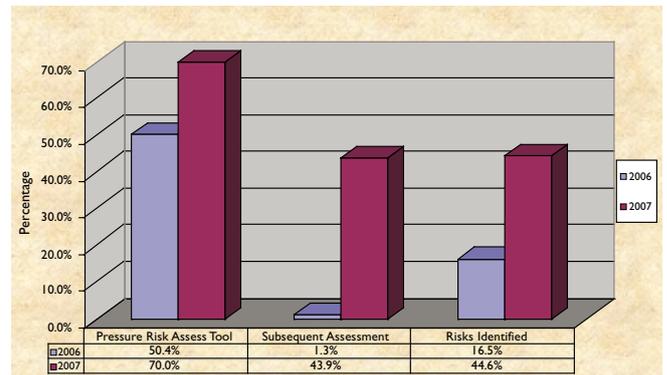
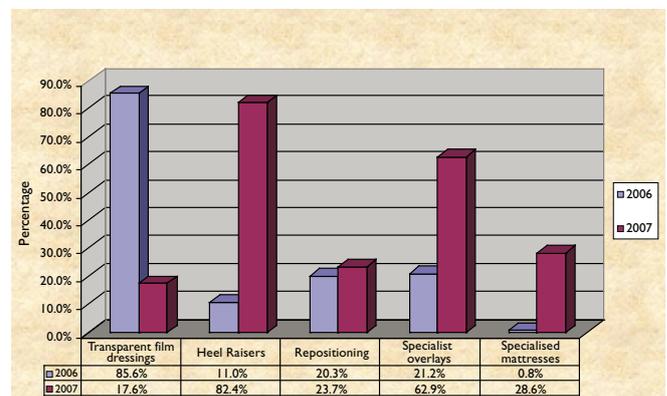


Figure 2. Pressure management strategies used pre- and post-project.



the project has also succeeded in building greater team cohesion. This was seen to enhance management strategies and complement other initiatives, such as falls prevention, in focusing the research agenda on quality improvement and risk management to be consonant with local, state, national and international guidelines for quality improvement¹⁹⁻²⁰.

Specific practice changes have included use of the Braden scale as the risk assessment tool for the identification of those patients at risk of development of pressure ulcers. This is completed on admission, following changes in condition, and at regular intervals throughout the admission. The protocol for patient assessment and documentation has also been modified to reflect best practice in identifying those patients at risk of developing pressure ulcers, falls, manual handling and malnutrition (Appendix 1). Included in this protocol is a flow chart for nursing actions in relation to each risk identified. This involves a turning chart which also prompts

the re-evaluation of skin assessment at each position change, and a malnutrition screening tool adapted from Ferguson *et al.*²⁷ to identify those patients requiring referral to the dietician for consultation and development of a nutrition management plan.

The equipment trial data are provided with the limitation of a small number of patient ratings, due to the heavy workloads of clinical staff. All ratings were relative to other pieces of equipment and not intended as an indictment of any one type of equipment. From the feedback, one could conclude that ease of positioning and patient comfort are the two most important elements in developing equipment for patients who must remain in bed; this feedback can be of some use to manufacturers. Becoming involved in the rating has also underlined the importance of clinical input into purchasing decisions.

Finally, in the context of conducting this study, the research team attracted interest from nursing staff in other areas of the hospital who realised that the study provided a context for sharing expertise. This was most evident in the staff development sessions, all of which were enhanced by the participation of clinical staff from the private hospital where the study had been conducted. The authors contend that this study exemplifies the comprehensive approach that should be taken to all primary clinical issues in order to circumvent the limitations of single factor studies which fail to inform change at all levels, and which build congruence of purpose from the bedside to senior management.

Figure 3. Skin lesions acquired in hospital pre- and post-project.

