Government of Western Australia
Department of Health

Sir Charles Gairdner Hospital

Pressure Injury and Skin Tear Prevalence Survey

May 2016 (Report compiled June 2016)

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Acknowledgement

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Executive Summary

Prevalence surveys are a useful tool in monitoring and measuring the effectiveness of programmes and interventions. The aims of this pressure injury and skin tear prevalence survey were to quantify the number of pressure injury and skin tears on inpatients on a given day at Sir Charles Gairdner Hospital (SCGH).

The Australian Commission on Safety and Quality in Health Care '*Standard 8 Preventing and Managing Pressure Injuries*'[1] requires the following items to be addressed:

- *Section 8.2.1*: evidence of a standardised organisational-wide system for reporting pressure injuries.
- *Section 8.2.2*: development of administrative and clinical data to be used to regularly monitor and investigate the frequency and severity of pressure injuries.
- *Section 8.2.3*: development of a structure whereby information on pressure injuries are regularly reported to the highest level of governance in the health organisation.
- *Section 8.9:* informing patients with a high risk of pressure injury, and their carers about the risks, prevention strategies, and management of pressure injuries.

The table on the following page titled 'Key Results at a Glance' outlines the key findings of this report.

Recommendations from this report include:

- Improve patient education on how to prevent pressure injuries.
- Improve pressure injury documentation in the medical record; that is, every pressure injury should have a pressure injury sticker.
- Further education for nurses regarding how to accurately assess the Braden Scores for patients with a pressure injury.
- Further education for nurses regarding the correct support surface needed for the patient's Braden Score level of risk.

The following table highlights key results from the pressure injury and skin tear prevalence survey conducted at Sir Charles Gairdner Hospital on 11th May 2016. The results are compared to those obtained during the state-wide wound prevalence survey conducted at Sir Charles Gairdner Hospital in May 2014 and to the prevalence surveys conducted in May 2013 and May 2011. The differences in results (2014 & 2016) between the surveys are displayed below.

Key Results at a Glance

	Change 2014 to 2016	2016	2014[2]	2013[3]	2011[4]
Survey Population					
Number of patients approached	16 more patients	488	472	495	468
Number of patients consented to a skin inspection	86 more patients	440 (90.2%)	354 (74.7%)	456 (92.1%)	435 (92.9%)
Mean age (years)		66	65	64	65
Pressure Injury Data					
Pressure injury prevalence	7.9% increase	15.7%	7.8%	13.4%	11.5%
Hospital-acquired pressure injury prevalence	2.0% increase	8.6%	6.6%	11.0%	9.0%
Skin Tear Data					
Skin tear prevalence		9.8%	N/A	9.2%	9.7%
Hospital-acquired skin tear prevalence		3.9%	N/A	5.3%	5.1%
Wound Management and Prevention Strategies					
Completed skin assessment on admission	7.5% increase	79.5%	72.1%	65.7%	NA
Documented pressure injury prevention and management plans for WAPPS[1]	4.9% increase	79.9%	74.9%	43.6%	NA
Current pressure injury staging tools at the bedside		79.9%	N/A	33.3%	NA

NA = Not applicable as this data was not collected

[1] Patients identified as at risk who have a Pressure Injury Prevention Management Plan

[2] Quality Improvement and Change Management Unit. Western Australian Safety and Quality Point Prevalence Survey 2014. Patient Safety and Clinical Quality Division, Department of Health Western Australian; 2015.

[3] Mulligan S, Prentice J, Scott L. Sir Charles Gairdner Hospital Wound Prevalence Survey Perth, Western Australia: Ambulatory Care Services, Department of Health; 2013.

[4] WoundsWest. Wound Prevalence Survey Sir Charles Gairdner Hospital Site Report. Perth, Western Australia: Department of Health; 2011.

Abbreviations

GHDU	General High Dependency Unit
ICU	Intensive Care Unit
n	Number
NSQHS	National Safety Quality Health Standards
PI	Pressure Injury
RAT	Risk Assessment Tool
SCGH	Sir Charles Gairdner Hospital
SD	Standard Deviation
SDTI	Suspected Deep Tissue Injury
SPSS	Statistical Package for the Social Science
STAR	Skin Tear Audit Research
yrs	Years

Introduction

A point prevalence survey identifies the number of patients with a health issue in a given population at a specific point in time. Prevalence surveys are useful for public health planning and measuring burden of disease in a hospital. They are also useful to trend the prevalence rates over time and measure whether a health issue has responded to interventions employed to improve the health issue.

Pressure injuries are a preventable adverse event, which significantly impacts on the patient's quality of life[1], and increases morbidity and mortality[2]. Pressure injury is defined as a localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear[3]. The National Safety and Quality Health Service Standards for reducing harm mandate systems are in place to prevent pressure injuries[4].

Skin tears are defined as a wound caused by shear, friction, and/or blunt force, resulting in separation of skin layers. A skin tear can be partial-thickness, which is separation of the epidermis from the dermis; or full thickness, which is separation of both epidermis and dermis from underlying structures[5].

Sir Charles Gairdner Hospital (SCGH) has a long history of conducting wound prevalence surveys. In years 2007, 2009 and 2011, the survey was conducted with WoundsWest, in collaboration with all Western Australian public hospitals (n=86). In 2013, SCGH undertook the survey independently. The 2007 to 2013 Wound Prevalence Surveys were based upon the Pan Pacific Pressure Injury Classification System, with the inclusion of National Safety and Quality Health Service Standards (NSQHS), '*Standard 8 Preventing and Managing Pressure Injuries*'.

The NSQHS's '*Standard 8 Preventing and Managing Pressure Injuries*'[1] provides set criteria for the prevention and management of pressure injuries. It specifies the expected standard of care to prevent patients developing pressure injuries and best practice management when pressure injuries occur.

The aims of this pressure injury and skin tear prevalence survey were to quantify the number of pressure injuries and skin tears afflicting inpatients on a given day at SCGH and to measure how well the hospital responded to items outlined in Standard 8.

Methodology

This study used a point prevalence design. Data were collected on 11th May 2016 using an online Survey Monkey platform (http://www.surveymonkey.com) and Samsung tablets. The study used the wound prevalence survey methodology, eligibility, training criteria, and data analysis processes previously used to conduct all WoundsWest state-wide wound prevalence surveys.[5]

To improve reliability of data collection processes, surveyors partnered with data collectors to approach and survey patients in teams of three. In addition, a Mini Root Cause Analysis was conducted to ensure consistency and reliability of data collection. The wound management team were consulted and reviewed all patients they were unfamiliar with, who were identified

with a pressure injury stage II, III, IV, suspected deep tissue injury, or unstageable pressure injury. Any wound of dubious or unknown aetiology or any finding of five or more pressure injuries on one patient were also reviewed by the wound management team.

This study was approved by the Sir Charles Gairdner Hospital and Osborne Park Health Care Group Human Research Ethics Office (GECKO number 11590) as negligible risk research.

Inclusion and exclusion criteria

All adult inpatients and those located in the Emergency Department awaiting a ward bed or in the Emergency Observation ward on the day of the survey were included. Psychiatric, hospital in the home, dialysis, day surgery and day procedure patients, and any patient admitted after midnight were excluded.

Education and survey process

Staff members were recruited to be pressure injury and skin tear prevalence surveyors (n=51) and data collectors (n=25). The data collectors included representatives from nursing executive and hospital executive, a medical member and students from Edith Cowan University and the University of Western Australia Podiatry Faculty.

All surveyors attended a two hour education session. Surveyors were tested on their understanding of pressure injury and skin tear definitions, and the classification systems used in the survey. A test was administered to assess their ability to classify clinical slides of pressure injury and skin tears. This consisted of 31 questions with a pass mark of 28 correct responses (90%). Two opportunities were provided to pass the competency tests, however all surveyors passed on the first test.

Separate education sessions were given to the data collectors to ensure they were competent and confident with the data collection tool. Pilot surveys (n=18) were conducted with members (already deemed competent) in different clinical areas. Following feedback, the electronic audit tool underwent slight revisions to improve the clarity of the questions.

All surveyors and data collectors were provided with a ‘Surveyor’s Toolkit’, which contained general information on the survey and pressure injury and skin tear classification systems.

Surveyors were instructed that in the presence of reactive hyperaemia, the patient should be repositioned off the affected area and re-checked 30 minutes later for evidence of a stage 1 pressure injury.

All surveyors were asked to complete an evaluation of the survey via a separate survey monkey questionnaire. Feedback from this survey will assist in the planning of the next survey.

Instruments

This survey used a modified version of the WoundsWest Data Collection Sheet (Appendix 1). In short, data on wounds were removed and a few questions were updated based upon the National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance guidelines.[6]

Pressure injuries were classified using the National Pressure Ulcer Advisory Panel Staging System[6] (see Appendix 2). Skin tears have been classified using the STAR Skin Tear Classification System[7] (see Appendix 3).

Data analysis

Data were exported to SPSS version 23.0 (IBM Corp. SPSS Inc., 2011, Armonk, NY) for analysis. Data were analysed to produce descriptive statistics including frequencies with percentages or as means ± standard deviations.

Results

The following sections provide detailed results of the pressure injury and skin tear prevalence survey conducted on 11th May 2016 at Sir Charles Gairdner Hospital.

The results are presented in five parts:

- Part 1: Overall population
- Part 2: Pressure injury
- Part 3: Pressure injury management and prevention
- Part 4: Skin tears
- Part 5: Additional information

For the purpose of this report:

Prevalence describes the proportion of patients identified with one or more pressure injury or skin tear in the total number of patients consenting to a skin inspection; and

Proportion describes the number of pressure injury and skin tears found in the consenting population.

Part 1: Overall Population

1.1. Survey population

In total, 488 patients were approached and 440 (90.2%) consented to a skin inspection.

Figure 1 and Table 1 show the consented and non-consented survey population by ward.

