Southern District Health Board
Piki Te Ora

National approach to in-hospital pressure injury measurement

Kim Caffell
Patient Safety and Policy Advisor

14 June 2018

Past measurement approaches

- No P&I audits since 2013
- Data from HRT 2016 showed increase in Stage 3 and 4 in SDHB
- Review of recorded PI on Safety1st (incident management system) and in coding showed significant difference between reported pressure injuries of all stages.

Current measurement approach

- A3 quality improvement methodology
- Audit tool
- Audit process

Title: Reducing patient harm from pressure injuries

Southern District Health Board
Piki Te Ora

Version:27 **Date: 16 May 2018**

Author: Sharron Feist, Alan Jones, Emil Schmidt, Mandy Pagan, Kirk Davidson, Andrea Dorne, Kim Caffell, Luciana Blaga

What is the Problem?

Problem Statement: We do not know how much harm is caused to our patients with pressure injuries in the Southern DHB

Background: A report from the Health Round Table 2016 indicated that the DHB had an increase in the number of grade 3 and 4 pressure injuries across the DHB.

Evidence Proving the Problem: A review of recorded pressure injuries was undertaken via safety 1st and clinical coding. This highlighted a significant difference between the reported number of pressure injuries of all grades via both systems. It was also noted that both Invercargill and Dunedin hospital sites had not undertaken a hospital wide audit on pressure injuries since 2013. There would appear to be significant underreporting via the safety 1st clinical incidents system:

Recorded PI	Dunedin	Southland
Safety1st	37	23
Clinical files (NHIs from HRT data)	341	113
% reported on Safety1st	< 1%	20%

Data from 2015-2016

(The higher reporting in Southland most likely relates to the different structure to the CNS roles on each site)

Where did the PI occur?	Dunedin	Southland
Hospital	56/ 341 (16.4%)	44/113 (39%)
Community	72/ 341 (21.3%)	37/113 (39%)
Not documented/ Unknown	164/341 (48%)	25/113 (22.2%)
Not PI	49/341 (14.3%)	7/113 (6.1%)

Summary of information from review of clinical records (NHIs generated from HRT report)

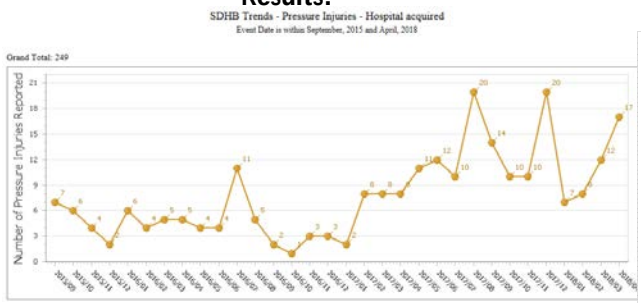
Target Condition: A system is in place to reliably gather data on pressure injury prevalence on admission, and identify how many PI occur in hospital (incidence).

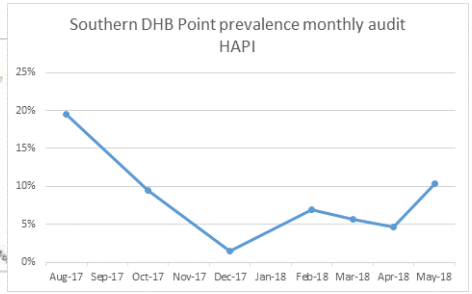
Proposed Solutions: Monthly auditing or randomised patients within selected areas to more clearly identify the problem, and allow us to identify potential solutions to improve patient safety

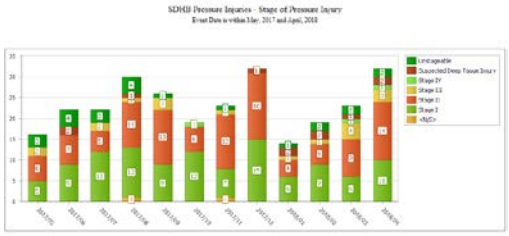
Implementation Plan: A staged roll out is now underway across district.

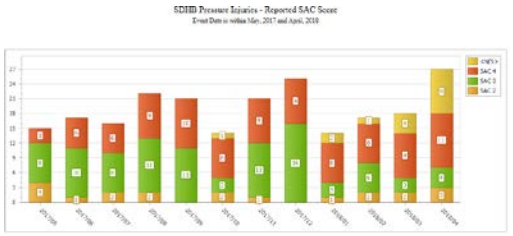
- **Ongoing**
- HQSC Quality markers are to be assessment and planning Ongoing as part of national work
- Developing a list of ongoing activities that would feed into an ongoing programme around PI
- Audit day will be **2nd Tues each month**. Use Stop PI day each year as being a key date to provide feedback to clinical areas (3rd Thurs in Nov each year)

Results:









