

Results

The following section details the results of prevalence and contextual data collected from the state-wide wound prevalence survey over a 4 week period between 7th May and 1st June 2007. All public hospitals agreed to participate (n = 85). No eligible patients were available on survey day in 17 hospitals leaving 68 sites to contribute patient data.

The results are presented in 3 parts: Part 1 details the data for the overall population, Part 2 the results within each wound category and Part 3 the contextual and education program data.

For the purpose of this report prevalence describes the proportion of patients identified with 1 or more wounds in the total number of patients seen.

Part 1 - Prevalence

1.1 State-wide wound prevalence

The state-wide wound prevalence was 49.1% (range 0-100%). The total population surveyed was 2,979 patients. Metropolitan sites represented 82.5% of the patient population (n = 2,458) and rural sites 17.5% (n = 521). Table 2 and Figure 1 below show the state-wide wound prevalence.

No wounds were identified in 17 rural health services (0% prevalence). The number of patients at these 17 health services ranged from 0 to 3. Six health services identified 100% prevalence. The number of patients at these 6 rural health services ranged from 0 to 4. [Appendix C](#) shows individual hospital prevalence for all sites who provided patient data.

Table 2. State-wide wound prevalence

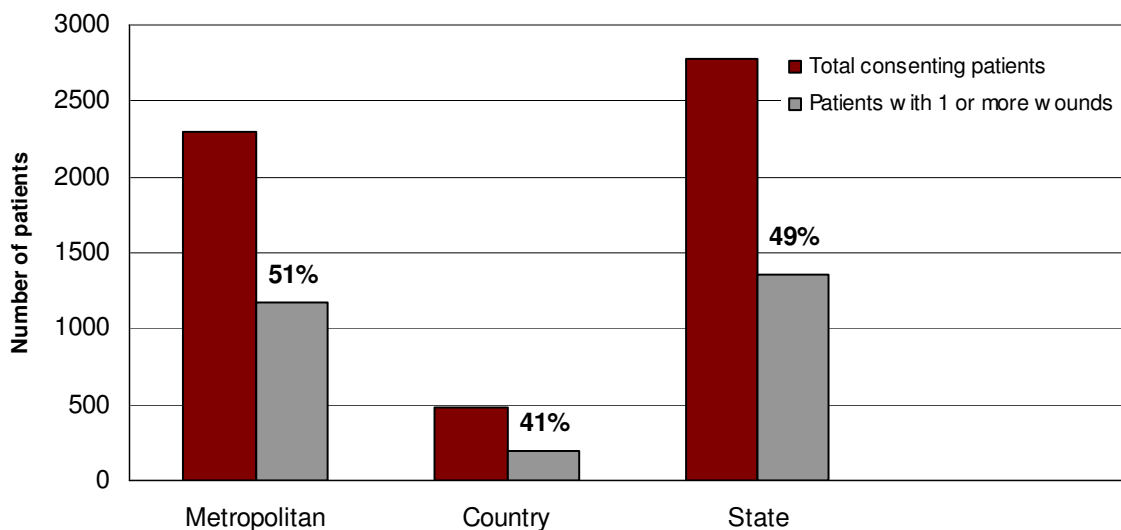
Group	Total patients approached	Total patients consented to skin inspection	Response fraction	Patients with 1 or more wounds of any category	Prevalence
Metropolitan ¹	2,458	2,299	93.5%	1,169	50.8%
Country ²	521	478	91.7%	194	40.6%
State total	2,979	2,777	93.2%	1,363	49.1%

Notes:

¹ Metropolitan represents 15 contributing metropolitan hospital sites

² Country represents 53 contributing regional and rural hospital sites

Figure 1. State-wide wound prevalence



1.2 Prevalence by regional group

Table 3 and Figure 2 show the wound prevalence identified by regional group (range 29.1% to 53.9%). Membership of each regional group is noted in [Appendix D](#).

Table 3. Wound prevalence by regional group

Group	Total patients approached	Total patients consented to skin inspection	Response fraction ⁶	Patients with 1 or more wounds of any category	Prevalence
Metropolitan¹					
Other metropolitan	241	228	94.6%	123	53.9%
SMAHS ²	1,248	1,176	94.2%	631	53.7%
NMAHS ³	883	770	92.4%	365	47.4%
PMH ⁴	136	125	91.9%	50	40.0%
Subtotal metropolitan	2,458	2,299	93.5%	1,169	50.8%
WACHS⁵					
Integrated district health services	179	165	92.2%	75	45.5%
Regional health services	251	234	93.2%	96	41.0%
Small hospitals	91	79	86.8%	23	29.1%
Subtotal WACHS	521	478	91.7%	194	40.6%
State total	2,979	2,777	93.2%	1,363	49.1%

Notes:

¹ Metropolitan data contributed by 15 metropolitan health services

² SMAHS = South Metropolitan Area Health Service

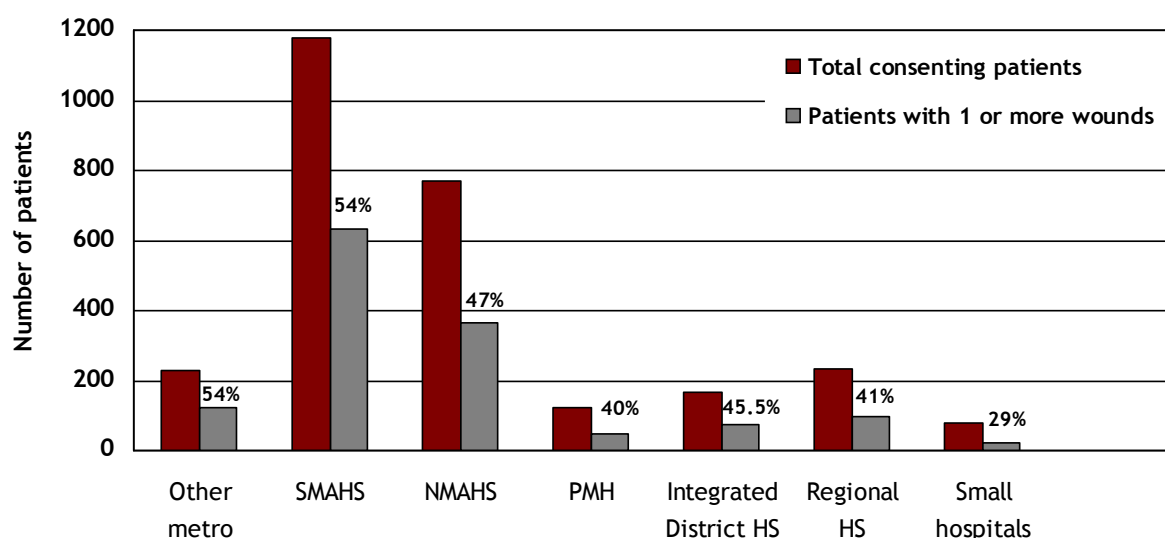
³ NMAHS = North Metropolitan Area Health Service

⁴ PMH = Princess Margaret Hospital for Children

⁵ WACHS (Western Australian Country Health Service) data contributed by 53 regional and rural health services

⁶ Response fraction is calculated as a proportion of the regional group not the total population

Figure 2. Wound prevalence by regional group



1.3 Prevalence by number of hospital beds

Hospitals were categorised into groups according to the number of available acute hospital inpatient beds as provided by the site coordinators. Table 4 and Figure 3 show the wound prevalence identified by number of hospital beds which ranged from 27.8% to 55.1%. The number of hospital beds groups were used as benchmarking categories in the individual hospital reports.

Health service membership of each hospital bed grouping is noted in [Appendix E](#).

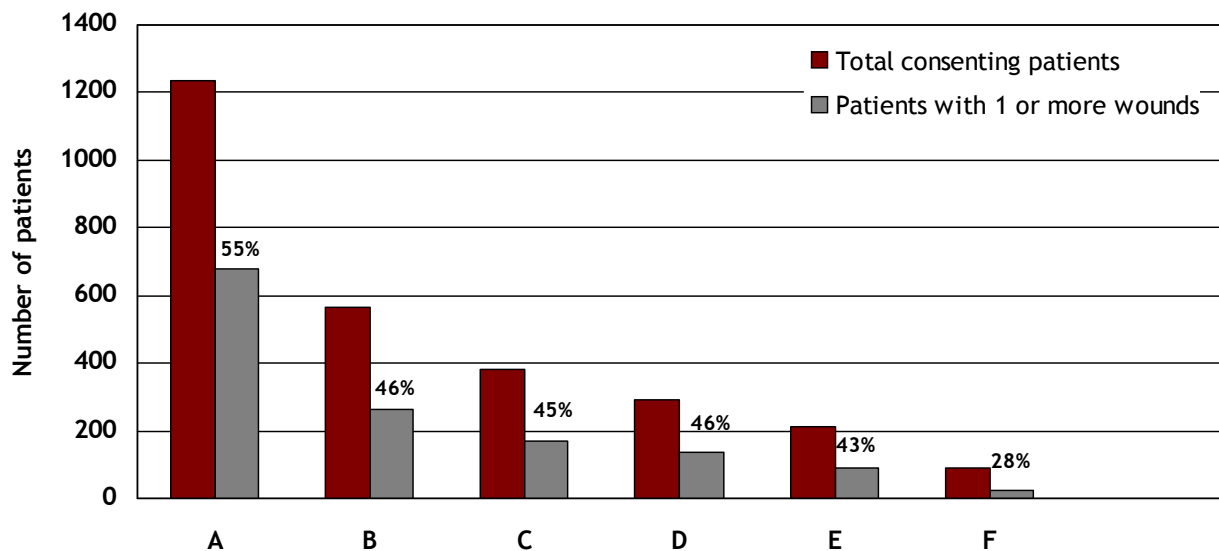
Table 4. Wound prevalence by number of hospital beds

Group	Total patients approached	Total patients consented to skin inspection	Response fraction ¹	Patients with 1 or more wounds of any category	Prevalence
A (300+ beds)	1,324	1,237	93.4%	681	55.1%
B (150-299 beds)	607	567	93.4%	262	46.2%
C (100-149 beds)	401	380	94.9%	170	44.7%
D (50-99 beds)	312	293	93.9%	135	46.1%
E (20-49 beds)	233	210	90.1%	90	42.9%
F (0-19 beds)	102	90	88.2%	25	27.8%
Total	2,979	2,777	93.2%	1,363	49.1%

Notes:

¹ Response fraction is calculated as a proportion of the number of hospital bed group not the total population

Figure 3. Wound prevalence by number of hospital beds



1.4 Prevalence by wound category

Table 5 shows the prevalence of wounds and hospital-acquired wounds by wound category for the consented population. More detail on the wound categories used by WoundsWest is shown in [Appendix F](#) and [Appendix G](#).