Figure 1: Survey population

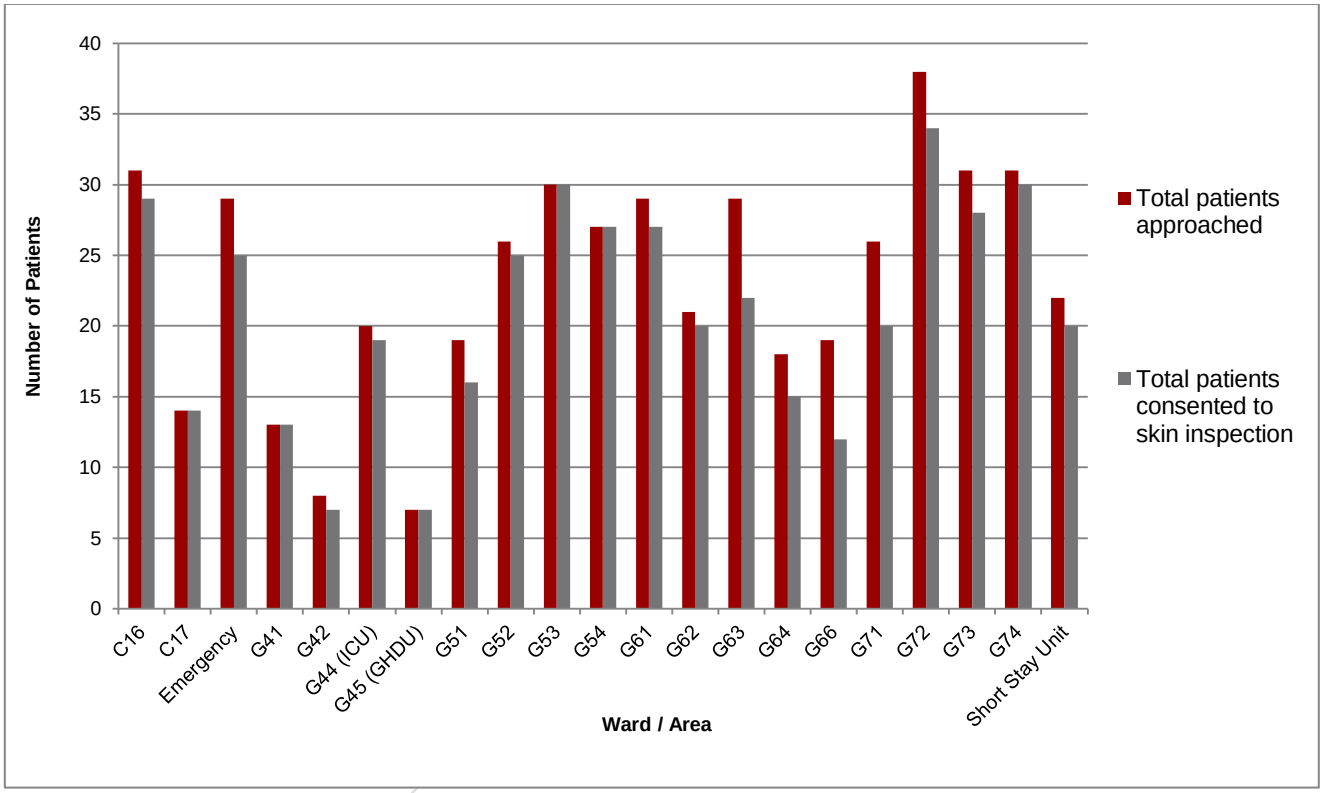

Table 1: Survey population

Ward / Area	Total patients approached	Total patients consented to skin inspection	Proportion consented[1] (%)	Total patients declined skin inspection	Proportion declined (%)
C16	31	29	93.5	2	6.5
C17	14	14	100.0	0	0.0
Emergency	29	25	86.2	4	13.8
G41	13	13	100.0	0	0.0
G42	8	7	87.5	1	12.5
G44 (ICU)	20	19	95.0	1	5.0
G45 (GHDU)	7	7	100.0	0	0.0
G51	19	16	84.2	3	15.8
G52	26	25	96.2	1	3.8
G53	30	30	100.0	0	0.0
G54	27	27	100.0	0	0.0
G61	29	27	93.1	2	6.9
G62	21	20	95.2	1	4.8
G63	29	22	75.9	7	24.1
G64	18	15	83.3	3	16.7
G66	19	12	63.2	7	36.8
G71	26	20	76.9	6	23.1
G72	38	34	89.5	4	10.5
G73	31	28	90.3	3	9.7
G74	31	30	96.8	1	3.2
Short Stay Unit	22	20	90.9	2	9.1
Total	**488**	**440**	**90.2**	**48**	**9.8**

[1] Proportion = number of consenting patients / number of patients approached

1.2. Wound prevalence by demographic variables

The mean age of all patients approached was 66.3 years (SD 19.6) and the mean age of those consenting to a skin inspection was 66.8 years (SD=19.2). The mean age of all consenting patients with one or more wounds was 71.2 years (SD=15.9).

Figure 2: Wound prevalence by demographic variables

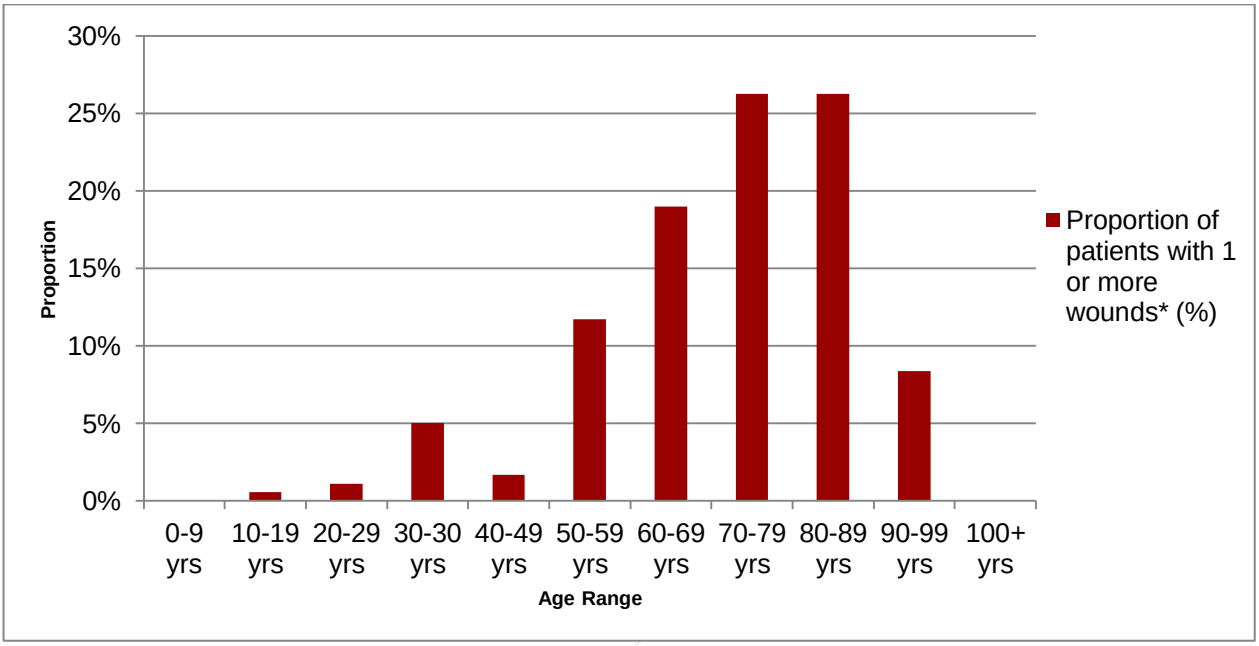

Table 2: Wound prevalence by demographic variables

Age Range	Number of patients consented	Number of patients with 1 or more wounds	Proportion of patients with 1 or more wounds[1] (%)
0-9 years	0	0	0.0
10-19 years	5	1	0.6
20-29 years	21	2	1.1
30-30 years	27	9	5.0
40-49 years	21	3	1.7
50-59 years	63	21	11.7
60-69 years	72	34	19.0
70-79 years	93	47	26.3
80-89 years	110	47	26.3
90-99 years	27	15	8.4
100+ years	1	0	0.0
Total	**440**	**179**	**100.0**

[1] Proportion = number of patients with at least 1 wound / number of patients consenting to a skin assessment

Part 2: Pressure injuries

2.1. Pressure injury prevalence by stage

Patients with stage 1 pressure injuries formed the largest group of patients with one or more pressure injuries at 56.5% (n=39), and of these 61.5% (n=24) were hospital-acquired. All SDTI and unseen/unsure pressure injuries, however, were acquired in hospital.

Figure 3: Pressure injury prevalence by stage

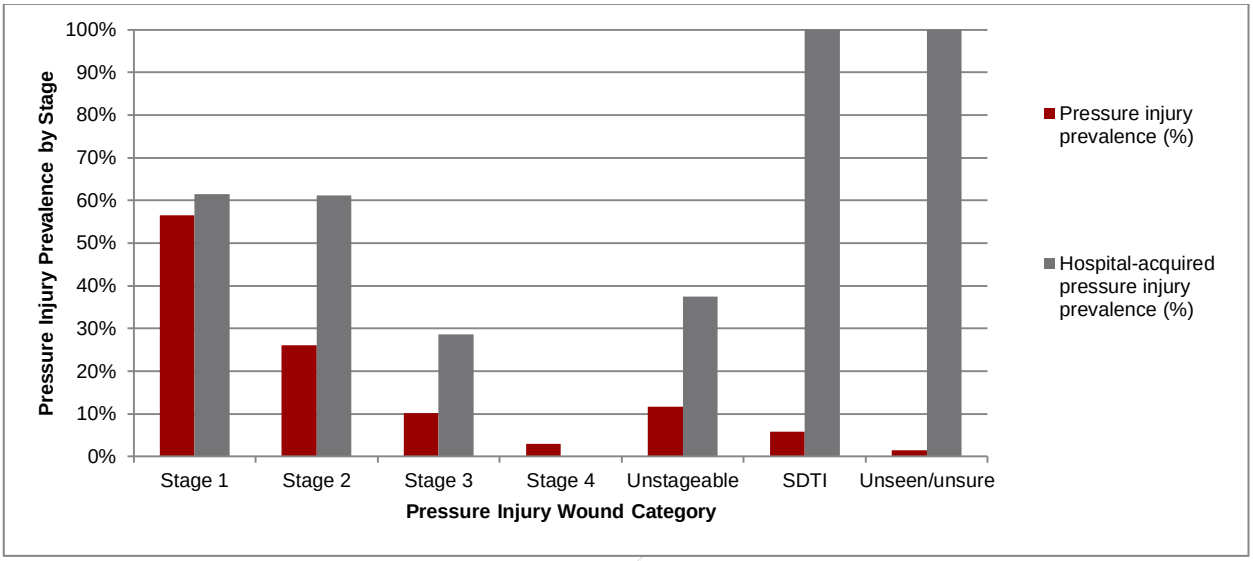

Table 3: Pressure injury prevalence by stage

Pressure injury wound category	Patients with pressure injuries	Pressure injury prevalence (%)[1]	Patients with hospital-acquired pressure injuries	Hospital-acquired pressure injury prevalence (%)
Stage 1	39	56.5	24	61.5
Stage 2	18	26.1	11	61.1
Stage 3	7	10.1	2	28.6
Stage 4	2	2.9	0	0.0
Unstageable	8	11.6	3	37.5
SDTI	4	5.8	4	100.0
Unseen/unsure	1	1.4	1	100.0
Total patients with PI[2]	**69**	**100.0**	**38**	**55.1**

[1] Pressure injury prevalence = number of consented patients who had one or more pressure injury identified in this pressure injury subcategory / total number of consented patients who had one or more pressure injuries
[2] Patients with multiple pressure injuries may appear in more than one row

2.2. Pressure injury proportions

Stage 1 pressure injuries formed the largest group of all pressure injuries at 62.3% (n=58) with stage 2 pressure injuries forming the second largest group at 23.0% (n=26).

54.9% of all pressure injuries found were hospital-acquired.