Current Activity/ Finalising A3:

- ACC funded PI position – work ongoing in recruitment. Looking at split FTE- 0.4 O& S, then 0.2 support/ project
- Improved return rates for May audit- ongoing processes to support implementation under Patient Safety currently.
- Maternity (district), paeds/ NICU (Otago) and Mental Health (district)- not participating. Focus currently is on the areas where harm occurs – medical/ surgical and ATR.
- Audit form and flow chart to be put on MIDAS (Kim)
- Ongoing review of policies (CNSs)
- Project completed:
  - Communications (Kim/ Sharon)
  - A3 sign off at Patient Safety meeting (Sharron/ Kim)- 18 June
- District assessment form- consider as part of essentials of care work (DoNs) (? Including education)
- Ongoing collection of data for Patient Safety Markers ready for HQSC timeframe (1 July 18) (Kim)
- Project group may transition into governance group for implementation of Guiding principles once position appointed

Sign off: A3 Complete

Date:

Audit tool

Southern District Health Board
Piki Te Ora

Southern District Health Board Piki Te Ora

Pressure Injury Patient Audit

Ward: _____ **Date Conducted:** _____

Person Conducting the Audit: _____

Exclusions:

- Pressure injuries do not include mucosal injuries or incontinence associated dermatitis (see below description).
- Patients that are documented as in Last Days of Life.

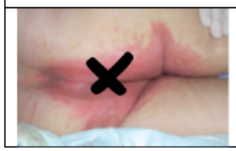
Check all the pressure points on your patient and indicate on the form whether or not they have a Pressure Injury (PI). If they do have a PI tick the appropriate stage and H/A if hospital acquired (a PI which was not present on admission]

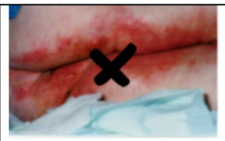
Once completed please scan the audit side of this form to kim.caffell@southerndhb.govt.nz

Note: if there is additional information following the audit, e.g. detailed clinical assessment/ interventions, please document these in the patients clinical record. These forms are for audit purposes only and are not retained in the clinical record.

This audit is undertaken as part of *normal care* delivery using a full skin assessment. If the patient declines please select the next patient on the randomised list until the number for your area is complete.

PI do **not** include mucosal injuries or Incontinence Associated Dermatitis **Incontinence Associated Dermatitis (IAD):** Skin damage from exposure to urine or stool.
IAD appears over a large area, and initially as erythema which can range from pink to red. In darker skin tones, skin may be paler, darker, purple, dark red or yellow. Lesions including vesicles or bullae, papules or pustules may be observed. The epidermis may be damaged superficially or partial-thickness. IAD can affect perineum, peri-genital area, groins, buttocks, thighs and lower back.





If a new PI is found you need to:

- Complete a Pressure Area Risk Assessment (MIDAS 42082)(Otago), Braden Scale: PA Risk Assessment and Intervention Tool (MR1257 V1) (Southland)
- If there is a wound present complete a Wound Assessment form (Oracle PRNT4405)
- If the PI is a Stage 3 or 4, please refer to the Wound Care CNS for advice
- For all Pressure Injuries, complete a Skin and Tissue form on Safety1st

CONFIDENTIALITY

The information contained on this report is classified as confidential. The original should be placed into the patient clinical file once the audit is completed. If the reader of this report is not the intended recipient you are notified that any use, disclosure, copying or distribution of the information is prohibited.

PRESSURE INJURY AUDIT ASSESSMENT TOOL
VS 8 15March2018

Surname:		**NHI:**
Other names:	**DOB:**	**Age:**
Ward:	**Consultant:**	
Address:	**Phone number:**	

Apply patient label, or document patient surname and NHI

DATE OF ADMISSION TO HOSPITAL: _____

WHAT WAS THE BRADEN SCALE SCORE ON ADMISSION: ____

DATE OF MOST RECENT BRADEN ASSESSMENT: _____

WHAT IS THE MOST RECENT BRADEN SCALE SCORE: ____

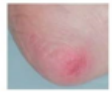
Affected body site and stage	State "No" if no PI on assessment	Stage 1	Stage 2	Stage 3	Stage 4	Unstageable	Suspected Deep Tissue Injury	If PI due to equipment or device state type	Hospital Acquired Y/N
Nose									
Ear		L R	L R	L R	L R	L R	L R		
Shoulder		L R	L R	L R	L R	L R	L R		
Spine									
Sacrum or Coccyx									
Hip		L R	L R	L R	L R	L R	L R		
Buttock		L R	L R	L R	L R	L R	L R		
Heel		L R	L R	L R	L R	L R	L R		
Other site / stage:									

Is there evidence or documentation that the patient was admitted to the ward/ unit with an existing pressure injury from (circle one): No Another ward/ inpatient area Community Aged Residential Care

Table 7.1 NPUAP/EPUAP pressure injury classification system[4]

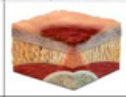
Stage I pressure injury: non-blanchable erythema

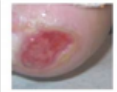
- Intact skin with non-blanchable redness of a localised area usually over a bony prominence.
- Darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area.
- The area may be painful, firm, soft, warmer or cooler compared to adjacent tissue.
- May be difficult to detect in individuals with dark skin tones.
- May indicate "at risk" persons (a heralding sign of risk).