Table 5. State-wide prevalence of wounds by wound category

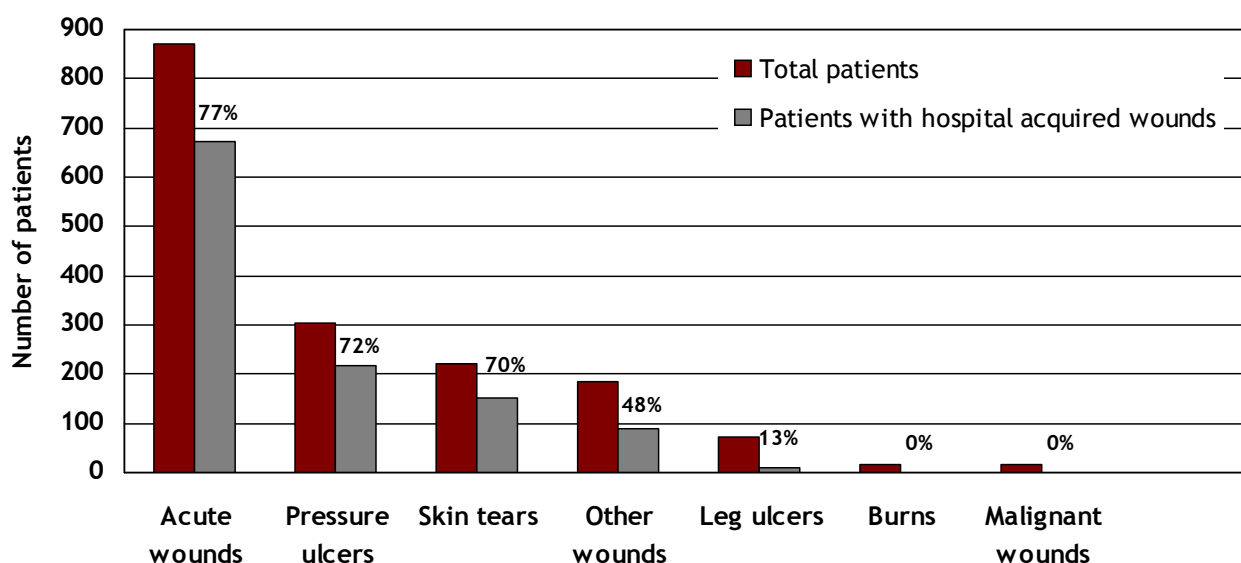
Wound Category	Patients ¹	Prevalence ²	Patients with hospital-acquired wounds ³	Hospital-acquired prevalence ⁴
Patients with acute wounds	869	31.3%	673	24.2%
Patients with pressure ulcers	303	10.9%	217	7.8%
Patients with skin tears	220	7.9%	153	5.5%
Patients with other wounds	186	6.7%	89	3.2%
Patients with leg ulcers	71	2.6%	9	0.3%
Patients with burns	17	0.6%	0	0.0%
Patients with malignant wounds	15	0.5%	0	0.0%
Total patients with 1 or more wounds⁵	1,363		979	

Notes:

- ¹ Patients = number of consented patients identified with 1 or more wounds in this category
- ² Prevalence = number of consented patients who had 1 or more wounds identified in this category/total number of consented patients (n = 2,777)
- ³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey
- ⁴ Hospital-acquired prevalence = number of consented patients who had 1 or more hospital-acquired wounds identified in this category/total number of consented patients (n = 2,777)
- ⁵ Total patients is not the sum of the ‘Patients’ column as patients with multiple wounds may appear in more than one row

Figure 4 shows the prevalence of wounds by wound category and the proportion of hospital-acquired wounds for the consented population.

Figure 4. State-wide prevalence of wounds and hospital-acquired wounds by wound category



1.5 Proportion by wound category

Table 6 and Figure 5 show the proportion of wounds identified for each wound category and the proportion of wounds in each wound category that were hospital-acquired for the consented population.

Table 6. Proportion of wounds by wound category

Wound category	Number of wounds ¹	Proportion of total wounds ²	Number of hospital-acquired wounds ³	Proportion of wound category hospital-acquired wounds ⁴
Acute wounds	1,555	54.2%	1,181	75.9%
Pressure ulcers	502	17.5%	328	65.3%
Skin tears	354	12.4%	225	63.6%
Other wounds	272	9.5%	138	50.7%
Leg ulcers	131	4.6%	17	13.0%
Burns	33	1.2%	0	0%
Malignant wounds	20	0.7%	0	0%
Total wounds	2,867	100.0%	1,889	65.9%

Notes:

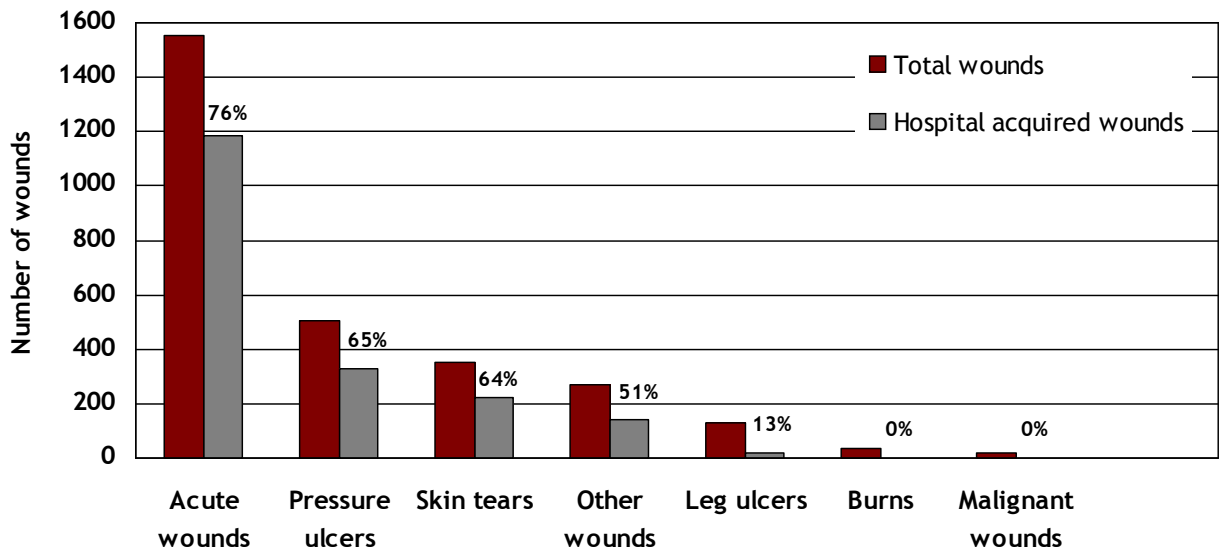
¹ n = number of wounds identified in the consented population

² Proportion = number of wounds identified in that wound category/total number of wounds identified in the consented population

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Hospital-acquired proportion = number of hospital-acquired wounds in that wound category/total number of wounds identified in that category

Figure 5. Proportion of wounds by wound category



1.6 Prevalence by demographic and clinical variables

Table 7 and Figure 6 below show the proportion of patients with 1 or more wounds by age and gender for the consented population.

Table 7. Wound prevalence by demographic variables

Variable	Number of patients consented ²	Proportion of consented population	Number of patients with 1 or more wounds [number of wounds]	Proportion of patients with 1 or more wounds ³
Age				
0-42 days ¹	77	2.8%	9 [12]	11.7%
43-364 days	51	1.8%	10 [15]	19.6%
1-9 yrs	71	2.6%	25 [42]	35.2%
10-19 yrs	118	4.2%	51 [115]	43.2%
20-29 yrs	228	8.2%	130 [256]	57.0%
30-39 yrs	220	7.9%	130 [248]	59.1%
40-49 yrs	213	7.7%	99 [241]	46.5%
50-59 yrs	260	9.4%	128 [254]	49.2%
60-69 yrs	374	13.5%	187 [384]	50.0%
70-79 yrs	477	17.2%	243 [540]	50.9%
80-89 yrs	519	18.7%	257 [541]	49.5%
90-99 yrs	164	5.9%	90 [204]	54.9%
100+ yrs	5	0.2%	4 [15]	80.0%
Total	2,777	100.0%	1,363 [2,867]	49.1%
Gender				
Female	1,491	53.7%	734 [1,466]	49.2%
Male	1,286	46.3%	629 [1,411]	48.9%
Total	2,777	100.0%	1,363 [2,867]	49.1%

Note:

¹ 0-42 days represents the neonatal period of birth to 6 weeks and is included to allow comparisons with other published literature for this group

² n = patients who consented to a skin inspection (2,777)

³ Proportion = number of patients with 1 or more wounds in that variable group/total number of consented patients in that variable group

Figure 6. Proportion of patients with 1 or more wounds by age group

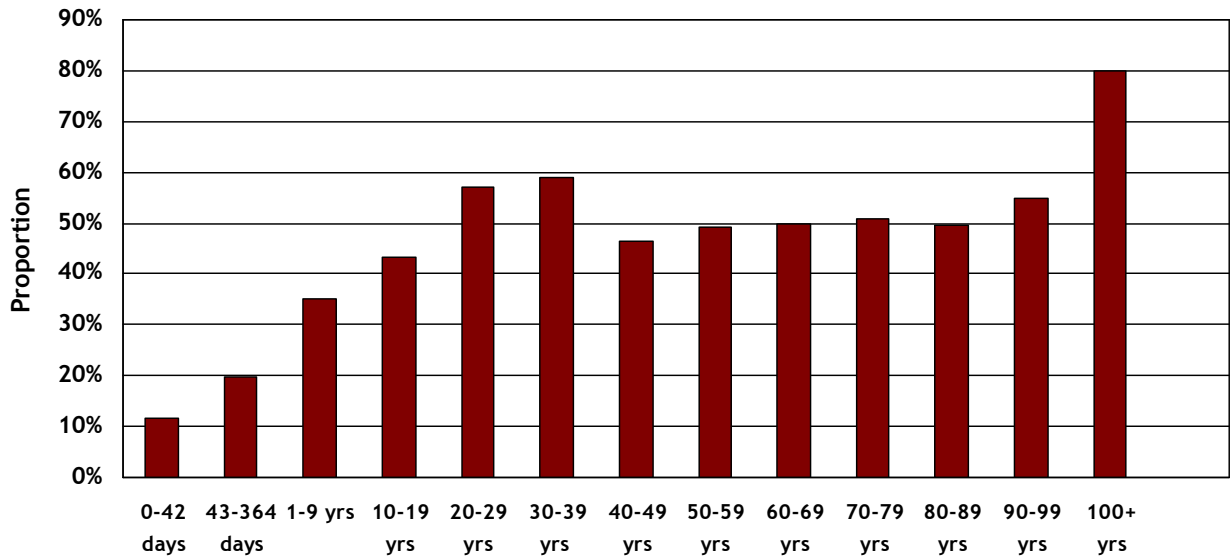
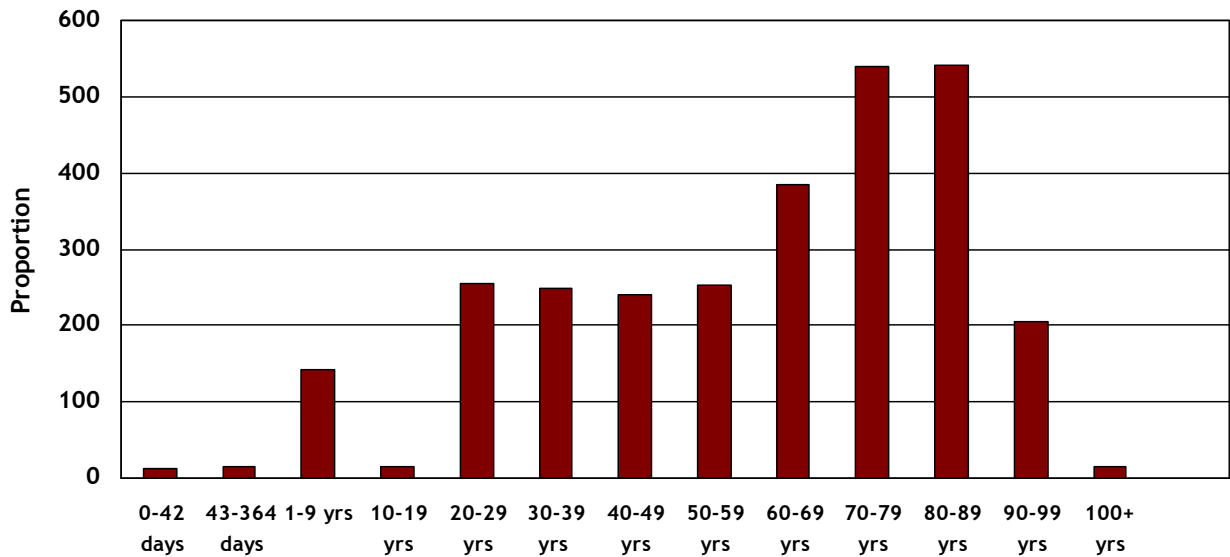


Figure 7 shows the number of identified wounds by age group for the consented population. Patients 60 years and over accounted for 58.7% (n = 1,684) of all wounds identified.