Figure 4: Pressure injury proportions

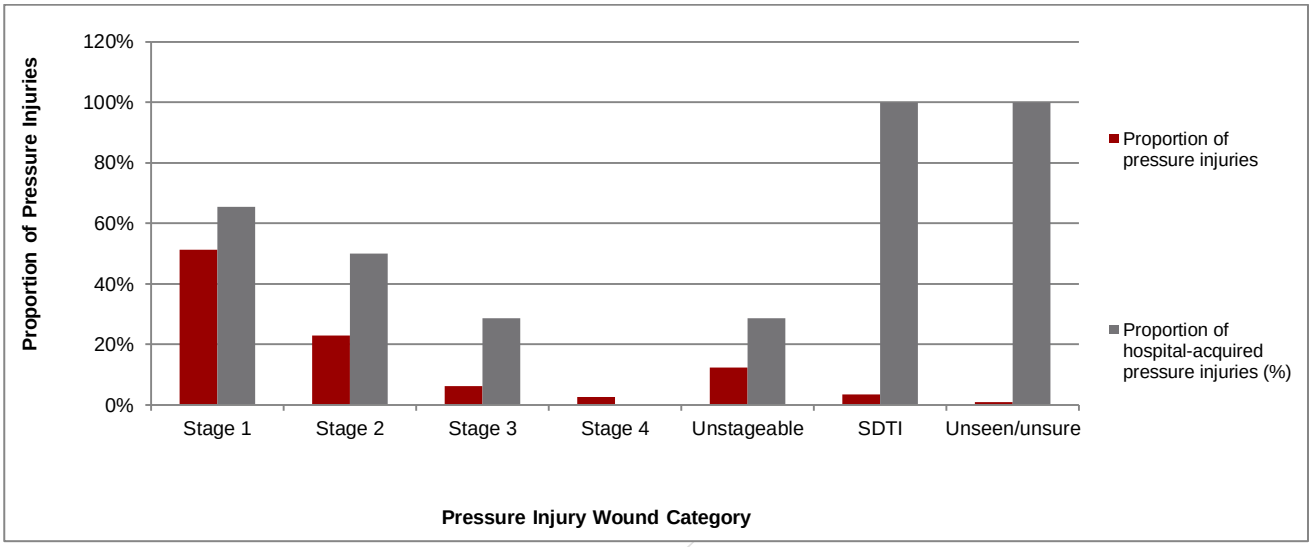

Table 4: Pressure injury proportions

Pressure injury wound category	Number of pressure injuries[1]	Proportion of pressure injuries[2]	Number of hospital-acquired pressure injuries	Proportion of hospital-acquired pressure injuries (%)[4]
Stage 1	58	51.3	38	65.5
Stage 2	26	23.0	13	50.0
Stage 3	7	6.2	2	28.6
Stage 4	3	2.7	0	0.0
Unstageable	14	12.4	4	28.6
SDTI	4	3.5	4	100.0
Unseen/unsure	1	0.9	1	100.0
Total number of PIs	**113**	**100.0**	**62**	**54.9**

[1] Number = number of wounds identified in the pressure injury category
[2] Proportion = number of wounds identified in the pressure injury subcategory / total number of wounds identified in the pressure injury category
[3] Hospital-acquired pressure injury proportion = number of hospital-acquired pressure injuries for that stage / total number of pressure injuries for that stage

2.3. Pressure injury proportion by ward

G74 had the largest number of pressure injuries found in the consenting population (n=21), followed by G52 (n=13). Five wards did not have any pressure injuries; wards G41, G42, G45, G64 and the Short Stay Unit.

Table 5: Pressure injury proportion by ward

Ward / Area	Stage 1	Stage 2	Stage 3	Stage 4	Unstageable	SDTI	Unseen	Total
C16	7	3	0	0	1	0	0	11
C17	1	1	1	0	0	0	1	4
Emergency	6	0	0	0	1	0	0	7
G41	0	0	0	0	0	0	0	0
G42	0	0	0	0	0	0	0	0
G44 (ICU)	2	3	0	0	1	3	0	9
G45 (GHDU)	0	0	0	0	0	0	0	0
G51	1	2	0	0	1	0	0	4
G52	5	5	2	0	1	0	0	13
G53	3	0	0	0	0	0	0	3
G54	10	0	0	0	0	0	0	10
G61	4	1	0	0	0	0	0	5
G62	8	0	0	1	0	0	0	9
G63	0	1	0	0	0	0	0	1
G64	0	0	0	0	0	0	0	0
G66	0	1	0	0	3	0	0	4
G71	4	0	2	0	2	0	0	8
G72	1	1	1	0	0	0	0	3
G73	1	0	0	0	0	0	0	1
G74	5	8	1	2	4	1	0	21
SSU	0	0	0	0	0	0	0	0
Total	**58**	**26**	**7**	**3**	**14**	**4**	**1**	**113**

2.4. Hospital-acquired pressure injury proportion by ward

The Intensive Care Unit had the largest number of hospital-acquired pressure injuries found in the consenting population with a total of 9, followed by C16, G52 and G62 with a total of 8 hospital-acquired pressure injuries each.

Table 6: Hospital-acquired pressure injury proportion by ward

Ward / Area	Stage 1	Stage 2	Stage 3	Unstageable	SDTI	Unseen	Total
C16	4	3	0	1	0	0	8
C17	0	0	1	0	0	1	2
Emergency	0	0	0	0	0	0	0
G41	0	0	0	0	0	0	0
G42	0	0	0	0	0	0	0
G44 (ICU)	2	3	0	1	3	0	9
G45 (GHDU)	0	0	0	0	0	0	0
G51	1	2	0	0	0	0	3
G52	5	2	1	0	0	0	8
G53	1	0	0	0	0	0	1
G54	6	0	0	0	0	0	6
G61	4	1	0	0	0	0	5
G62	8	0	0	0	0	0	8
G63	0	0	0	0	0	0	0
G64	0	0	0	0	0	0	0
G66	0	0	0	0	0	0	0
G71	4	0	0	2	0	0	6
G72	0	0	0	0	0	0	0
G73	1	0	0	0	0	0	1
G74	2	2	0	0	1	0	5
Short Stay Unit	0	0	0	0	0	0	0
Total	**38**	**13**	**2**	**4**	**4**	**1**	**62**

2.5. Pressure injury prevalence by demographic variables

The mean age of patients with one or more pressure injuries was 76.9 years (SD=13.8). The mean age for patients with one or more hospital-acquired pressure injuries was 76.5 years (SD=10.5).

Figure 5: Pressure injury prevalence by demographic variables

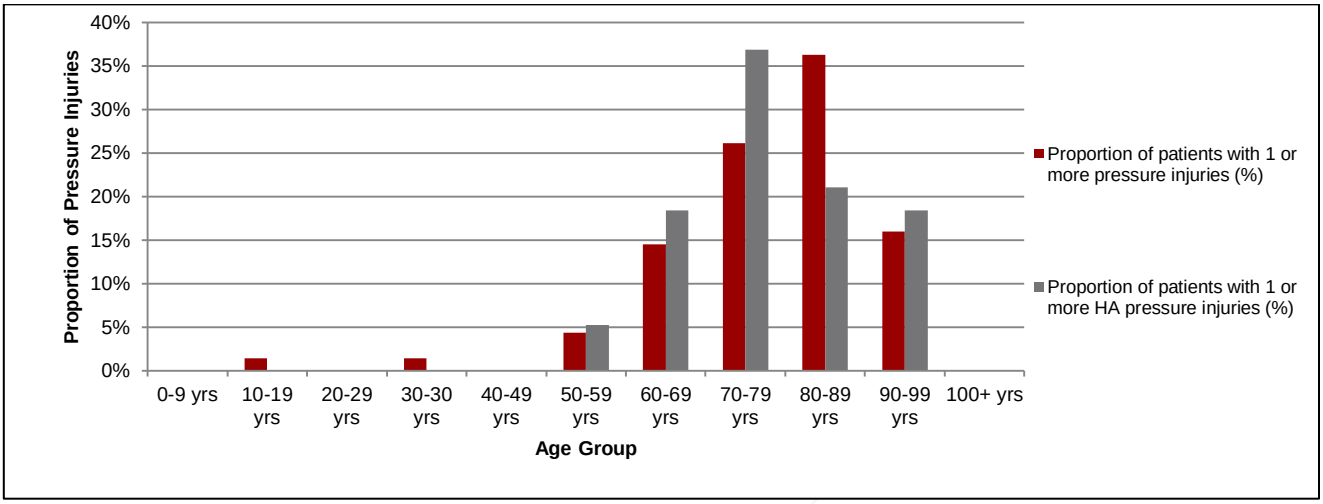

Table 7: Pressure injury prevalence by demographic variables

	Number of patients with 1 or more pressure injuries	Proportion of patients with 1 or more pressure injuries (%)	Number of patients with 1 or more HA pressure injuries	Proportion of patients with 1 or more HA pressure injuries (%)
Age Range				
0-9 yrs	0	0.0	0	0.0
10-19 yrs	1	1.4	0	0.0
20-29 yrs	0	0.0	0	0.0
30-30 yrs	1	1.4	0	0.0
40-49 yrs	0	0.0	0	0.0
50-59 yrs	3	4.3	2	5.3
60-69 yrs	10	14.5	7	18.4
70-79 yrs	18	26.1	14	36.8
80-89 yrs	25	36.2	8	21.1
90-99 yrs	11	15.9	7	18.4
100+ yrs	0	0.0	0	0.0
Total	**69**	**100.0**	**38**	**100.0**
Gender				
Male	36	52.2	20	52.6
Female	33	47.8	18	47.4
Total	**69**	**100.0**	**38**	**100.0**

2.6. Pressure injury prevalence by medical specialty

Medical had the highest proportion of patients with one or more pressure injuries at 8.4% (n=37). Whereas Medical and Surgical had the highest number of hospital-acquired pressure injuries at 16 each (7.0% and 10.1% respectively).

Figure 6: Pressure injury prevalence by medical specialty

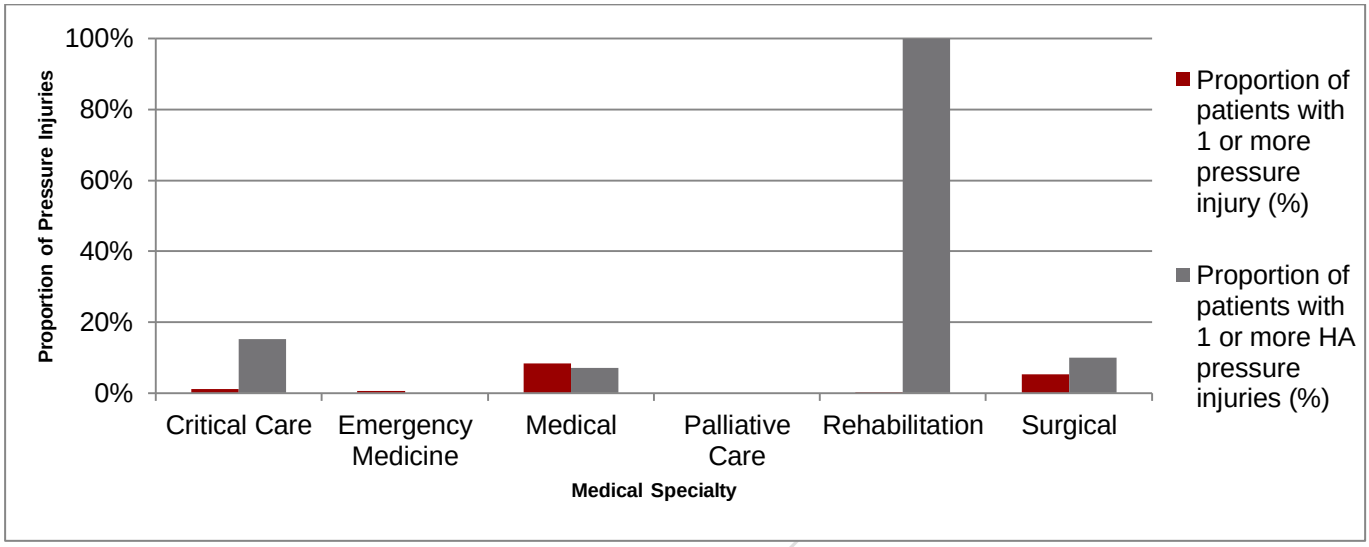

Table 8: Pressure injury prevalence by medical specialty

Medical Specialty	Number of consented patients	Number of patients with 1 or more pressure injury	Proportion of patients with 1 or more pressure injury (%)	Number of patients with 1 or more HA pressure injury	Proportion of patients with 1 or more HA pressure injuries (%)
Critical Care	33	5	1.1%	5	15.2%
Emergency Medicine	17	3	0.7%	0	0.0%
Medical	228	37	8.4%	16	7.0%
Palliative Care	2	0	0.0%	0	0.0%
Rehabilitation	1	1	0.2%	1	100.0%
Surgical	159	23	5.2%	16	10.1%
Total	**440**	**69**	**15.7%**	**38**	**8.6%**

[1] Proportion = number of patients with at least 1 pressure injury within that medical specialty / total number of patients within that medical specialty

2.7. Pressure injuries with a sticker in the notes

Only 37.2% (n=42) of all pressure injuries had a completed pressure injury sticker in the notes as per state guidelines. An additional 8.8% of pressure injuries (n=10) had a partially completed pressure injury sticker in the notes. Stage 2 pressure injuries formed the largest portion of pressure injuries with a completed sticker in the notes at 57.7% (n=15).