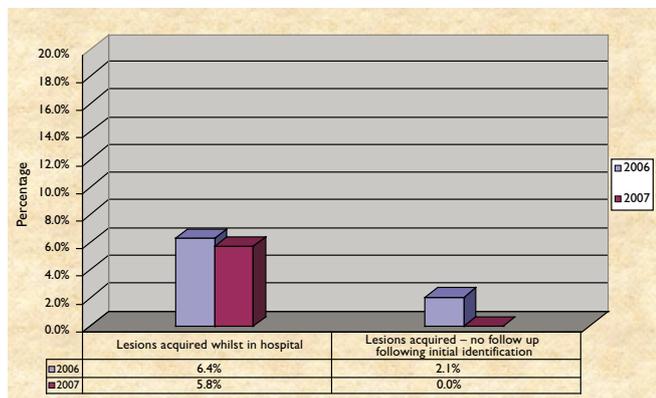
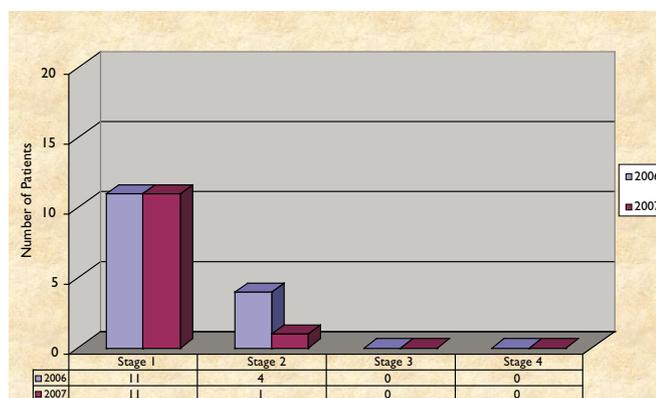


Figure 4. Pressure lesions acquired in hospital according to Stage.



Acknowledgements

The authors would like to acknowledge Medibank Private which provided funding for the project. The clinical team would also like to thank Huntleigh Health Care and River Abilities who donated equipment for the trial.

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Appendix 1. Best practice guidelines for maintaining skin integrity.

Assessment

Complete head-to-toe on admission and daily afterwards for those at risk:

- Clinical judgement and the Braden Scale should be used for risk assessment.
- Surgical clients or those restricted to bed should be assessed for pressure, friction and shear in all positions and during lifting, turning and repositioning.
- Staging of pressure ulcers should be according to RN & NICE best practice guidelines.
- All data should be documented at the time of assessment and reassessment.

Planning

- An individualised plan of care should be based on assessment data, identified risk factors and client's goals, developed in collaboration with the client, significant others and health professionals.
- The nurse should use clinical judgement to interpret risk in the context of the entire client profile, including client goals.

Interventions

The care provider should:

- For high risk patients, minimise pressure through a positioning schedule.
- Use proper positioning, transferring and turning techniques, in consultation with OT and physio, for transfer, positioning, devices and optimising client independence.
- Consider the impact of pain – pain control should be monitored on an ongoing basis using a valid assessment tool.
- Consider the client's risk for skin breakdown related to the loss of protective sensation or the ability to perceive pain and to respond in an effective manner (impact of analgesics, sedatives, neuropathy etc).
- Consider the impact of pain on local tissue perfusion.
- Avoid massage over bony prominences; use pillows or foam wedges over prominences and devices to totally relieve pressure on heels and bony prominences of feet.
- Surgical clients or those at risk of pressure ulcers should have replacement mattress with low interface.
- For those restricted to bed, care should be interdisciplinary. Devices should enable independent positioning, lifting and transfers. Patients should be repositioned every 2 hours or sooner if at high risk – 30 degree turn to either side, maintaining head of the bed to lowest elevation (30 degree or lower) consistent with medical conditions and restrictions. Use lifting devices to avoid dragging clients during transfer and position changes. Do not use donut type devices or products that localise pressure to other areas.
- For those restricted to chair, care should be interdisciplinary, with referrals to OT and physio for seating assessments and adaptations. Client should shift weight every 15 minutes if able. Reposition every hour if unable to shift weight. Use pressure reducing devices for seating, not devices that localise pressure to other areas. Consider postural alignment, distribution of weight,

balance, stability, support of feet and pressure reduction when positioning individuals in chairs or wheelchairs.

- Protect and promote skin integrity by ensuring hydration through adequate fluid intake. Individualise bathing schedule. Avoid hot water, use pH balanced, non-sensitising skin cleanser. Minimise force and friction. Maintain skin hydration by applying non-sensitising, pH balanced, lubricating moisturisers and creams with minimal alcohol content. Use protective barriers or padding to reduce friction injuries.
- Protect skin from excessive moisture and incontinence, assessing and managing body fluids, cleansing at time of soiling, avoiding friction during care, and minimising skin exposure. Where moisture cannot be controlled, use absorbent pads, dressings or briefs that wick moisture away from the skin. Replace pads and linens when damp. Use topical agents that provide protective barriers to moisture. If there is unresolved skin irritation in the moist area, consult with a physician. Establish a bowel and bladder programme.
- Complete nutritional assessment with appropriate interventions on entry to a new healthcare environment or when client's condition changes. If a nutritional deficit is suspected, consult with a registered dietitian, investigate factors that compromise intake, plan and implement nutritional support or supplementation programme. If it remains inadequate, consider alternative nutritional interventions, especially for older persons.
- Institute a rehabilitation programme, if consistent with the overall goals of care and if the potential exists for improving the individual's mobility and activity status.