Figure 7. Number of wounds by age group



1.7 Prevalence by medical specialty

Table 8 and Figure 8 show the wound prevalence identified in the consented population by medical specialty. The membership of the medical specialty groups is noted in the key below. The wound prevalence identified in the surgical group was 71.7% and patients in this group accounted for 40.1% of patients with 1 or more wounds (n=763). Obstetric patients showed a wound prevalence of 60.9%. Medical patients accounted for 40% of the consented population and 28.2% of patients with 1 or more wounds (n=384).

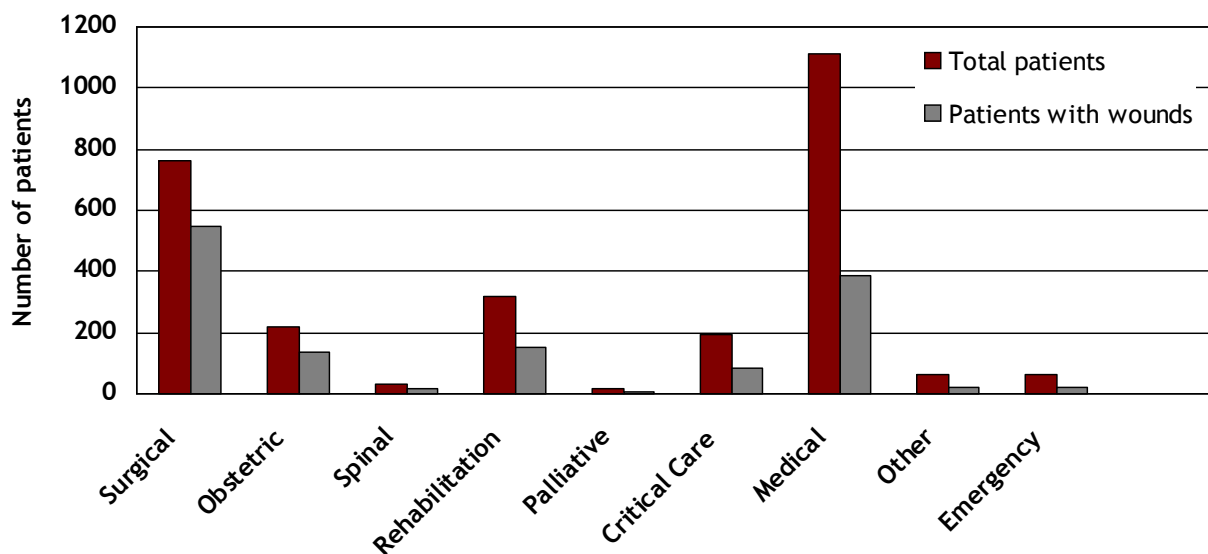
Table 8. Wound prevalence by medical specialty

Medical Specialty	Total patients ¹	Proportion total patients	Patients with 1 or more wounds present	Proportion of patients within this specialty with 1 or more wounds	Proportion of total patients with 1 or more wounds
Surgical	763	27.5%	547	71.7%	40.1%
Obstetric	220	7.9%	134	60.9%	9.8%
Spinal	31	1.1%	17	54.8%	1.2%
Rehabilitation	319	11.5%	152	47.6%	11.2%
Palliative	16	0.6%	7	43.8%	0.5%
Critical Care	191	6.9%	81	42.4%	5.9%
Medical	1,112	40.0%	384	34.5%	28.2%
Other	64	2.3%	22	34.4%	1.6%
Emergency	61	2.2%	19	31.1%	1.4%
Total	2,777	100.0%	1,363	49.1%	100.0%

Notes:

¹ n = patients who consented to a skin inspection (2,777)

Figure 8. Wound prevalence by medical specialty



Key: Medical Specialty Groups

Primary Medical Specialty	Group includes:
Critical Care	Critical Care, Coronary Care, Level 2 Special Care Nurseries, High Dependency & Intensive Care Units (Adult and Neonatal).
Emergency Medicine	Emergency Medicine
Medical	Cardiovascular/Cardiology, Dermatology, Detoxification, Endocrinology, Gastroenterology, General Medical, Geriatric Medicine, Haematology, Hepatobiliary, Immunology, Infectious Diseases, Interim Care, Neonatal, Neurology, Oncology, Paediatric (medical or surgical as appropriate), Renal, Respiratory Medicine, Rheumatology, Stroke, Special Care Nursery
Surgical	Burns, Cardiovascular/Cardiology, Ear Nose & Throat, General Surgical, Gynaecology, Head and neck, Liver transplant, Neurosurgical, Ophthalmology, Oral facio-maxillary, Orthopaedic, Pain Management, Plastic Surgery, Thoracic Surgery, Transplant, Urological & Vascular
Obstetric	Obstetric
Palliative Care	Palliative Care
Rehabilitation	Rehabilitation
Spinal	Spinal
Other	All other medical specialties

Paediatric patients were allocated to their appropriate medical specialty and were not considered a separate group for the medical specialty analysis

1.8 Distribution of wounds

Patients with 1 or 2 wounds accounted for 74% (n=1,008) of all patients with wounds in the consented population, see Table 9 and Figure 9 below.

Table 9. Distribution of wounds per patient

Number of wounds per patient	Number of patients with wounds ¹	Number of wounds	Proportion of all patients with wounds
1	726	726	53.3%
2	282	564	20.7%
3	147	441	10.8%
4	93	372	6.8%
5	43	215	3.2%
6	30	180	2.2%
7	16	112	1.2%
8	10	80	0.7%
9	8	72	0.6%
11	3	33	0.2%
12	1	12	0.1%
13	2	26	0.1%
17	2	34	0.1%
Total	1,363	2,867	100.0%

Note:

¹n = number of consented patients identified with 1 or more wounds (1,363)

Figure 9. Distribution of wounds per patient

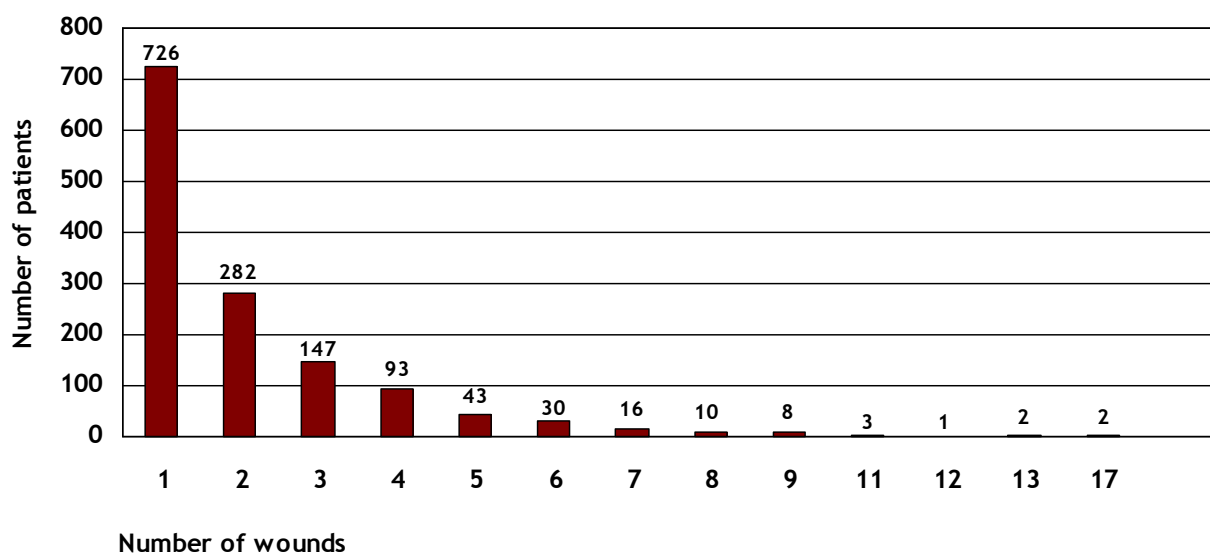


Table 10 shows the mean wounds identified per patient.

Table 10. Mean wounds per patient

Group	Mean wounds per patient	Patients ¹	Std Dev ²
Metropolitan	2.1	1,169	1.809
Country	1.9	194	1.541
Total	2.1	1,363	1.774

Notes:

¹n = number of consented patients identified with 1 or more wounds (1,363)

²Std Dev = standard deviation

1.9 Documentation of current wound management

Documentation of current wound management was recorded as present if any written notation regarding the wound(s) identified was found in any part of the medical record on the survey day or 4 days prior. This documentation could be noted in general medical progress notes, nursing care plans, clinical pathways and wound care charts. No measure was made of the quality of the documentation.

Data collected from the contextual questionnaire suggested a high documentation rate could be expected as 94% (n = 80) of hospitals indicated they used individual wound prevention and management plans. Evidence of documentation was sought for every wound.

Current documentation was identified for 74% of wounds found (See Table 11 and Figure 10).

Of the 234 (47%) pressure ulcers with no documentation, 7 were Stage 3 or 4 pressure ulcers. Of the 140 (39.5%) skin tears with no documentation, 43 were Category 3.