Figure 7: Pressure injuries with a sticker in the notes

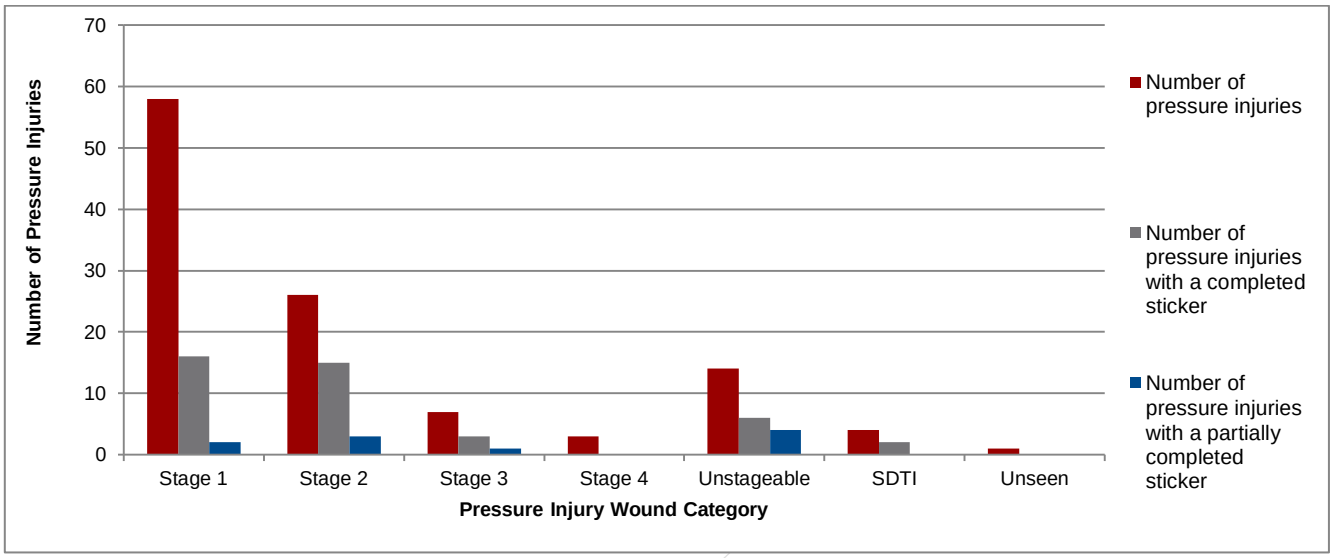

Table 9: Pressure injuries with a sticker in the notes

Pressure injury wound category	Number of pressure injuries	Number of pressure injuries with a completed sticker	Proportion of pressure injuries with a completed sticker (%)[1]	Number of pressure injuries with a partially completed sticker	Proportion of pressure injuries with a partially completed sticker (%)
Stage 1	58	16	27.6	2	3.4
Stage 2	26	15	57.7	3	11.5
Stage 3	7	3	42.9	1	14.3
Stage 4	3	0	0.0	0	0.0
Unstageable	14	6	42.9	4	28.6
SDTI	4	2	50.0	0	0.0
Unseen	1	0	0.0	0	0.0
Total number of Pis	**113**	**42**	**37.2**	**10**	**8.8**

[1] Proportion = number of pressure injuries within the pressure injury category with current documentation / total number of pressure injuries with current documentation

2.8. Anatomical location of pressure injuries

The largest number of pressure injuries were found on the sacrum (n=32), followed by the heel (n=22).

Table 10: Anatomical location of pressure injuries

Anatomical Location	Stage 1	Stage 2	Stage 3	Stage 4	Unstageable	SDTI	Unseen	Total
Neck (Front or Rear)	0	1	0	0	1	0	0	2
Face	0	0	0	0	0	2	0	2
Ear	2	1	1	0	0	0	0	4
Nose	1	0	0	0	0	0	0	1
Back (Upper or Lower)	3	3	0	0	0	0	0	6
Chest	1	1	0	0	0	0	0	2
Upper Arm	0	1	0	0	1	0	0	2
Elbow	6	0	1	0	0	0	0	7
Buttock	4	1	0	2	0	0	0	7
Sacrum	14	12	3	0	2	0	1	32
Ischial tuberosity	0	1	0	0	0	0	0	1
Hip	1	1	0	0	0	0	0	2
Knee	0	1	0	0	1	0	0	2
Lower Leg	1	1	1	0	2	0	0	5
Foot (Dorsum or Planter)	5	0	0	0	3	0	0	8
Heel	14	1	1	1	3	2	0	22
Toes (Dorsum or Planter)	6	1	0	0	1	0	0	8
Total	**58**	**26**	**7**	**3**	**14**	**4**	**1**	**113**

2.9. Pressure injuries with a completed risk assessment tool

Overall, 78.3% (n=54) of patients with 1 or more pressure injuries had documented evidence of a completed pressure injury risk assessment within 8 hours of admission. In total, 95.7% (n=66) of patients with at least 1 pressure injury had a completed risk assessment tool on day of audit.

Figure 8: Patients with a pressure injury with a completed risk assessment

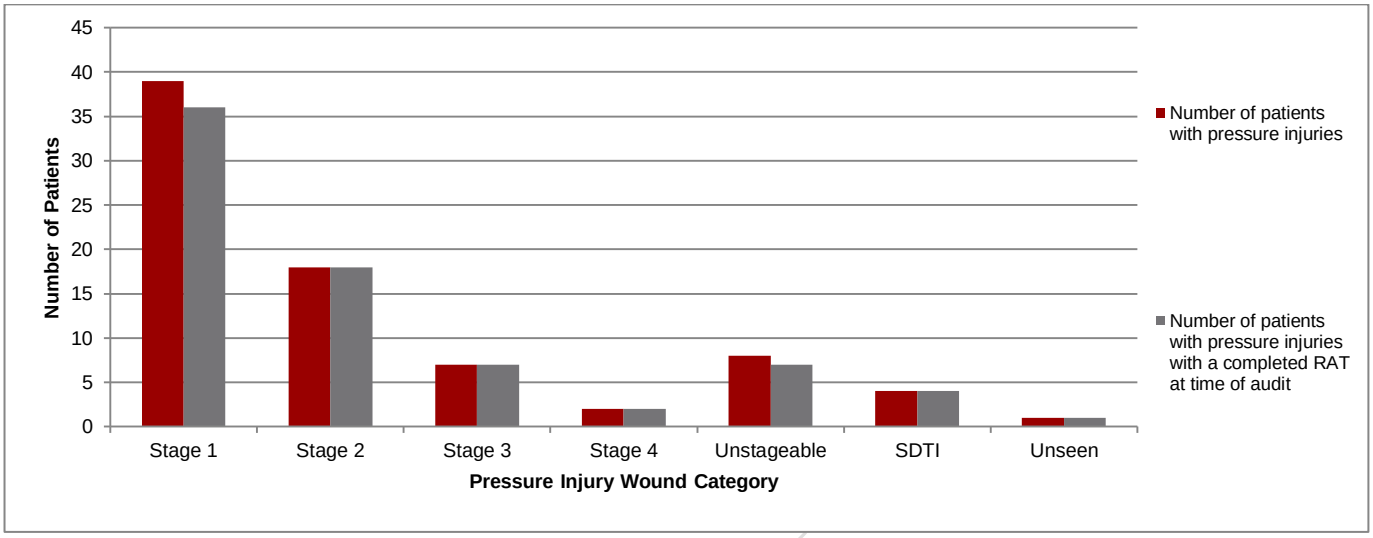

Table 11: Patients with a pressure injury with a completed risk assessment

Pressure injury wound category	Number of patients with pressure injuries	Number of patients with pressure injuries with a completed RAT within 8 hours	Proportion of patients with pressure injuries with a completed RAT within 8 hours[1]	Number of patients with pressure injuries with a completed RAT at time of audit	Proportion of patients with pressure injuries with a completed RAT at time of audit
Stage 1	39	30	76.9	36	92.3
Stage 2	18	16	88.9	18	100.0
Stage 3	7	5	71.4	7	100.0
Stage 4	2	2	100.0	2	100.0
Unstageable	8	5	62.5	7	87.5
SDTI	4	2	50.0	4	100.0
Unseen	1	1	100.0	1	100.0
Total number of patients with PIs[2]	**69**	**54**	**78.3**	**66**	**95.7**

[1] Proportion of patients with a pressure injury of that stage with a RAT / total patients with a pressure injury

[2] Patients with multiple pressure injuries may appear in more than one row

2.10. Pressure injury risk assessment and level of risk

Table 12 shows the number of patients with a pressure injury by the level of risk assigned.

Table 12: Pressure injury risk assessment and level of risk

Pressure injury wound category	No risk (19 - 23)	Low (15 - 18)	Medium (13 - 14)	High (10 - 12)	Very high (6 - 9)
Stage 1	11	12	6	4	3
Stage 2	5	4	4	3	2
Stage 3	2	3	1	1	0
Stage 4	0	1	1	0	0
Unstageable	1	2	0	3	1
SDTI	0	0	1	0	3
Unseen	1	0	0	0	0
Total number of patients with PIs[1]	**19**	**22**	**11**	**8**	**6**

[1] Patients with multiple pressure injuries may appear in more than one row

Shading shows level of risk incorrectly assessed for the stage of pressure injury
Shading shows level of risk correctly assessed for the stage of pressure injury

2.11. Support surfaces in patients with a pressure injury

Table 13 shows the types of support surfaces in use at time of survey where the patient had a pressure injury.