Stage II pressure injury: partial thickness skin loss

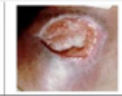
- Partial thickness loss of dermis presenting as a shallow, open wound with a red-pink wound bed, without slough.
- May also present as an intact or open/ruptured serum-filled blister.
- Presents as a shiny or dry, shallow ulcer without slough or bruising (NB bruising indicates suspected deep tissue injury).
- Stage II PI should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.





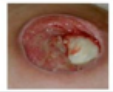
Stage III pressure injury: full thickness skin loss

- Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunnelling.
- The depth of a stage III PI varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and stage III PIs can be shallow. In contrast, areas of significant adiposity can develop extremely deep stage III PIs. Bone or tendon is not visible or directly palpable.



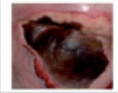
Stage IV pressure injury: full thickness tissue loss

- Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed.
- The depth of a stage IV pressure injury varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and these PIs can be shallow. Stage IV PIs can extend into muscle and/or supporting structures (e.g. fascia, tendon or joint capsule) making osteomyelitis possible. Exposed bone or tendon is visible or directly palpable.



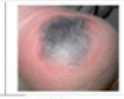
Unstageable pressure injury: depth unknown

- Full thickness tissue loss in which the base of the PI is covered by slough (yellow, tan, grey, green or brown) and/or eschar (tan, brown or black) in the PI bed.
- Until enough slough/eschar is removed to expose the base of the PI, the true depth, and therefore the stage, cannot be determined. Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as the body's natural biological cover and should not be removed.



Suspected deep tissue injury: depth unknown

- Purple or maroon localised area or discoloured, intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.
- Deep tissue injury may be difficult to detect in individuals with dark skin tone.
- Evolution may include a thin blister over a dark wound bed. The PI may further invaive and become covered by thin eschar. Evolution may be rapid, exposing additional layers of tissue even with optimal treatment.



All 3D graphics designed by Jarrod Gittos, Gear Interactive, http://www.gearinteractive.com.au
Photos stage, UV, unstageable and suspected deep tissue injury courtesy C. Young, Launceston General Hospital. Photos stage II and III courtesy K. Carville, Silver Chain. Used with permission.

AWMA

Audit process

PREVALENCE AND INCIDENT AUDIT PROCESS FOR CNMS

Day prior to audit
CNM receives reminder from Patient Safety Advisor (or delegate) about monthly audit to be undertaken (2nd Tuesday of each month- except January)
CNM ensures audit forms available (in colour)

↓

Day of audit
Receive randomised patient names and NHI prior to 0800
You MUST start with the first NHI on the list and work down. You only exclude a patient if they meet the exclusion criteria.

↓

CNM provides audit forms to nurses caring for patients selected for audit.

↓

Staff member undertakes audit as part of care for the patient that shift. Completed audit form returned to CNM prior to the end of the shift

↓

CNM reviews audit sheets and ensures they are completed correctly (if incomplete, ask staff member to complete)

↓

CNM scans completed audit forms to Patient Safety Advisor

Note: If the CNM is on leave or not available this must be handed to the person who will be in charge of the shift on the day of the audit. The CNM must ensure the person in charge understands the process.

PREVALENCE AND INCIDENT AUDIT PROCESS FOR CNMS

The number of patients selected depends on the number of beds in your ward. In the event of patient unavailability/refusal, or by your clinical judgement it is not appropriate or safe to audit them, please continue to the next selected patient (spare).

1-10 patients on ward = 3 patients selected, only 2 audits required (1 spare)

11-30 patients on ward = 7 patients selected, only 5 audits required (2 spare)

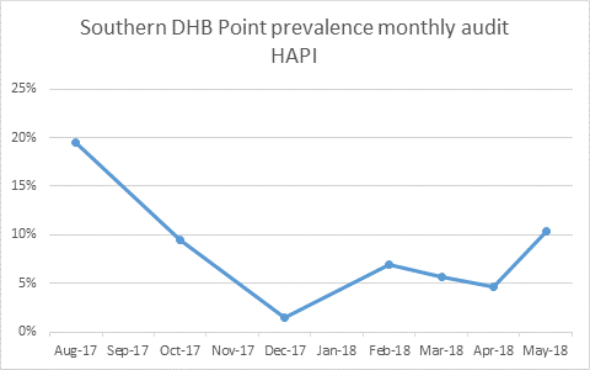
30+ patients on ward = 14 patients selected, only 10 audits required (4 spare)