Table 11. Presence of current documentation by wound category

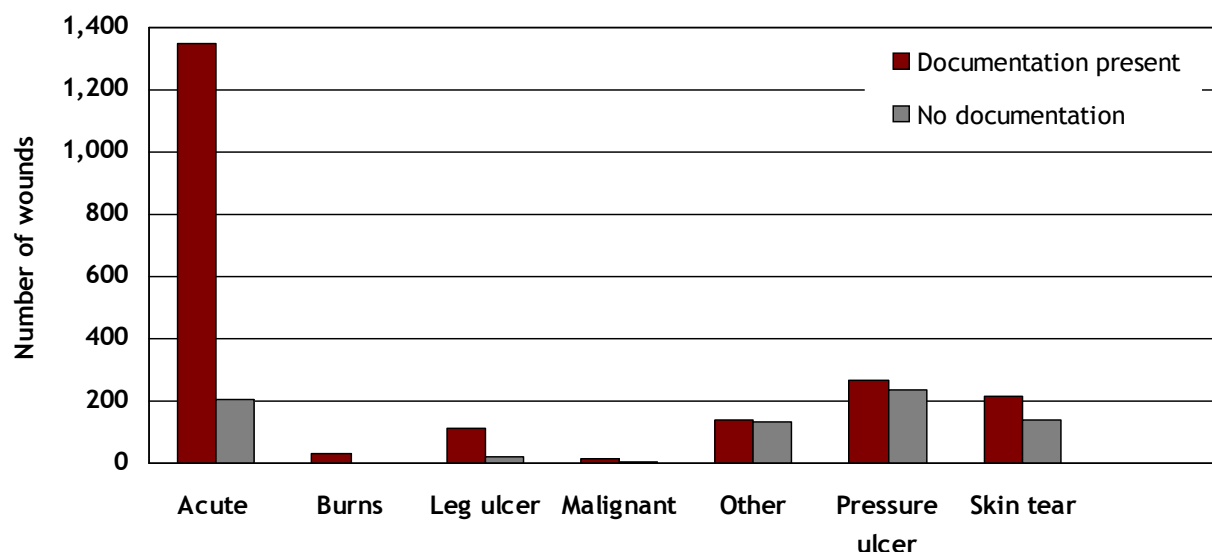
Wound category	Wound count	Current documentation present ¹	Proportion ²
Acute	1,555	1,348	86.7%
Burns	33	32	97.0%
Leg ulcer	131	112	85.5%
Malignant	20	13	65.0%
Other	272	141	51.8%
Pressure ulcer	502	268	53.4%
Skin tear	354	214	60.5%
Total	2,867	2,128	74.2%

Notes:

¹ Current documentation was deemed to be present if any notation relating to the identified wound was found anywhere in the medical record on the survey day or in the 4 days prior to the survey day.

² Proportion = number of wounds with current documentation/total number of wounds

Figure 10. Presence of current documentation by wound category



Part 2 - Wound categories

The following section details results for each wound category used in the prevalence survey.

Although data is presented in categories to provide a range of information related to wounds within that category, it is important to remember that 47% of patients (n = 637) had more than 1 wound.

Proportion in the wound categories is calculated as a part of the consented patients in each category not the total consented patients.

2.1 Acute wounds

2.1.1 Acute wound category patients

Table 12 and Figure 11 show the proportion of patients identified with acute wounds and hospital-acquired acute wounds for each acute wound subcategory. Patients with suture lines accounted for 63.9% of acute wounds identified (n = 555).

Table 12. Proportion of patients within the acute wound category

Acute wound category	Patients with acute wounds ¹	Proportion of patients with acute wounds ²	Proportion of patients with hospital-acquired acute wounds	
			Patients with hospital-acquired acute wounds ³	Proportion of patients with hospital-acquired acute wounds
Patients with suture line	555	63.9%	490	56.4%
Patients with drain site	161	18.5%	146	16.8%
Patients with laceration	137	15.8%	60	6.9%
Patients with unsutured surgical incision	63	7.2%	54	6.2%
Patients with dehiscence	37	4.3%	22	2.5%
Patients with donor site	32	3.7%	30	3.5%
Patients with skin graft	29	3.3%	25	2.9%
Patients with abscess	21	2.4%	4	0.5%
Patients with other acute wounds	21	2.4%	7	0.8%
Patients with fistula	20	2.3%	16	1.8%
Patients with unseen/unsure ⁴	20	2.3%	13	1.5%
Patients with flap	10	1.2%	10	1.2%
Patients with pin site	10	1.2%	9	1.0%
Patients with peri-stomal breakdown	3	0.3%	1	0.1%
Patients with pilonidal sinus	3	0.3%	2	0.2%
Total patients with acute wounds⁵	869		673	

Notes:

¹ n = number of consented patients identified with 1 or more wounds in the acute wound category (869)

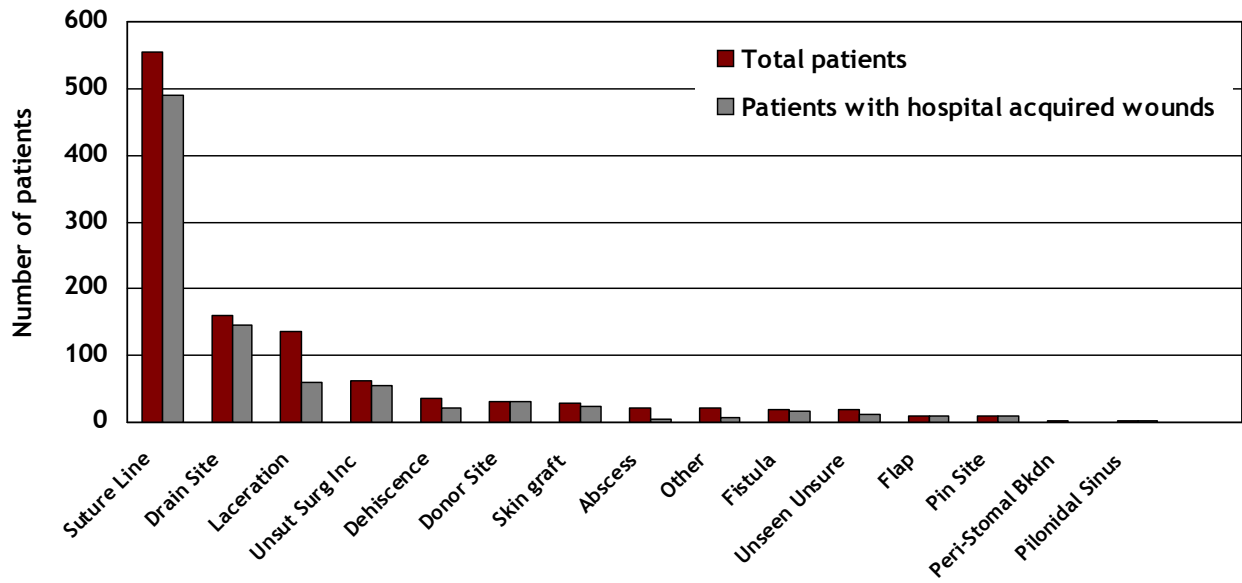
² Proportion = number of consented patients who had 1 or more wounds identified in this acute wound subcategory/total number of consented patients who had 1 or more acute wound identified

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Unseen/unsure = patients with an acute wound where a definitive subcategory could not be identified due to an intact dressing or unclear documentation

⁵ Patients with multiple acute wounds may appear in more than one row

Figure 11. Proportion of patients within the acute wound category



2.1.2 Acute wound category wounds

Table 13 and Figure 12 show the proportion of wounds and hospital-acquired wounds identified within the acute wound subcategories. Suture lines represented the largest group of wounds identified 46.7% (n = 726).

Table 13. Proportion of wounds by acute wound category

Acute wound category	Wounds ¹	Proportion of acute wounds ²	Hospital-acquired wounds ³	Proportion of hospital-acquired acute wounds ⁴
Suture line	726	46.7%	640	88.2%
Drain site	248	15.9%	225	90.7%
Laceration	245	15.8%	77	31.4%
Unstured surgical incision	86	5.5%	76	88.4%
Dehiscence	41	2.6%	24	58.5%
Skin graft	41	2.6%	31	75.6%
Donor site	38	2.4%	34	89.5%
Abscess	31	2.0%	7	22.6%
Other	21	1.4%	7	33.3%
Pin site	21	1.4%	17	81.0%
Unseen/unsure ⁵	21	1.4%	14	66.7%
Fistula	20	1.3%	16	80.0%
Flap	10	0.6%	10	100.0%
Peri-stomal breakdown	3	0.2%	1	33.3%
Pilonidal sinus	3	0.2%	2	66.7%
Total acute wounds	1,555	100.0%	1,181	75.9%

Notes:

¹ n = number of wounds identified in the acute wound category (1,555)

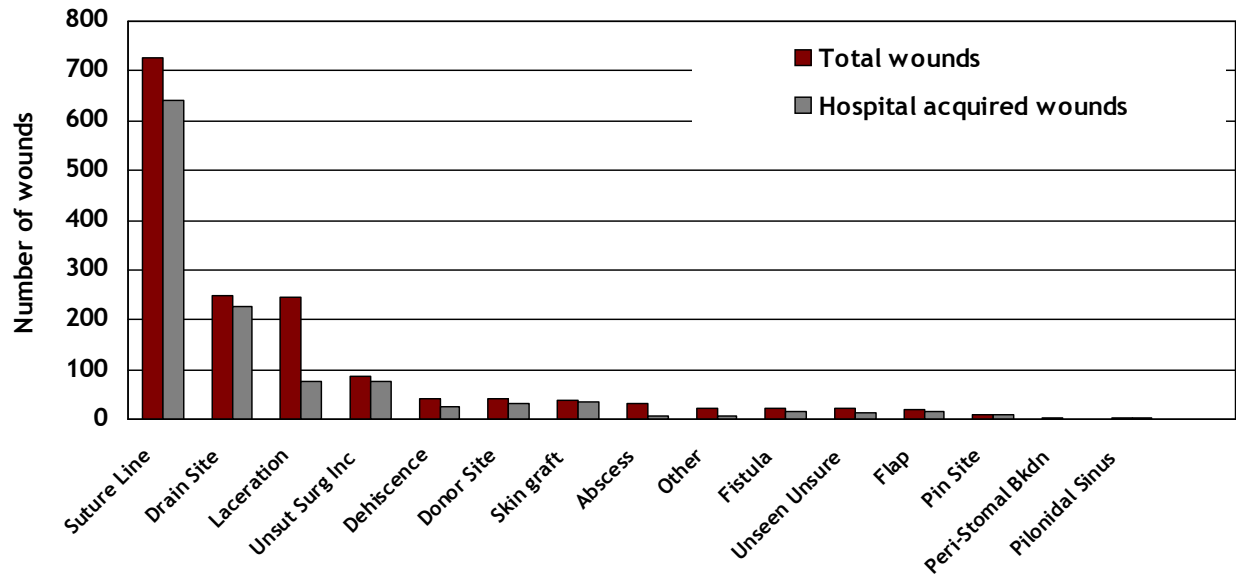
² Proportion = number of wounds identified in the acute wound subcategory/total number of wounds identified in the acute wound category

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Proportion = number of hospital-acquired wounds identified in the acute wound subcategory/total number of wounds in the acute wound subcategory

⁵ Unseen/unsure = an acute wound where a definitive subcategory could not be identified due to an intact dressing or unclear documentation

Figure 12. Proportion of wounds by acute wound category



2.1.3 Acute wound category demographic variables

Table 14 shows the proportion of patients who had 1 or more acute wounds by age and gender and the proportion of wounds for this group. Figure 13 shows the proportion of patients who had 1 or more acute wound by age.