Table 13: Presence of support surfaces in patients with a pressure injury

	Stage 1	Stage 2	Stage 3	Stage 4	Unstageable	SDTI	Unseen
Bed							
Nimbus	7	7	0	1	2	1	0
VersaCare / TotalCare	9	3	1	1	2	3	0
AlphaXcell	4	3	3	0	0	0	0
Standard Foam	19	5	3	0	4	0	1
Total bed	**39**	**18**	**7**	**2**	**8**	**4**	**1**
Chair							
ROHO	1	0	0	1	0	1	0
Foam Cushion	2	3	1	0	2	0	0
Total chair	**3**	**3**	**1**	**1**	**2**	**1**	**0**
Other							
Adjunct	14	10	2	1	3	3	0
Total other	**14**	**10**	**2**	**1**	**3**	**3**	**0**
Total support surfaces	**56**	**31**	**10**	**4**	**13**	**8**	**1**

Part 3: Pressure injury management and prevention

3.1. Pressure injury risk assessment

In total, 79.5% (n=388) of patients approached had a pressure injury risk assessment completed within 8 hours of admission. An additional 8.2% (n=40) of patients approached had a pressure injury risk assessment completed between 8-24 hours. On the day of audit, 94.3% (n=460) of all patients approached had a completed pressure injury risk assessment.

Figure 9: Patients with a completed pressure injury risk assessment

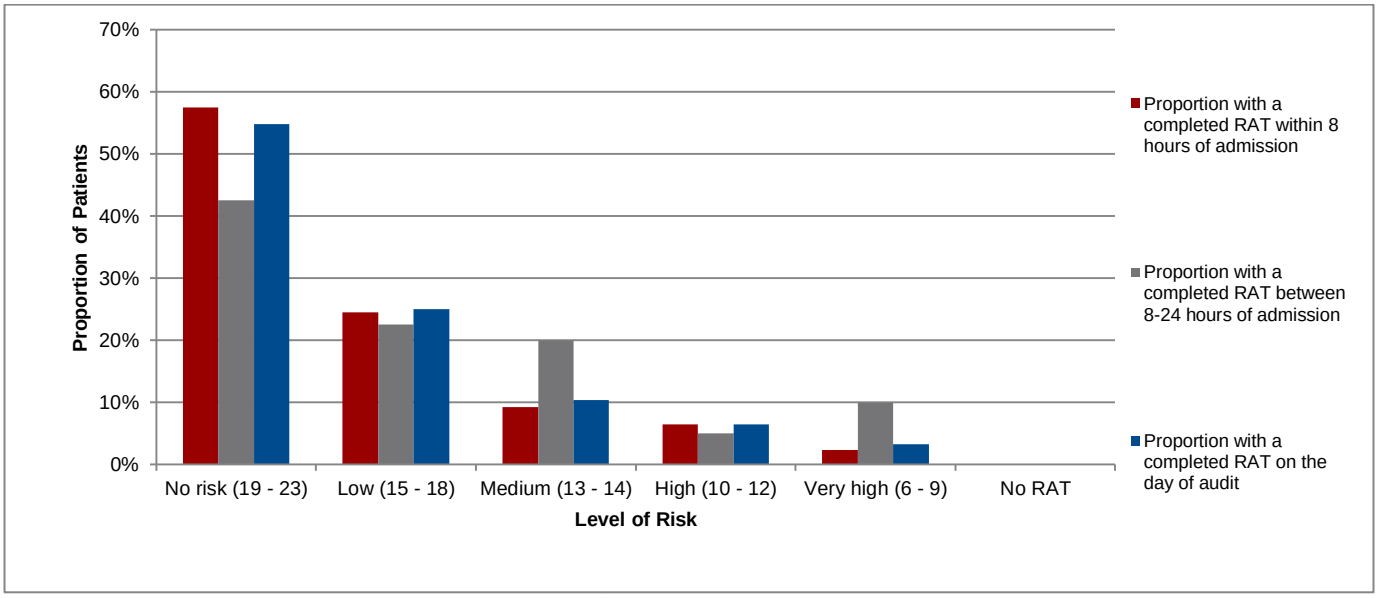

Table 14: Patients with a completed pressure injury risk assessment

Level of Risk	Patients with a completed RAT within 8 hours of admission	Proportion with a completed RAT within 8 hours of admission	Patients with a completed RAT between 8-24hrs of admission	Proportion with a completed RAT between 8-24hrs of admission	Patients with a completed RAT on the day of audit	Proportion with a completed RAT on the day of audit
No risk (19 - 23)	223	57.5	17	42.5	252	54.8
Low (15 - 18)	95	24.5	9	22.5	115	25.0
Medium (13 - 14)	36	9.3	8	20.0	48	10.4
High (10 - 12)	25	6.4	2	5.0	30	6.5
Very high (6 - 9)	9	2.3	4	10.0	15	3.3
No RAT	0	0.0	0	0.0	0	0.0
Total patients approached	**388**	**100.0**	**40**	**100.0**	**460**	**100.0**

3.2. Pressure injury risk assessment by ward

Table 15: Completed risk assessment by ward

Ward / Area	Total patients	Patients with a completed RAT within 8 hours of admission	Proportion with a completed RAT within 8 hours of admission	Patients with a completed RAT between 8-24hrs of admission	Proportion with a completed RAT between 8-24hrs of admission	Patients with a completed RAT on the day of audit	Proportion with a completed RAT on the day of audit
C16	31	27	87.1	1	3.2	31	100.0
C17	14	11	78.6	1	7.1	14	100.0
Emergency	29	6	20.7	2	6.9	12	41.4
G41	13	12	92.3	0	0.0	12	92.3
G42	8	8	100.0	0	0.0	8	100.0
G44 (ICU)	20	15	75.0	4	20.0	20	100.0
G45 (GHDU)	7	5	71.4	1	14.3	7	100.0
G51	19	14	73.7	5	26.3	19	100.0
G52	26	21	80.8	3	11.5	26	100.0
G53	30	24	80.0	3	10.0	29	96.7
G54	27	23	85.2	2	7.4	26	96.3
G61	29	27	93.1	2	6.9	29	100.0
G62	21	19	90.5	1	4.8	20	95.2
G63	29	28	96.6	1	3.4	29	100.0
G64	18	16	88.9	0	0.0	18	100.0
G66	19	12	63.2	4	21.1	18	94.7
G71	26	23	88.5	0	0.0	24	92.3
G72	38	32	84.2	3	7.9	38	100.0
G73	31	24	77.4	3	9.7	31	100.0
G74	31	23	74.2	4	12.9	30	96.8
Short Stay Unit	22	18	81.8	0	0.0	19	86.4
Total	**488**	**388**	**79.5**	**40**	**8.2**	**460**	**94.3**

3.3. Pressure injury staging tools

In total, 79.9% (n=390) of patients approached had a current pressure injury staging tool at the bedside.

Table 16: Patients approached with a current pressure injury staging tool at the bedside

Ward / Area	Total patients approached	Patients with a current PI staging tool	Proportion with a current PI staging tool	Patients without a current PI staging tool	Proportion without a current PI staging tool
C16	31	16	51.6	15	48.4
C17	14	13	92.9	0	0.0
Emergency	29	7	24.1	22	75.9
G41	13	13	100.0	0	0.0
G42	8	7	87.5	1	12.5
G44 (ICU)	20	20	100.0	0	0.0
G45 (GHDU)	7	6	85.7	1	14.3
G51	19	18	94.7	1	5.3
G52	26	26	100.0	0	0.0
G53	30	30	100.0	0	0.0
G54	27	26	96.3	0	0.0
G61	29	29	100.0	0	0.0
G62	21	20	95.2	1	4.8
G63	29	22	75.9	7	24.1
G64	18	11	61.1	7	38.9
G66	19	19	100.0	0	0.0
G71	26	25	96.2	1	3.8
G72	38	25	65.8	12	31.6
G73	31	31	100.0	0	0.0
G74	31	7	22.6	24	77.4
Short Stay Unit	22	19	86.4	3	13.6
Total	**488**	**390**	**79.9**	**95**	**19.5**

3.4. Pressure injury prevention education material

In total, 11.5% (n=56) of patients approached had read education material on pressure injury prevention; 19.7% (n=96) had pressure injury prevention education material present by their bedside, but had not read it; and 66.4% (n=324) were not aware of any pressure injury prevention education material available to patients and/or carers.

Table 17: Patients/carers approached who were given pressure injury prevention education to read

Ward / Area	Total patients approached	Patients who have read PI education material	Patients where PI education material is present in room	Patients unaware of PI education material available
C16	31	0	11	20
C17	14	4	8	2
Emergency	29	0	0	28
G41	13	0	6	7
G42	8	3	0	5
G44 (ICU)	20	1	0	19
G45 (GHDU)	7	0	6	1
G51	19	0	0	19
G52	26	0	26	0
G53	30	7	10	12
G54	27	0	0	27
G61	29	6	1	20
G62	21	13	1	7
G63	29	3	0	26
G64	18	3	1	14
G66	19	6	2	11
G71	26	5	5	14
G72	38	0	1	36
G73	31	0	4	27
G74	31	1	6	24
Short Stay Unit	22	4	8	5
Total	**488**	**56**	**96**	**324**

3.5. Risk of pressure injuries

In total, 32.6% (n=159) of patients approached had received information on their risk of developing a pressure injury; 48.0% (n=234) had not received information on their risk of developing a pressure injury and 17.8% (n=87) were unable to receive information on their risk of developing a pressure injury.

Table 18: Patients/carers approached who were made aware of their risk of pressure injuries

Ward / Area	Total patients approached	Patients who had received information on their risk of PI	Patients who had not received information on their risk of PI	Patients who were unable to received information on their risk of PI
C16	31	12	8	11
C17	14	9	3	2
Emergency	29	2	23	4
G41	13	6	6	1
G42	8	4	3	1
G44 (ICU)	20	3	11	6
G45 (GHDU)	7	5	1	1
G51	19	1	16	2
G52	26	9	11	6
G53	30	17	10	2
G54	27	12	10	5
G61	29	13	12	2
G62	21	14	4	3
G63	29	5	21	2
G64	18	4	10	4
G66	19	9	10	0
G71	26	9	8	7
G72	38	5	20	11
G73	31	7	23	1
G74	31	8	7	16
Short Stay Unit	22	5	17	0
Total	**488**	**159**	**234**	**87**

3.6. Bed support surfaces

Figure 10: Bed support surfaces in use on all patients approached

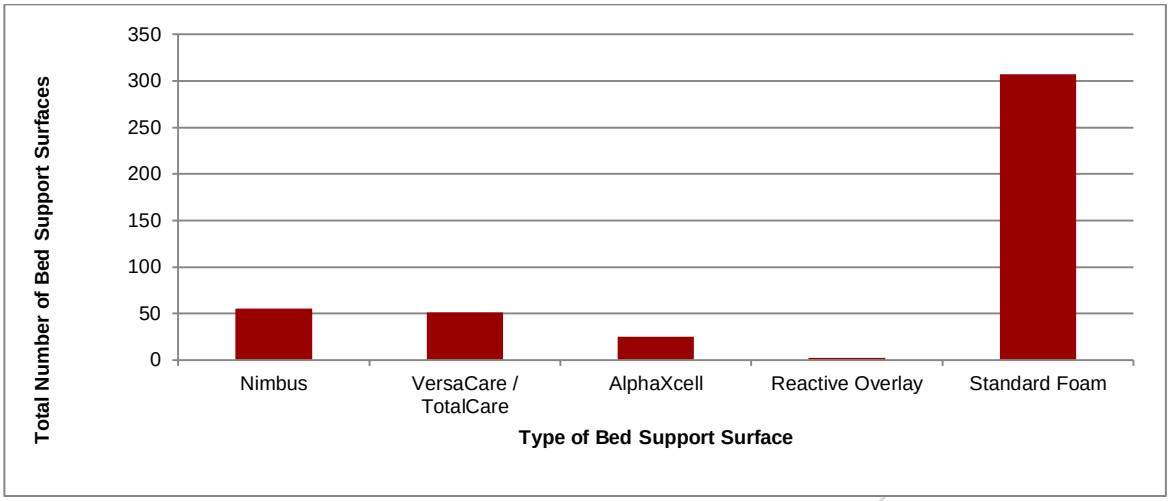

Table 19: Bed support surfaces in use on all patients approached

Ward / Area	Nimbus	VersaCare / TotalCare	AlphaXcell	Reactive Overlay	Standard Foam
C16	7	1	7	1	13
C17	2	0	0	0	12
Emergency	0	0	0	0	25
G41	2	0	0	0	11
G42	1	0	0	0	6
G44 (ICU)	0	19	0	0	0
G45 (GHDU)	0	7	0	0	0
G51	2	0	2	0	12
G52	2	2	1	0	20
G53	9	5	2	0	14
G54	2	2	0	0	23
G61	4	1	0	0	22
G62	3	4	1	0	12
G63	2	1	0	0	19
G64	2	5	0	0	8
G66	0	2	1	0	9
G71	2	1	4	0	13
G72	6	0	2	0	26
G73	1	1	0	0	26
G74	8	0	5	1	16
Short Stay Unit	0	0	0	0	20
Total	**55**	**51**	**25**	**2**	**307**