Organisation and policy

- Organisations need a policy with respect to providing and requesting advance notice when transferring or admitting clients between practice settings when special needs (surfaces) are required.
- Guidelines are more likely to be effective if they take into account local circumstances and are disseminated by ongoing educational and training programmes.
- Nursing best practice guidelines can be successfully implemented only when there is adequate planning, resources, organisational and administrative support and appropriate facilitation. An organisation plan includes – assessment of organisational readiness and barriers to education, involvement of all members who will contribute to implementation, dedication of a qualified individual for support of education and implementation, ongoing opportunities for discussion and education to reinforce the importance of best practices, and opportunities for reflection on personal and organisational experience in implementing guidelines.
- Organisations need to ensure that resources are available to clients and staff (moisturisers, skin barriers, equipment, consultants).
- Interventions and outcomes should be monitored and documented using prevalence and incidence studies, surveys and focused audits^{18, 28}.

Support surfaces

- High specification mattresses are preferred over standard foam. Further research is required comparing different support surfaces¹².

Appendix 2. Skin integrity audit tool: Peel Private Hospital.

MRN _____
 Age _____ Weight _____ DRG _____
 Month & year of admission _____ Length of stay _____

Classification
 Surgical Medical

Assessment

Nursing history Yes
 Physical assessment Yes
 Falls risk assessment Yes
 Manual handling assess Yes
 Has dietary insufficiency been identified? Yes No
 Risk identified Yes No
 Braden Scale score _____
 Subsequent reassessment scores recorded? Yes No
 Risk documented: No
 Yes (where?)
 Nursing history Yes
 Care plan Yes
 Progress notes Yes

Intervention

Were identified risks actioned?

Friction & shear: protection of bony prominences: Yes No

- Opsite Flexigrid or equivalent
- Booties/heel
- Sheepskin raisers

Moisture: patient incontinent? Yes No

- Care strategies to manage incontinence
- Strategies to keep skin surfaces dry
- Moisturiser for dry skin
- Other

Impaired mobility: repositioning: Yes No

- None
- Regular
- 4/24
- 2-3/24
- Stated but no timeframes

Equipment: Yes No

- Hoist
- Slide sheets
- Spenco/overlays
- Alphacell X-cell
- Gel pads in theatre

Nutritional deficit: Yes No

- Nutritional supplements
- Dietician referral
- Nil documented

Altered sensory perception: Yes No

- Documented evidence of altered sensory perception
- Documented evidence of care strategies

Documentation on admission

Skin intact Yes No
 Pressure lesion/s Yes No

- If yes, how many? 1 2 3 or more
- Where? Heels Sacrum Hips Other
- What lesion stage upon admission? 1 2 3 4
- What lesion stage upon discharge? 1 2 3 4

Documentation whilst in hospital

Were new lesions acquired whilst an inpatient? Yes No

- If yes, how many? 1 2 3 or more
- Where? Heels Sacrum Hips Other
- What lesion stage when first identified? 1 2 3 4
- What lesion stage upon discharge? 1 2 3 4
- Progress notes (date & time: _____)
- Care plan (date & time: _____)
- Other (detail: _____ (PTO if necessary))
- None

Patient acquired a pressure lesion whilst in hospital, which was not identified or actioned by staff? Yes No

- Where documented?
 Progress notes Observation chart Other
- Where? Heels Sacrum Hips Other
- What comments indicated pressure lesion?
 Development of redness to skin areas
 Patient complaint of discomfort to specific body location
 Other
- What lesion stage upon discharge? 1 2 3 4

Falls

Did patient fall whilst an in-patient? Yes No

- If yes, how many times? 1 2 3 or more
- Patient sustained either:
 Skin tear Other injury _____ No injury
- If yes, Clinical Fall Review form was completed for the following fall episodes? None 1 2 All falls

Name of staff member conducting audit: _____
 Date: _____