Table 14. Acute wound category by demographic variables

Variable	Total patients with 1 or more acute wounds ²	Proportion of patients with 1 or more wounds within the acute wound category	Total wounds ³	Proportion of wounds within the acute wound category
Age				
0-42 days ¹	3	0.3%	4	0.3%
43-364 days	7	0.8%	9	0.6%
1-9 yrs	18	2.1%	26	1.7%
10-19 yrs	47	5.4%	107	6.9%
20-29 yrs	115	13.2%	214	13.8%
30-39 yrs	109	12.5%	197	12.7%
40-49 yrs	84	9.7%	170	10.9%
50-59 yrs	86	9.9%	148	9.5%
60-69 yrs	128	14.7%	224	14.4%
70-79 yrs	148	17.0%	270	17.4%
80-89 yrs	94	10.8%	141	9.1%
90-99 yrs	28	3.2%	43	2.8%
100+ yrs	2	0.2%	2	0.1%
Total	869	100.0%	1,555	100.0%
Gender				
Female	484	55.7%	792	50.9%
Male	385	44.3%	763	49.1%
Total	869	100.0%	1,555	100.0%

Note:

¹0-42 days represents the neonatal period of birth to 6 weeks and is included to allow comparisons with other published literature for this group

² n = Number of patients who had 1 or more acute wounds (869)

³ n = Number of acute wounds (1,555)

Figure 13. Patients with 1 or more acute wounds by age group

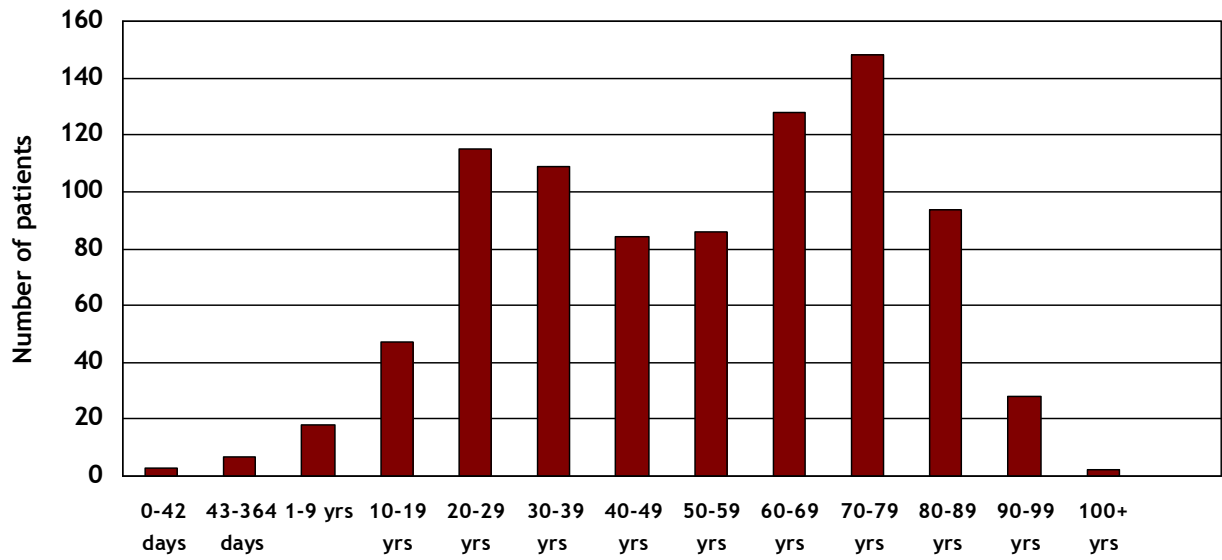
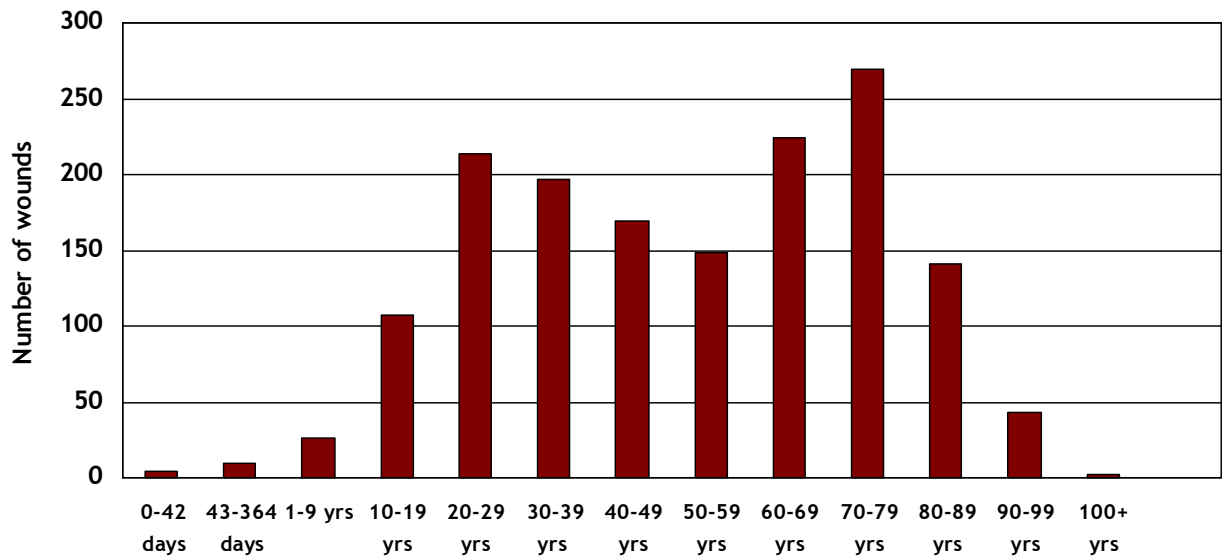


Figure 14 shows the number of identified acute wounds by age group for the consented population.

Figure 14. Acute wounds by age group



2.1.4 Acute wound category medical specialties

Table 15 and Figure 15 show the proportion of patients within the acute wound category by medical specialty.

Table 15. Acute wound category by medical specialty

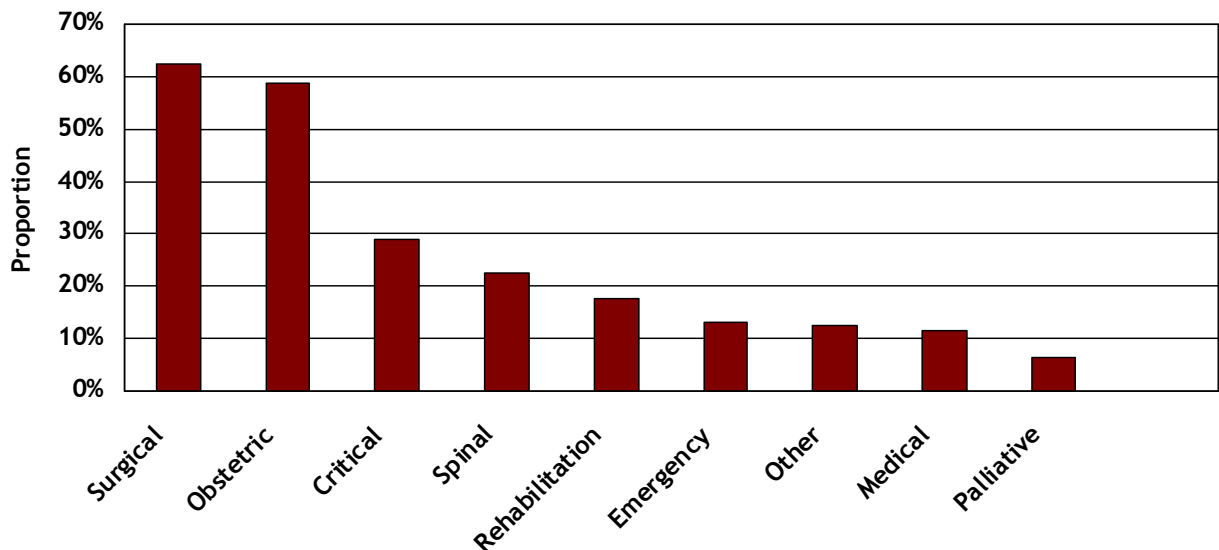
Medical Specialty	Total patients ¹	Patients with 1 or more acute wounds present	Proportion of patients with acute wounds ²
Surgical	763	476	62.4%
Obstetric	220	129	58.6%
Critical	191	55	28.8%
Spinal	31	7	22.6%
Rehabilitation	319	56	17.6%
Emergency	61	8	13.1%
Other	64	8	12.5%
Medical	1,112	129	11.6%
Palliative	16	1	6.3%
Total	2,777	869	31.3%

Notes:

¹ n = includes only patients who consented to a skin inspection (2,777)

² Proportion = number of patients with acute wounds within that medical specialty/total number of patients within that medical specialty

Figure 15. Acute wound category by medical specialty



2.1.5 Presence of current documentation in acute wound category

Table 16 and Figure 16 show the presence of current documentation within the acute wound category.

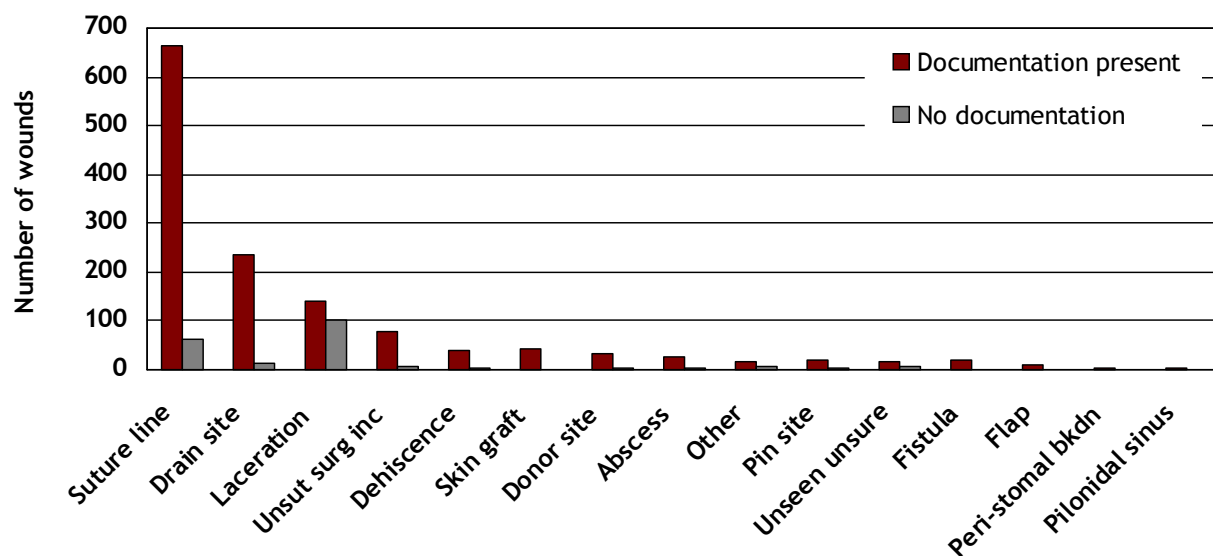
Table 16. Presence of current documentation by acute wound category

Acute wound category	Wound count	Current documentation present ¹	Proportion with current documentation present	No documentation	Proportion with no documentation
Suture line	726	665	91.6%	61	8.4%
Drain site	248	235	94.8%	13	5.2%
Laceration	245	142	58.0%	103	42.0%
Unstitched surgical incision	86	80	93.0%	6	7.0%
Dehiscence	41	39	95.1%	2	4.9%
Skin graft	41	41	100.0%		0.0%
Donor site	38	34	89.5%	4	10.5%
Abscess	31	27	87.1%	4	12.9%
Other	21	16	76.2%	5	23.8%
Pin site	21	19	90.5%	2	9.5%
Unseen/unsure	21	16	76.2%	5	23.8%
Fistula	20	19	95.0%	1	5.0%
Flap	10	10	100.0%		0.0%
Peri-stomal breakdown	3	3	100.0%		0.0%
Pilonidal sinus	3	2	66.7%	1	33.3%
Total	1,555	1,348	86.7%	207	13.3%

Note:

¹ Current documentation was deemed to be present if any notation relating to the identified wound was found anywhere in the medical record on the survey day or in the 4 days prior to the survey day

Figure 16. Presence of current documentation by acute wound category



2.2 Burns

2.2.1 Burns category patients

Table 17 and Figure 17 show the proportion of patients identified with burns in each burns sub category. Patients with partial thickness burns <10% accounted for 64.7% (n = 11) of all patients identified with burns. No burns were identified as being hospital-acquired. Burns were classified as a proportion of either full or partial skin thickness.