Table 20: Level of risk and bed support surface

Braden Score	Bed Support Surface					
	Standard Foam	Reactive Overlay	AlphaXCell	VersaCare / TotalCare	Nimbus	Total
No risk (19-23)	198	1	1	9	10	219
Low risk (15-18)	58	0	6	14	18	96
Medium risk (13-14)	20	1	11	5	12	49
High risk (10-12)	4	0	6	14	10	34
Very high risk (6-9)	3	0	0	9	5	17
No RAT	24	0	1	0	0	25
Total	307	2	25	51	55	440

Shading indicates incorrect support surface for level of risk

Shading indicates correct support surface fro level of risk

3.7. Chair support surfaces

In total, 94.3% (n=460) of patients approached did not have a chair support surface available at the time of survey.

Table 21: Chair support surfaces in use on all patients approached

Ward / Area	ROHO	Foam
C16	0	5
C17	0	2
G44 (ICU)	1	0
G52	0	2
G53	2	1
G54	0	1
G61	0	2
G62	1	1
G66	0	3
G71	0	2
G74	4	1
Total	**8**	**20**

3.8. Other support surfaces

In total, 84.8% (n=414) of patients approached did not have other support surfaces available at the time of survey.

Table 22: Other support surfaces in use on all patients approached

Ward / Area	Adjunct
C16	4
C17	2
G44 (ICU)	15
G45 (GHDU)	4
G52	5
G53	8
G54	2
G61	3
G62	10
G64	1
G66	1
G71	1
G72	7
G74	11
Total	**74**

Part 4: Skin tears

4.1. Skin tear prevalence by category

Overall skin tear prevalence was 9.8% (n=43) and hospital-acquired skin tear prevalence was 3.9% (n=17). Patients with category 3 skin tears formed the largest group of patients with one or more skin tears at 48.8% (n=21) whereas patients with category 1a skin tears had the lowest prevalence at 16.3% (n=7). Category 1a skin tears formed the largest group of patients with one or more hospital acquire skin tears at 42.9% (n=3).

Figure 11: Skin tear prevalence by category

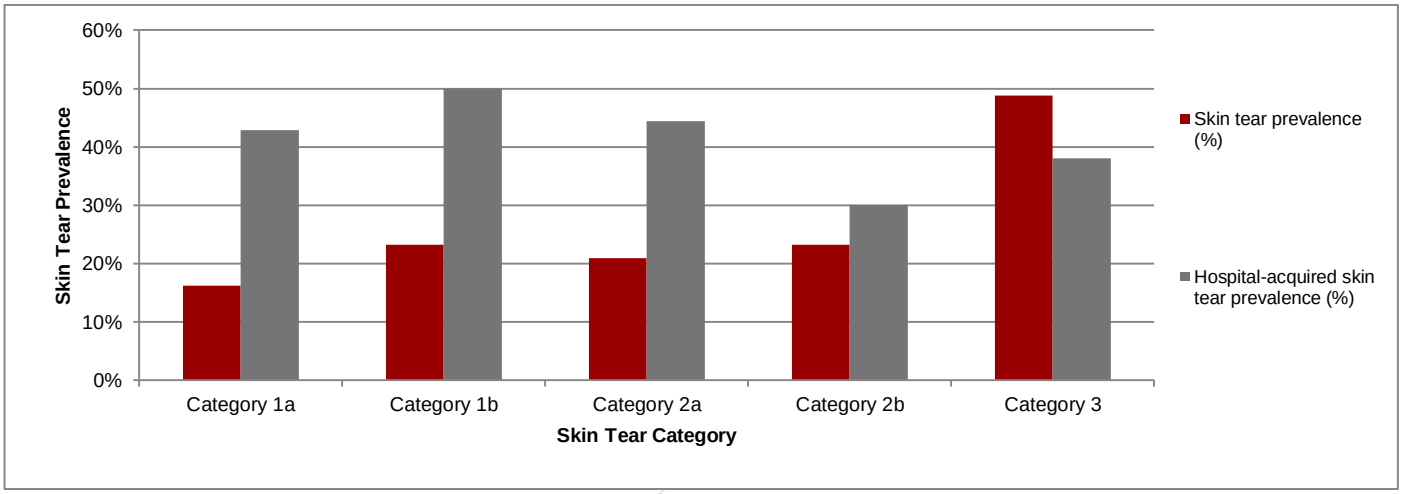

Table 23: Skin tear prevalence

Skin Tear Category	Patients with skin tears	Skin tear prevalence (%)[1]	Patients with hospital-acquired skin tears	Hospital-acquired skin tear prevalence (%)[2]
Category 1a	7	16.3	3	42.9
Category 1b	10	23.3	5	50.0
Category 2a	9	20.9	4	44.4
Category 2b	10	23.3	3	30.0
Category 3	21	48.8	8	38.1
Total patients with skin tears[3]	**43**	**100.0**	**17**	**39.5**

[1] Prevalence = number of patients with wounds identified in the skin tear subcategory / total number of patients with wounds identified in the skin tear wound category
[2] Hospital-acquired skin tear prevalence = number of patients with 1 or more hospital-acquired skin tears for that category / total number of patients with 1 or more skin tears for that category
[3] Patients with multiple skin tears may appear in more than one row

4.2. Skin tear proportions

Category 3 skin tears formed the largest category of skin tears at 35.6% (n=31) whereas category 2a skin tears formed the smallest category at 10.3% (n=9). Of all skin tears found, 31.0% (n=27) of were hospital-acquired.

Figure 12: Skin tear proportions

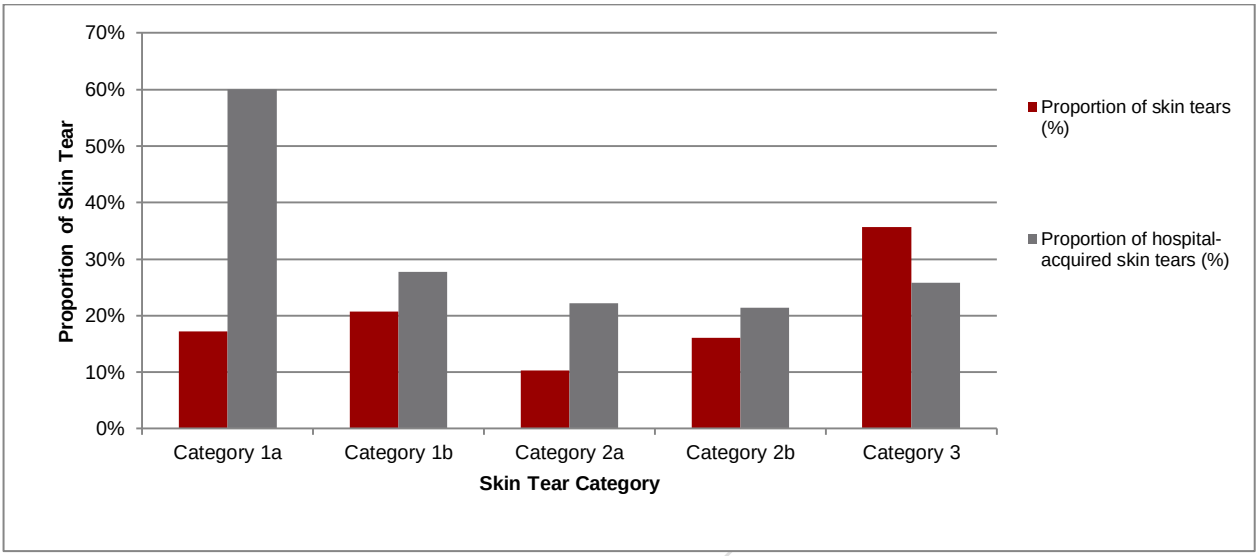

Table 24: Skin tear proportions

Skin Tear Category	Number of skin tears	Proportion of skin tears (%)[1]	Number of hospital-acquired skin tears	Proportion of hospital-acquired skin tears (%)[2]
Category 1a	15	17.2	9	60.0
Category 1b	18	20.7	5	27.8
Category 2a	9	10.3	2	22.2
Category 2b	14	16.1	3	21.4
Category 3	31	35.6	8	25.8
Total skin tears	**87**	**100.0**	**27**	**31.0**

[1] Proportion = number of wounds identified in the skin tear subcategory / total number of wounds identified in the skin tear wound category
[2] Hospital-acquired skin tear proportion = number of hospital-acquired skin tears for that category / total number of skin tears for that category

4.3. Skin tear proportion by ward

G63 had the largest number of skin tears (n=21) followed by C16 (n=16).

Table 25: Skin tear proportion by ward

Ward / Area	Category 1a	Category 1b	Category 2a	Category 2b	Category 3	Total
C16	12	2	0	1	1	16
C17	0	1	1	3	1	6
Emergency	0	0	1	0	1	2
G44 (ICU)	0	0	2	1	5	8
G45 (GHDU)	0	0	0	0	2	2
G51	0	0	0	0	2	2
G52	0	0	1	0	0	1
G53	0	3	2	0	5	10
G54	0	0	0	0	1	1
G62	0	1	0	0	0	1
G63	1	9	0	4	7	21
G64	0	1	0	0	1	2
G71	0	0	0	1	0	1
G72	0	0	0	1	3	4
G73	1	0	0	0	0	1
G74	1	1	2	3	2	9
Total	**15**	**18**	**9**	**14**	**31**	**87**

4.4. Hospital-acquired skin tear proportion by ward

C16 had the largest number of hospital-acquired skin tears (n=10), followed by the Intensive Care Unit and G53 (n=5 each).

Table 26: Hospital-acquired skin tear proportion by ward

Ward / Area	Category 1a	Category 1b	Category 2a	Category 2b	Category 3	Total
C16	7	2	0	0	1	10
C17	0	1	0	0	0	1
G44 (ICU)	0	0	1	1	3	5
G53	0	0	1	0	4	5
G62	0	1	0	0	0	1
G71	0	0	0	1	0	1
G73	1	0	0	0	0	1
G74	1	1	0	1	0	3
Total	**9**	**5**	**2**	**3**	**8**	**27**

4.5. Skin tear prevalence by demographic variables

The mean age of patients with one or more skin tears was 77.5 years (SD=13.2). The mean age of patients with one or more hospital-acquired skin tears was 71.1 years (SD=13.6).