Key lessons learned

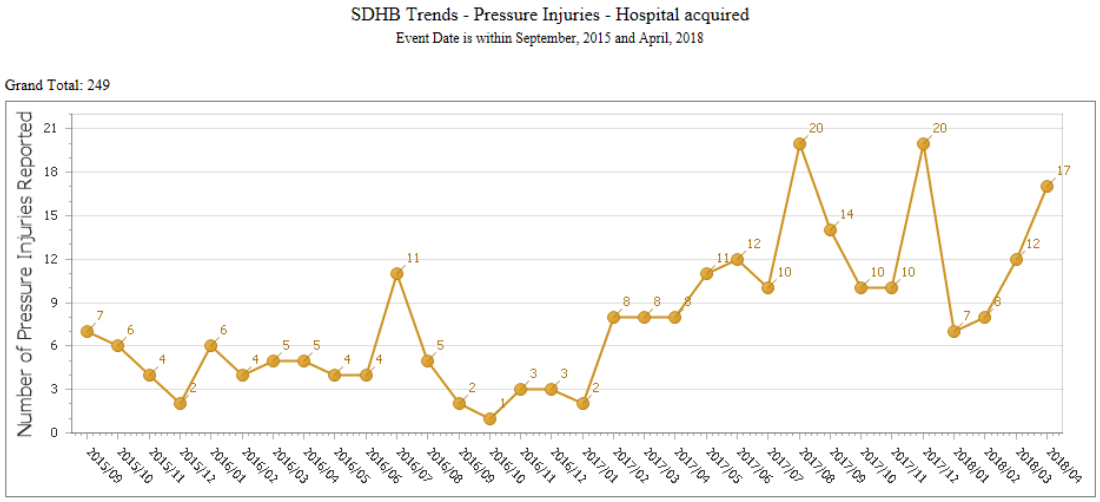
- Keep the audit process as simple as possible
- Don’t underestimate the support required to establish the audit process
- Needs some form of centralized coordination
- How your data will be collected/ collated important part of the project (keep the focus on HQSC markers- don’t make it too complex)

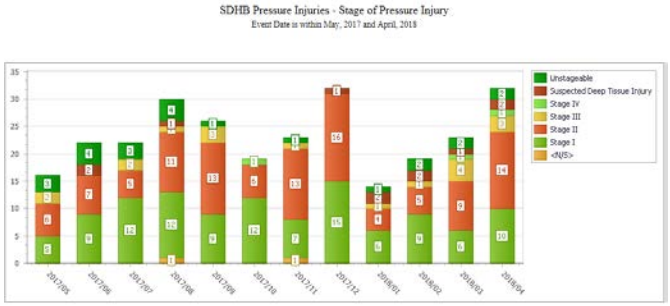
Results

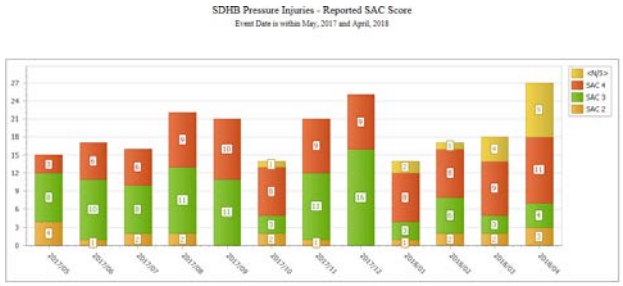
- Still early days
- Still lots to do around PI- it can become overwhelming. Establish your audit processes first- other things will follow
- Not all areas participating- MH, paeds & NICU (Otago), maternity
- Not at the stage where we have enough data to share back with areas – key focus has been getting a regular sustainable process in place for auditing



Reporting


SDHB Trends - Pressure Injuries - Hospital acquired
Event Date is within September, 2015 and April, 2018
Grand Total: 249
Number of Pressure Injuries Reported


SDHB Pressure Injuries - Stage of Pressure Injury
Event Date is within May, 2017 and April, 2018
Unstageable
Suspected Deep Tissue Injury
Stage IV
Stage III
Stage II
Stage I
<N/S>


SDHB Pressure Injuries - Reported SAC Score
Event Date is within May, 2017 and April, 2018
<N/S>
SAC 4
SAC 3
SAC 2

Actions

- Essentials of care
- Documentation
- Education
- Patient Safety Group
- Opportunities- broader project to implement *Guiding Principles for PI Prevention and Management in New Zealand (May17)*

kim.Caffell@southerndhb.govt.nz

sharron.feist@southerndhb.govt.nz