Table 17. Proportion of patients within the burns category

Burns category	Patients with burns ¹	Proportion of patients with burns ²	Patients with hospital-acquired burns ³	Proportion of patients with hospital-acquired burns
Patients with Full <10%	3	17.6%		
Patients with Full >20%	1	5.9%		
Patients with Full 10-20%	2	11.8%		
Patients with Partial <10%	11	64.7%		
Patients with Partial 10-20%	2	11.8%		
Patients with Partial >20%	0	0.0%		
Total patients with burns⁴	17		0	0.0%

Notes:

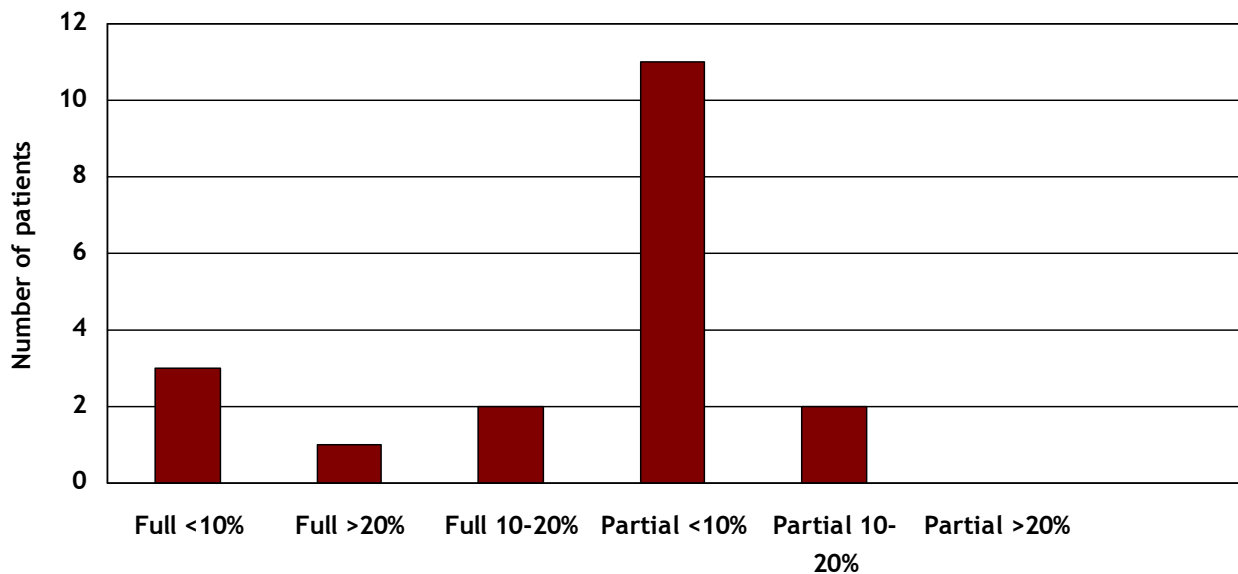
¹ n = number of consented patients identified with 1 or more wounds in the burns category (17)

² Proportion = number of consented patients who had 1 or more wounds identified in this burns subcategory/total number of consented patients who had 1 or more burns identified

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Total patients is not the sum of the patients with burns column as patients may have burns from multiple subcategories

Figure 17. Proportion of patients within the burns category



2.2.2 Burns category wounds

Table 18 and Figure 18 show the proportion of wounds within the burns category. Partial burns <10% represented the largest group of wounds identified 63.6% (n=21). There were no hospital-acquired burns identified in the survey population.

Table 18. Proportion of wounds by burns category

Burns category	Wounds ¹	Proportion of burns ²	Hospital-acquired burns ³	Proportion of hospital-acquired burns ⁴
Full <10%	4	12.1%		
Full 10-20%	1	3.0%		
Full >20%	4	12.1%		
Partial <10%	21	63.6%		
Partial 10-20%	3	9.1%		
Partial >20%	0	0.0%		
Total Burns	33	100.0%	0	0.0%

Notes:

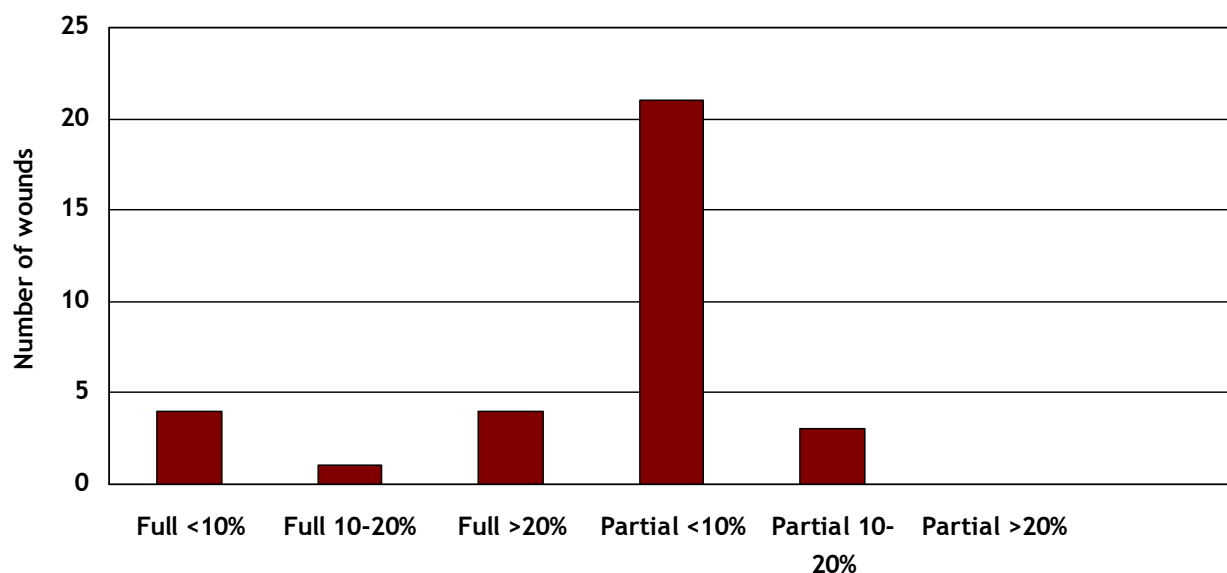
¹ n = number of wounds identified in the burns category (33)

² Proportion = number of wounds identified in the burns subcategory/total number of wounds identified in the burns category

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Proportion = number of hospital-acquired wounds identified in the burns subcategory/total number of wounds in the burns subcategory

Figure 18. Proportion of wounds by burns category



2.2.3 Burns category demographic variables

Table 19 shows the proportion of patients who had 1 or more burns by age and gender. Figure 19 shows the proportion of patients who had 1 or more burns by age.

Table 19. Burns category by demographic variables

Variable	Total patients with 1 or more burns ²	Proportion of patients with 1 or more wounds within the burns category	Total burnss ³	Proportion of wounds within the burns category
Age				
0-42 days ¹	0	0.0%	0	0.0%
43-364 days	0	0.0%	0	0.0%
1-9 yrs	4	23.5%	10	30.3%
10-19 yrs	0	0.0%	0	0.0%
20-29 yrs	1	5.9%	1	3.0%
30-39 yrs	1	5.9%	1	3.0%
40-49 yrs	3	17.6%	7	21.2%
50-59 yrs	2	11.8%	3	9.1%
60-69 yrs	4	23.5%	7	21.2%
70-79 yrs	1	5.9%	3	9.1%
80-89 yrs	1	5.9%	1	3.0%
90-99 yrs	0	0.0%	0	0.0%
100+ yrs	0	0.0%	0	0.0%
Total	17	100.0%	33	100.0%
Gender				
Female	4	23.5%	5	15.2%
Male	13	76.5%	28	84.8%
Total	17	100.0%	33	100.0%

Note:

¹ 0-42 days represents the neonatal period of birth to 6 weeks and is included to allow comparisons with other published literature for this group

² n = Number of patients who had 1 or more burns (17)

³ n = Number of burns (33)