Figure 13: Skin tear prevalence by demographic variables

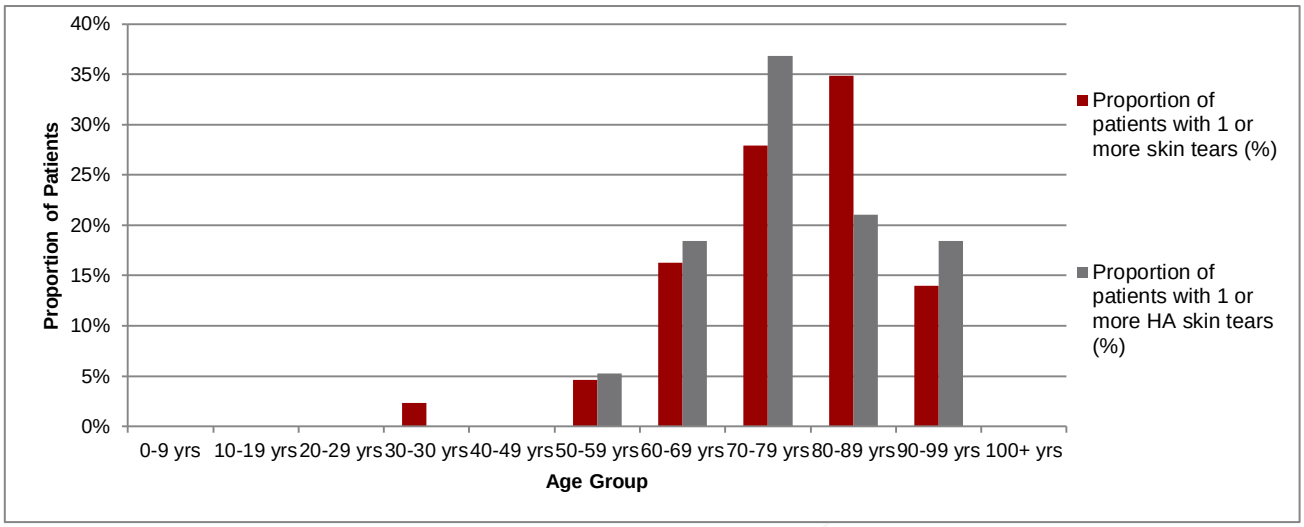

Table 27: Skin tear prevalence by demographic variables

	Number of patients with 1 or more skin tears	Proportion of patients with 1 or more skin tears (%)	Number of patients with 1 or more HA skin tears	Proportion of patients with 1 or more HA skin tears (%)
Age Range				
0-29 yrs	0	0.0%	0	0.0
30-30 yrs	1	2.3%	1	0.0
40-49 yrs	0	0.0%	0	0.0
50-59 yrs	2	4.7%	0	5.3
60-69 yrs	7	16.3%	5	18.4
70-79 yrs	12	27.9%	6	36.8
80-89 yrs	15	34.9%	5	21.1
90+ yrs	6	14.0%	0	18.4
Total	**43**	**100.0%**	**17**	**100.0**
Gender	0	0.0%		
Male	0	0.0%	11	52.6
Female	0	0.0%	6	47.4
Total	**1**	**2.3%**	**17**	**100.0**

4.6. Skin tear prevalence by medical specialty

Medical had the greatest proportion of patients with one or more skin tears at 5.5% (n=24), whereas Critical Care areas had the greatest proportion of patients with one or more hospital-acquired skin tears at 12.1% (n=4).

Figure 14: Skin tear prevalence by medical specialty

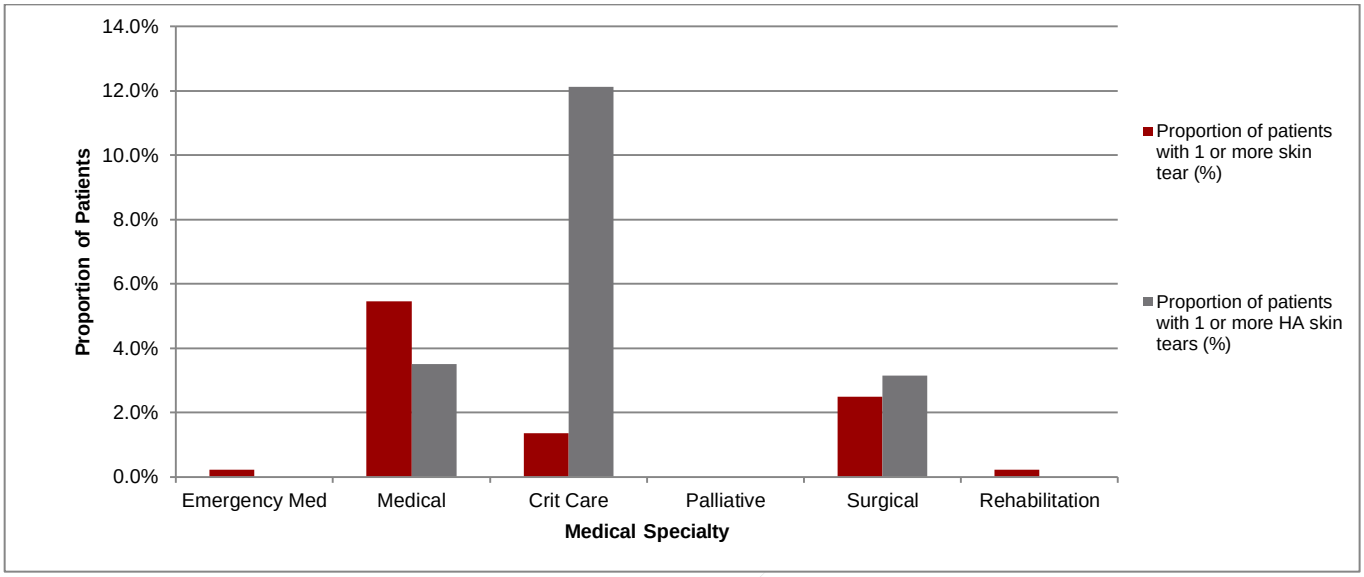

Table 28: Skin tear prevalence by medical specialty

Medical Specialty	Number of consented patients	Number of patients with 1 or more skin tear	Proportion of patients with 1 or more skin tear (%)[1]	Number of patients with 1 or more HA skin tear	Proportion of patients with 1 or more HA skin tears (%)[2]
Emergency Med	17	1	0.2	0	0.0
Medical	228	24	5.5	8	3.5
Critical Care	33	6	1.4	4	12.1
Palliative Care	2	0	0.0	0	0.0
Surgical	159	11	2.5	5	3.1
Rehabilitation	1	1	0.2	0	0.0
Total	**440**	**43**	**9.8**	**17**	**3.9**

[1] Proportion = number of patients with skin tears within that medical specialty / total number of consenting patients within that medical specialty

[2] Hospital-acquired skin tear proportion = number of hospital-acquired skin tears for that medical specialty / total number of skin tears for that medical specialty

4.7. Anatomical location of skin tears

The largest number of skin tears were found on the lower arm (n=21) followed by the lower leg (n=16).

Table 29: Anatomical location of skin tears

Anatomical Location	Category 1a	Category 1b	Category 2a	Category 2b	Category 3	Total
Scalp	0	1	0	0	0	1
Back (Upper or Lower)	2	0	1	0	0	3
Chest	0	0	0	0	1	1
Upper Arm	1	1	1	3	3	9
Elbow	1	2	0	1	4	8
Lower Arm	1	12	3	2	3	21
Hand	1	1	2	0	3	7
Abdomen	1	0	0	0	0	1
Buttock	1	0	0	0	1	2
Sacrum	0	0	0	0	2	2
Hip	0	0	0	0	4	4
Upper Leg	2	0	1	0	2	5
Knee	1	0	0	2	2	5
Lower Leg	4	1	1	6	4	16
Foot (Dorsum or Planter)	0	0	0	0	1	1
Heel	0	0	0	0	1	1
Total	**15**	**18**	**9**	**14**	**31**	**87**

Part 5: Additional Information

5.1. Admission source

In total, 19.1% (n=93) of patients approached were admitted electively.

Table 30: Admission source for all patients approached

Ward / Area	Number of elective admissions	Proportion of elective admissions	Number of emergency admissions	Proportion of emergency admissions
C16	0	0.0	31	7.8
C17	2	2.2	12	3.0
Emergency	0	0.0	29	7.3
G41	2	2.2	11	2.8
G42	0	0.0	8	2.0
G44 (ICU)	4	4.3	16	4.1
G45 (GHDU)	2	2.2	5	1.3
G51	0	0.0	19	4.8
G52	6	6.5	20	5.1
G53	6	6.5	24	6.1
G54	8	8.6	19	4.8
G61	7	7.5	22	5.6
G62	9	9.7	12	3.0
G63	5	5.4	24	6.1
G64	10	10.8	8	2.0
G66	3	3.2	16	4.1
G71	6	6.5	20	5.1
G72	2	2.2	36	9.1
G73	5	5.4	26	6.6
G74	4	4.3	27	6.8
Short Stay Unit	12	12.9	10	2.5
Total	**93**	**100.0**	**395**	**100.0**

5.2. Ability to reposition

In total, 66.2% (n=323) of all patients approached were able to reposition themselves without assistance.

Table 31: Ability to reposition

Ward / Area	Number of patients able to reposition	Proportion of patients able to reposition	Number of patients unable to reposition	Proportion of patients unable to reposition
C16	22	6.8	7	6.3
C17	14	4.3	0	0.0
Emergency	22	6.8	2	1.8
G41	12	3.7	1	0.9
G42	6	1.9	1	0.9
G44 (ICU)	3	0.9	16	14.3
G45 (GHDU)	4	1.2	3	2.7
G51	12	3.7	4	3.6
G52	22	6.8	3	2.7
G53	15	4.6	15	13.4
G54	23	7.1	4	3.6
G61	23	7.1	4	3.6
G62	14	4.3	5	4.5
G63	19	5.9	2	1.8
G64	14	4.3	1	0.9
G66	9	2.8	3	2.7
G71	12	3.7	6	5.4
G72	19	5.9	15	13.4
G73	26	8.0	2	1.8
G74	12	3.7	18	16.1
Short Stay Unit	20	6.2	0	0.0
Total	**323**	**100.0**	**112**	**100.0**

5.3. Patient situated at time of survey

In total, 70.9% (n=346) of all patients approached were situated in/on the bed at time of survey; 17.0% (n=83) of all patients approached were situated in/on the chair at time of survey and 1.6% (n=8) where neither on the bed or chair at time of survey.

Table 32: Patient situated at time of survey

Ward / Area	In / On Bed	In / On Chair	Other
C16	9	19	1
C17	9	5	0
Emergency	24	1	0
G41	13	0	0
G42	6	1	0
G44 (ICU)	19	0	0
G45 (GHDU)	5	2	0
G51	13	1	1
G52	22	1	2
G53	26	4	0
G54	27	0	0
G61	21	5	1
G62	15	4	0
G63	14	8	0
G64	11	4	0
G66	10	2	0
G71	17	2	1
G72	24	9	0
G73	21	6	1
G74	20	9	1
Short Stay Unit	20	0	0
Total	**346**	**83**	**8**

Limitations

A strength of this study is the number of patient who consented to a skin assessment (n=440, 90.2%) on the day of the audit. However, we need to acknowledge the possibility of response bias in that the data collectors' desire to achieve and do well may have influenced the response away from an accurate or truthful response. For example, the data collectors added the 'pressure injury staging tool' to the patients notes while conducting the audit and recorded the question as 'yes' the staging tool was present. Another example of potential bias includes the fact many of the senior nursing staff knew the day of the audit and may have encouraged their staff to complete all the required documentation for the audit day; as such, this may not accurately reflects what happens in real life practice.