Figure 19. Patients with 1 or more burns by age group

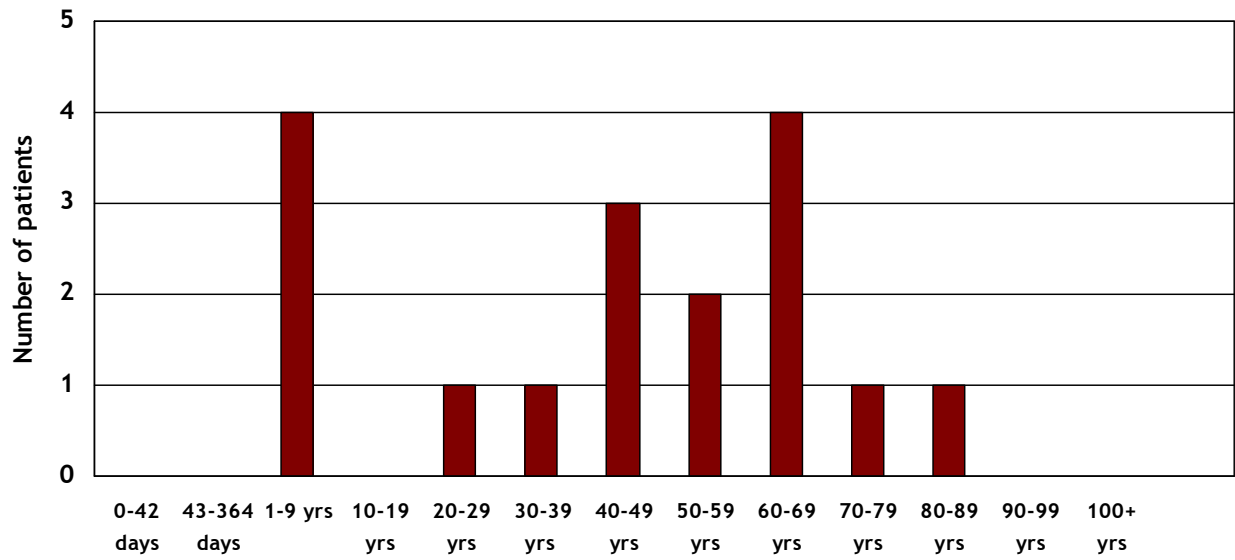
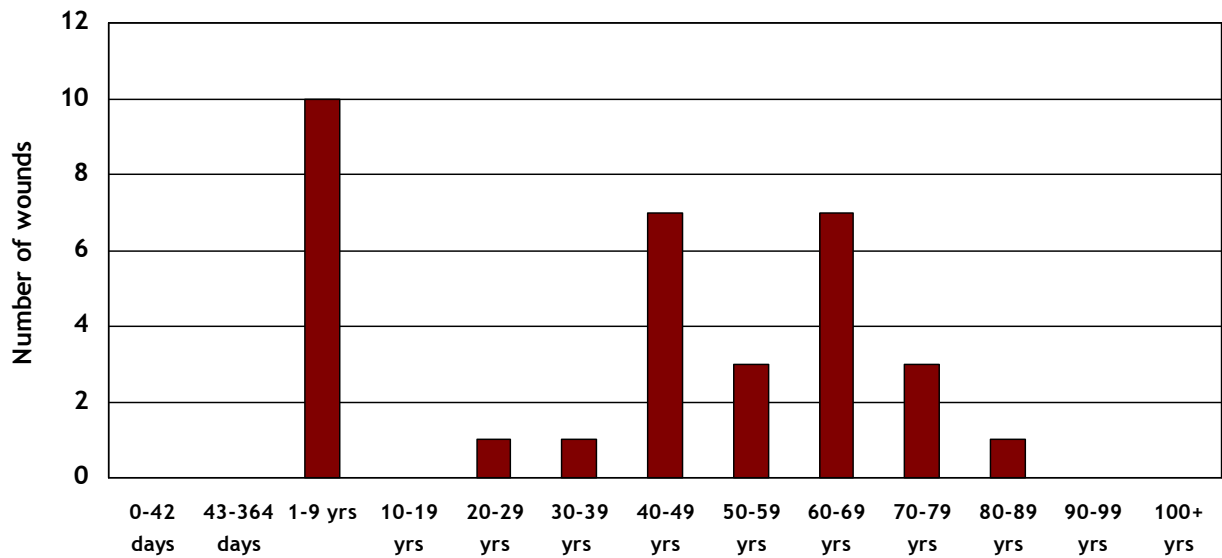


Figure 20 shows the number of identified burns by age group for the consented population.

Figure 20. Burns by age group



2.2.4 Burns category medical specialties

Table 20 and Figure 21 show the proportion of patients within the burns category by medical specialty. Only 3 medical specialties had patients identified with burns.

Table 20. Burns category by medical specialty

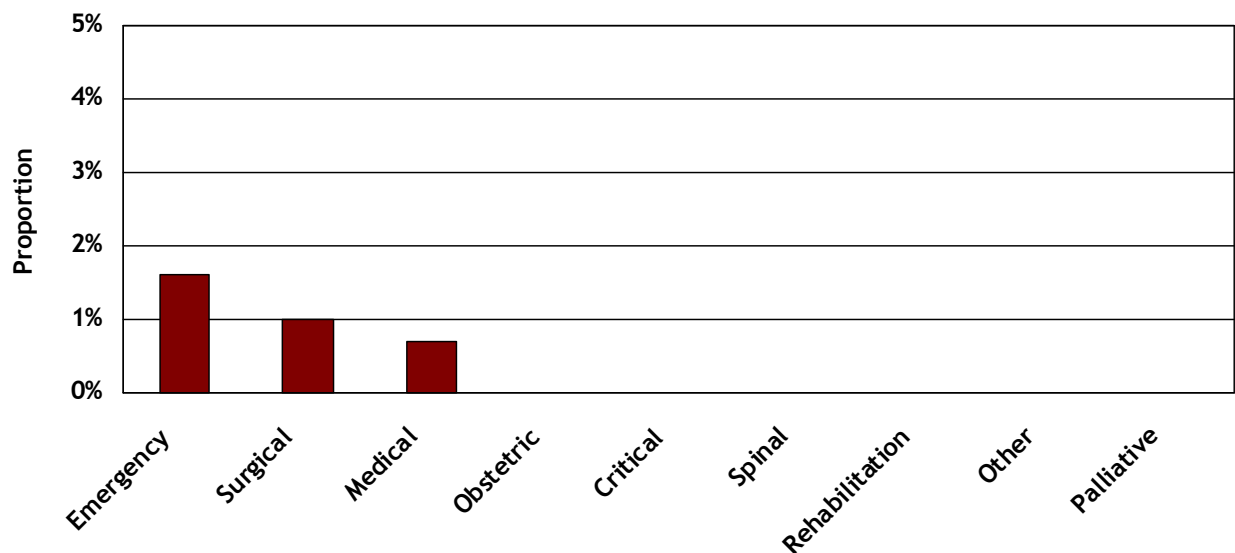
Medical Specialty	Total patients ¹	Patients with 1 or more burns present	Proportion of patients with burns ²
Emergency	61	1	1.6%
Surgical	763	8	1.0%
Medical	1,112	8	0.7%
Obstetric	220	0	0.0%
Critical	191	0	0.0%
Spinal	31	0	0.0%
Rehabilitation	319	0	0.0%
Other	64	0	0.0%
Palliative	16	0	0.0%
Total	2,777	17	0.6%

Notes:

¹ n = includes only patients who consented to a skin inspection (2,777)

² Proportion = number of patients with burns within that medical specialty/total number of patients within that medical specialty

Figure 21. Burns category by medical specialty



Burns were present in only 3 medical specialty groups.

2.2.5 Presence of current documentation in burns category

Table 21 and Figure 22 show the presence of current documentation within the burns category.

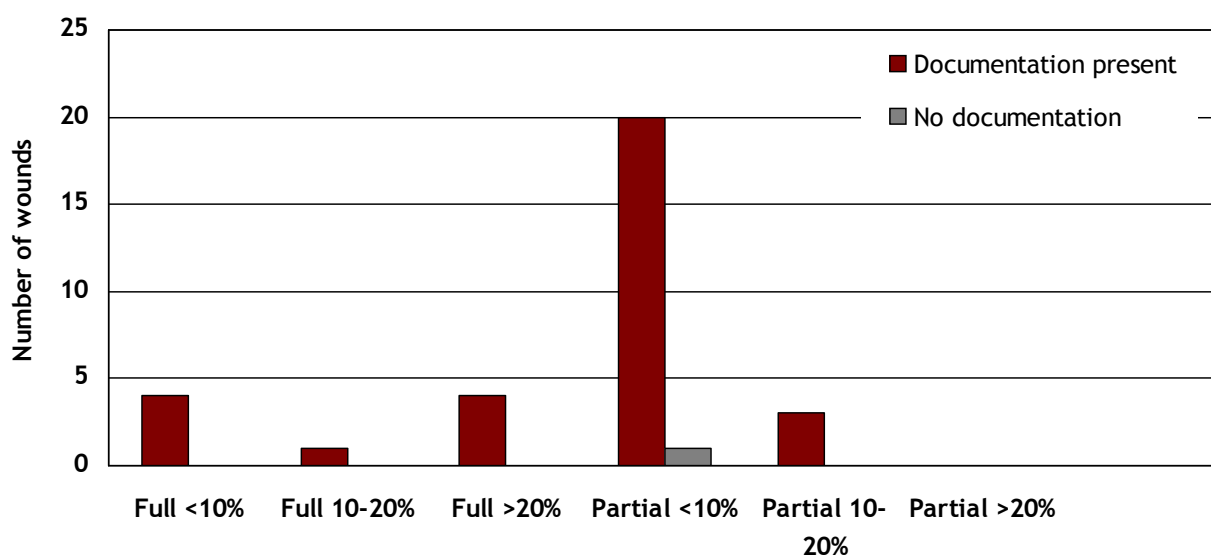
Table 21. Presence of current documentation by burns category

Burns category	Wound count	Current documentation present ¹	Proportion with current documentation present	No documentation	Proportion with no documentation
Full <10%	4	4	100.0%		0.0%
Full 10-20%	1	1	100.0%		0.0%
Full >20%	4	4	100.0%		0.0%
Partial <10%	21	20	95.2%	1	4.8%
Partial 10-20%	3	3	100.0%		0.0%
Partial >20%	0	0	0.0%		0.0%
Total	33	32	97.0%	1	3.0%

Note:

¹ Current documentation was deemed to be present if any notation relating to the identified wound was found anywhere in the medical record on the survey day or in the 4 days prior to the survey day

Figure 22. Presence of current documentation by burns category



2.3 Leg ulcers

2.3.1 Leg ulcer category patients

Table 22 and Figure 23 show the proportion of patients identified with leg ulcers within the leg ulcer category. Patients with leg ulcers that were unseen or of uncertain aetiology accounted for 46.5% (n=33) of patients seen in this cohort.

Table 22. Proportion of patients within the leg ulcer category

Leg ulcer category	Patients ¹	Proportion of total patients with leg ulcers ²	Patients with hospital-acquired leg ulcers ³	Proportion of patients with hospital-acquired leg ulcers
Patients with arterial	11	15.5%	2	2.8%
Patients with mixed	5	7.0%	2	2.8%
Patients with neuropathic	11	15.5%		0.0%
Patients with unseen/unsure ⁴	33	46.5%	5	7.0%
Patients with venous	14	19.7%	1	1.4%
Total patients with leg ulcers⁵	71		9	12.7%

Notes:

¹ Patients = number of consented patients identified with 1 or more wounds in the leg ulcer category

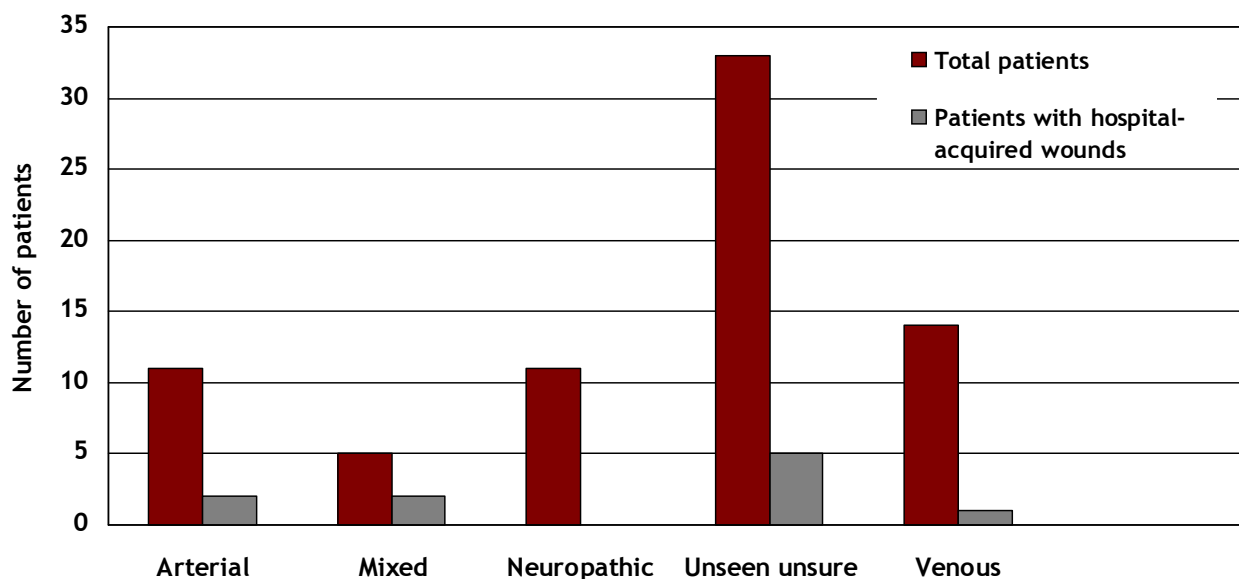
² Proportion = number of consented patients who had 1 or more wounds identified in this leg ulcer subcategory/total number of consented patients who had 1 or more leg ulcers identified

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Unseen/unsure = patients with a leg ulcer where a definitive subcategory could not be identified due to an intact dressing, unclear documentation or ambiguous aetiology

⁵ Patients with multiple leg ulcers may appear in more than one row

Figure 23. Proportion of patients within the leg ulcer category



2.3.2 Leg ulcer category wounds

Table 23 and Figure 24 show the proportion of wounds and hospital-acquired wounds within the leg ulcer category. Leg ulcers in the unseen/unsure subcategory represent the largest group of wounds identified 42% (n=55) within the leg ulcer category.