Summary of Findings

Pressure Injury

- Pressure injury prevalence rate was 15.7% (69/440).
- Hospital acquired prevalence rate was 8.6% (38/440).
- 69 patients had a total of 113 pressure injuries. Of which:
    - 45 patients had 1 pressure injury
    - 13 patients had 2 pressure injuries
    - 5 patients had 3 pressure injuries
    - 3 patients had 4 pressure injuries
    - 3 patients had 5 pressure injuries
- Of the 113 pressure injuries, the stages were:
    - Stage 1: n=58 (51.3%)
    - Stage 2: n=26 (23%)
    - Stage 3: n=7 (6.2%)
    - Stage 4: n=3 (2.7%)
    - Unstageable: n=14 (12.4%)
    - SDTI: n=4 (3.5%)
    - Unsure: n=1(0.9%)
- Of the 113 pressure injuries, 62 (54.9%) were device related.

Skin Tears

- Skin tear prevalence rate was 9.8% (43/440).
- Hospital acquired skin tear prevalence rate was 3.9% (17/440).
- 43 patients had a total of 87 skin tears. Of which:
    - 25 patients had 1 skin tear
    - 11 patients had 2 skin tears
    - 3 patients had 3 skin tears
    - 1 patient had 5 skin tears
    - 1 patient had 9 skin tears
    - 1 patient had 10 skin tears

- Of the 87 skin tears, the categories were:
    - Category 1a: n=15 (17.2%)
    - Category 1b: n=18 (20.7%)
    - Category 2a: n=9 (10.3%)
    - Category 2b: n=14 (6.1%)
    - Category 3: n=31 (35.6%)

Recommendations for Future Practice

Recommendations for Future Practice

- Overall, risk assessment tool completed within 8 hours was done well (79.5%). However, ED (20.7%) and G66 (63.2%) could improve.
- Further patient education is required on how to prevent pressure injury. Patient pressure injury prevention education material consisted of:
    - Only 11.5% of patients approached had read education material on pressure injury prevention;
    - 19.7% of patients had pressure injury prevention education material present by their bedside but had not read it;
    - 66.4% of patients were not aware of any pressure injury prevention education material
- Further education on the sticker is required. Pressure injury sticker was only completed 37% of the time.
- Further education is required on how to accurately assess the Braden Score. For patients with a pressure injury their Braden Score was often incorrect:
    - 13/18 (72.2%) of patients with a stage 2 pressure injury had either a no risk, low or medium risk Braden Score.
    - 6/7 (85.7%) of patients with a stage 3 pressure injury had either a no risk, low or medium risk Braden Score.
    - 2/2 (100%) of patients with a stage 4 pressure injury had either a low or medium risk Braden Score.
    - 3/7 (42.8%) of patients with an unstageable pressure injury had either a no risk, or low risk Braden Score.
    - 1/4 (25.0%) of patients with a SDTI pressure injury had either a medium risk Braden Score.
    - 1/1 (100%) of patients with an unseen pressure injury had a no risk Braden Score.
- Further education is required on the support surface (that is the correct mattress), needed for the Braden Score level of risk:
    - 21/49 (42.8%) of patients with a medium risk Braden Score were on the wrong mattress.
    - 10/34 (29.4%) of patients with a high risk Braden Score were on the wrong mattress.
    - 3/17 (17.6%) of patients with a very high risk Braden Score were on the wrong mattress.

Conclusion

Overall, pressure injury prevalence has increased when compared with preceding audits; however, hospital acquired pressure injury prevalence is similar. Skin tear prevalence and hospital acquired prevalence remains similar to previous audits at SCGH. Major findings from this prevalence survey suggest areas for improvement include involving the patient/caregiver in identifying the patient risks of pressure injury and in plans to prevent pressure injury.

Whilst the majority of risk assessments were carried out in the first eight hours as per policy, we found for patients with a pressure injury that their Braden Score was often incorrect. To ensure appropriate implementation of preventative measures, nurses need to be able to accurately assess a Braden Score. In addition, despite resources being available, there is still evidence that many patients identified as being at medium to high risk of acquiring a pressure injury remain on a support surface that isn't appropriate for their level of risk.

With the threat of future funding not being available for hospital acquired pressure injuries, it is imperative that there is an improvement made in the prevention and documentation of pressure injuries. One such improvement is the use of the pressure injury sticker in the medical notes.

The data collated from this point prevalence survey will assist nurses to understand their ward/unit based pressure injury prevalence rate and may drive a culture of improved patient safety evident by a reduction in pressure injury rates.

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Appendices

Appendix 1 Pressure Injury and Skin Tear Data Collection Sheet

SCGH Wound Prevalence Survey

1. Date of survey

Date DD / MM / YYYY

2. URMN

3. Ward/unit?

4. Patient's date of birth

Date DD / MM / YYYY

5. Date of admission

Date DD / MM / YYYY

6. Gender

- ◯ Male
- ◯ Female

7. Race

1

8. Admission source

- ◯ Elective
- ◯ Emergency

9. Referral source

10. Primary Medical Speciality

11. Is there documented evidence of an assessment of the patient's level of risk for developing a pressure injury using a *risk assessment tool* within the first 8 hours of admission or a pre-admission assessment?

- ◯ No, not at all
- ◯ Yes, within 8 hours
- ◯ Yes, after 8 hours (please specify when)

SCGH Wound Prevalence Survey

12. If the Braden Score was completed, state the initial Braden Score documented.

- ◯ No risk (19 - 23)
- ◯ Low (15 - 18)
- ◯ Medium (13 - 14)
- ◯ High (10 - 12)
- ◯ Very high (6 -9)
- ◯ Has not changed

13. If the patient's Braden Score has changed since it was documented on admission, please state current Braden Score:

- ◯ No risk (19 - 23)
- ◯ Low (15 - 18)
- ◯ Medium (13 - 14)
- ◯ High (10 - 12)
- ◯ Very high (6 -9)
- ◯ Has not changed

SCGH Wound Prevalence Survey

14. Has the Pressure Injury & Skin Integrity Management Plan been completed as per patients level of risk?

- ◯ Yes
- ◯ No

15. Is there a current pressure injury staging tool at the bedside/in the nursing notes?

- ◯ Yes
- ◯ No

16. Is there any pressure injury prevention education material for the patient and/or carer, e.g. brochure?

- ◯ Read
- ◯ Present
- ◯ Not aware

17. Ask the patient and/or carer "Have you received any information on your risk of pressure injury?"

- ◯ Yes
- ◯ No
- ◯ NA / Unable

18. Consent for skin inspection:

- ◯ Yes
- ◯ No, too ill
- ◯ No, consent declined
- ◯ No, other (please specify)

SCGH Wound Prevalence Survey

Physical Skin Examination

19. Where is the patient currently situated?

- ◯ In / on bed
- ◯ In / on chair
- ◯ Other (please specify)

20. Please indicate if a BED support surface to prevent pressure injury is in use:

21. Please indicate if a CHAIR support surface to prevent pressure injury is in use:

22. Please indicate if any OTHER device to prevent pressure injury is in use:

- ☐ Adjunct (e.g. limb elevator, foam wedge)
- ☐ None

23. Can the patient independently re-position himself or herself?

- ◯ Yes
- ◯ No

24. Is there evidence of a wound on skin examination?

- ◯ Yes
- ◯ No

25. Total number of wounds present following skin examination:

SCGH Wound Prevalence Survey

Pressure Injuries

26. Please complete the following for ALL pressure injuries present.

	Classification	Anatomical Location	Is the pressure injury device related?	Was the pressure injury present on admission?
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

27. If pressure injury is present, is there a pressure injury sticker in the notes as per state guidelines?

- ◯ Yes
- ◯ No
- ◯ Partially completed
- ◯ N/A

28. If the patient has more than one pressure injury, is there is a pressure injury sticker in the notes for each pressure injury as per state guidelines?

- ◯ Yes
- ◯ No
- ◯ N/A

SCGH Wound Prevalence Survey

29. Please complete the following for ALL skin tears present.

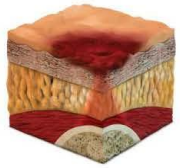
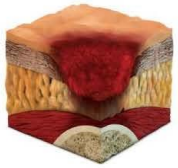
	Classification	Anatomical Location	Is the wound device related?	Was the wound present on admission?
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

6

Appendix 2 National Pressure Ulcer Advisory Panel (NPUAP) Staging System

WoundsWest Wound Prevalence Survey

PRESSURE INJURY STAGING SYSTEM (NPUAP-EPUAP)[1]. **Diagrams reproduced with permission of AWMA © (2012)[2].**

Stage 1	Stage 2	Stage 3	Stage 4	Unstageable	Suspected Deep Tissue Injury
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).	Partial thickness loss of dermis presenting as a shallow, open wound with a red-pink wound bed, without slough. May also be present as an intact or open/ruptured serum-filled blister. Presents as a shiny or dry, shallow injury without slough or bruising (NB bruising indicates suspected deep tissue injury). Stage 2 PI should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.	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 or tunneling. The depth of Stage 3 PI varies by anatomical location. The bridge of the nose, ear, occiput & malleolus do not have subcutaneous tissue & Stage 3 PIs can be shallow. In contrast, areas of significant adiposity can develop extremely deep Stage 3 PIs. Bone or tendon is not visible or directly palpable.	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 Stage 4 PI varies by anatomical location. The bridge of the nose, ear, occiput & malleolus do not have subcutaneous tissue & Stage 4 PIs can be shallow. Stage 4 PI 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.	Depth Unknown Full thickness tissue loss in which the base of the PI is covered with 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, & 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 & should not be removed.	Purple or maroon localised area or discoloured, intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue. Deep tissue injury may be difficult to detect in individuals with dark skin tone. Evolution may include a thin blister over a dark wound bed. The PI may further involve & become covered by thin eschar. Evolution may be rapid, exposing additional layers of tissue even with optimal treatment.
 	 	 	 	 	 

[1] National Pressure Ulcer Advisory Panel and European Pressure Ulcer Advisory Panel. 2009. *Prevention and treatment of pressure ulcers: clinical practice guideline.* National Pressure Ulcer Advisory Panel: Washington DC.

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Appendix 3 STAR Skin Tear Classification System

WoundsWest Wound Prevalence Survey

STAR Skin Tear Classification System[1]

Category 1a	Category 1b	Category 2a	Category 2b	Category 3
A skin tear where the edges ***can*** be realigned to the normal anatomical position and the skin or flap colour ***is not*** pale, dusky or darkened.	A skin tear where the edges ***can*** be realigned to the normal anatomical position and the skin or flap colour ***is*** pale, dusky or darkened.	A skin tear where the edges ***cannot*** be realigned to the normal anatomical position and the skin or flap colour ***is not*** pale, dusky or darkened.	A skin tear where the edges ***cannot*** be realigned to the normal anatomical position and the skin or flap colour ***is*** pale, dusky or darkened.	A skin tear where the skin flap is completely absent.
				

Reference:

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