Table 23. Proportion of wounds by leg ulcer category

Leg ulcer category	Wounds ¹	Proportion of total leg ulcers ²	Hospital-acquired leg ulcers ³	Proportion of hospital-acquired leg ulcers ⁴
Arterial	25	19.1%	9	36.0%
Mixed	11	8.4%	2	18.2%
Neuropathic	18	13.7%	0	0.0%
Unseen/unsure ⁵	55	42.0%	5	9.1%
Venous	22	16.8%	1	4.5%
Total leg ulcers	131	100.0%	17	13.0%

Notes:

¹ n = number of wounds identified in the leg ulcer category (131)

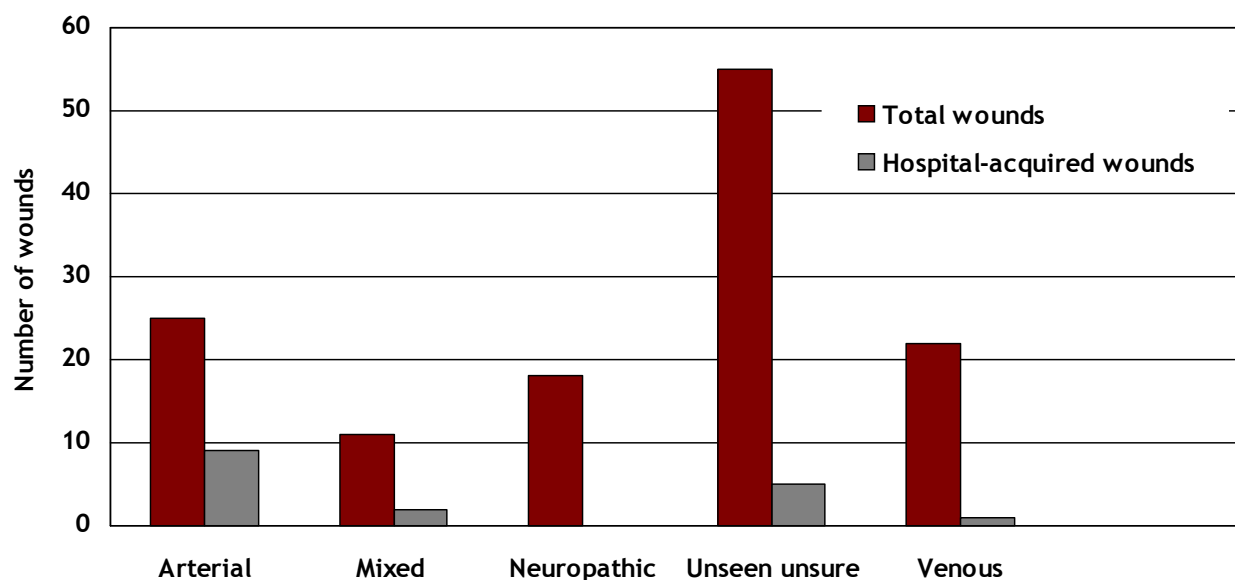
² Proportion = number of wounds identified in the leg ulcer subcategory/total number of wounds identified in the leg ulcer category

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Proportion = number of hospital-acquired wounds identified in the leg ulcer subcategory/total number of wounds in the leg ulcer subcategory

⁵ Unseen/unsure = patients with a leg ulcer where a definitive subcategory could not be identified due to an intact dressing, unclear documentation or ambiguous aetiology

Figure 24. Proportion of wounds by leg ulcer category



2.3.3 Leg ulcer category demographic variables

Table 24 shows the proportion of patients who had 1 or more leg ulcers by age and gender. Figure 25 shows the proportion of patients who had 1 or more leg ulcers by age.

Table 24. Leg ulcer category by demographic variables

Variable	Total patients with 1 or more leg ulcers ²	Proportion of patients with 1 or more wounds within the leg ulcer category	Total wounds ³	Proportion of wounds within the leg ulcer category
Age				
0-42 days ¹	0	0.0%	0	0.0%
43-364 days	0	0.0%	0	0.0%
1-9 yrs	0	0.0%	0	0.0%
10-19 yrs	0	0.0%	0	0.0%
20-29 yrs	0	0.0%	0	0.0%
30-39 yrs	4	5.6%	6	4.6%
40-49 yrs	3	4.2%	12	9.2%
50-59 yrs	2	2.8%	5	3.8%
60-69 yrs	14	19.7%	25	19.1%
70-79 yrs	19	26.8%	29	22.1%
80-89 yrs	24	33.8%	47	35.9%
90-99 yrs	4	5.6%	5	3.8%
100+ yrs	1	1.4%	2	1.5%
Total	71	100.0%	131	100.0%
Gender				
Female	36	50.7%	70	53.4%
Male	35	49.3%	61	46.6%
Total	71	100.0%	131	100.0%

Note:

¹ 0-42 days represents the neonatal period of birth to 6 weeks and is included to allow comparisons with other published literature for this group

² n = Number of patients who had 1 or more leg ulcers (71)

³ n = Number of leg ulcers (131)

Figure 25. Patients with 1 or more leg ulcers by age group

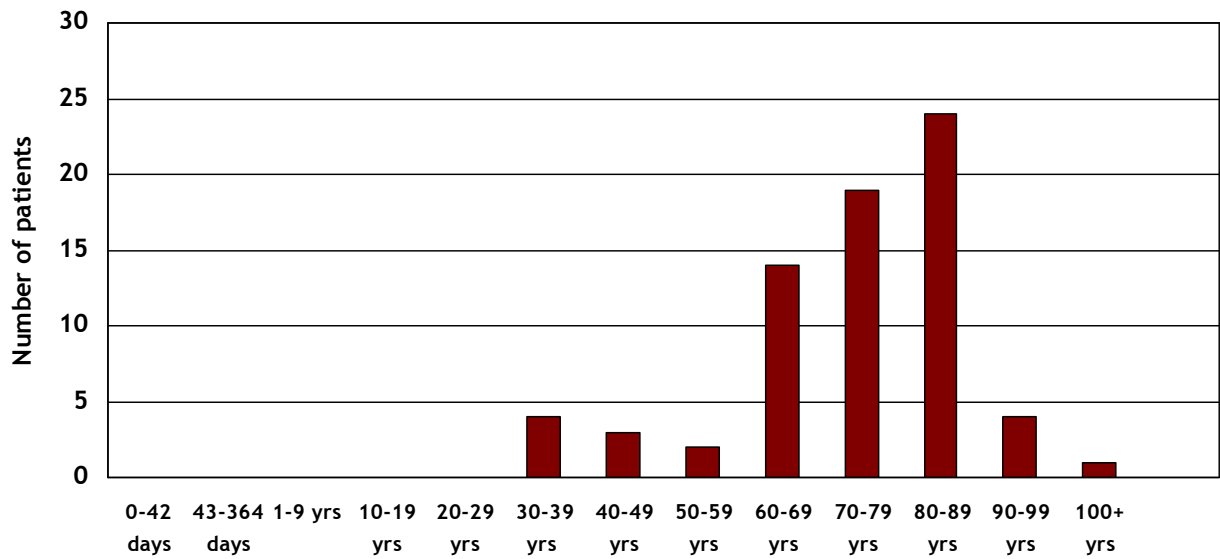
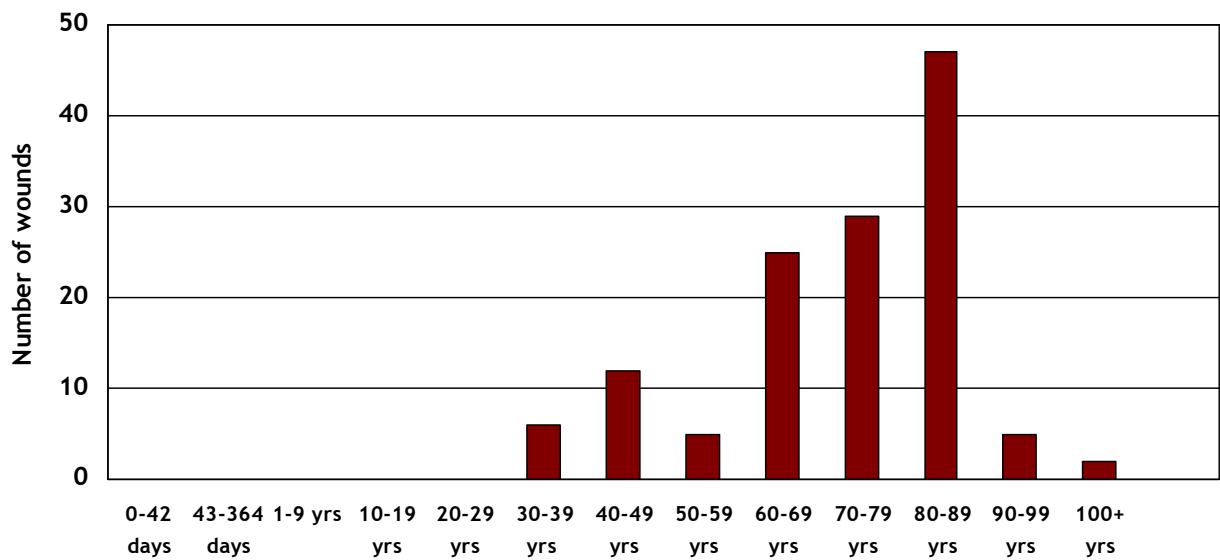


Figure 26 shows the number of identified leg ulcers by age group for the consented population.

Figure 26. Leg ulcers by age group



2.3.4 Leg ulcer category medical specialties

Table 25 and Figure 27 show the proportion of patients within the leg ulcer category by medical specialty.

Table 25. Leg ulcer category by medical specialty

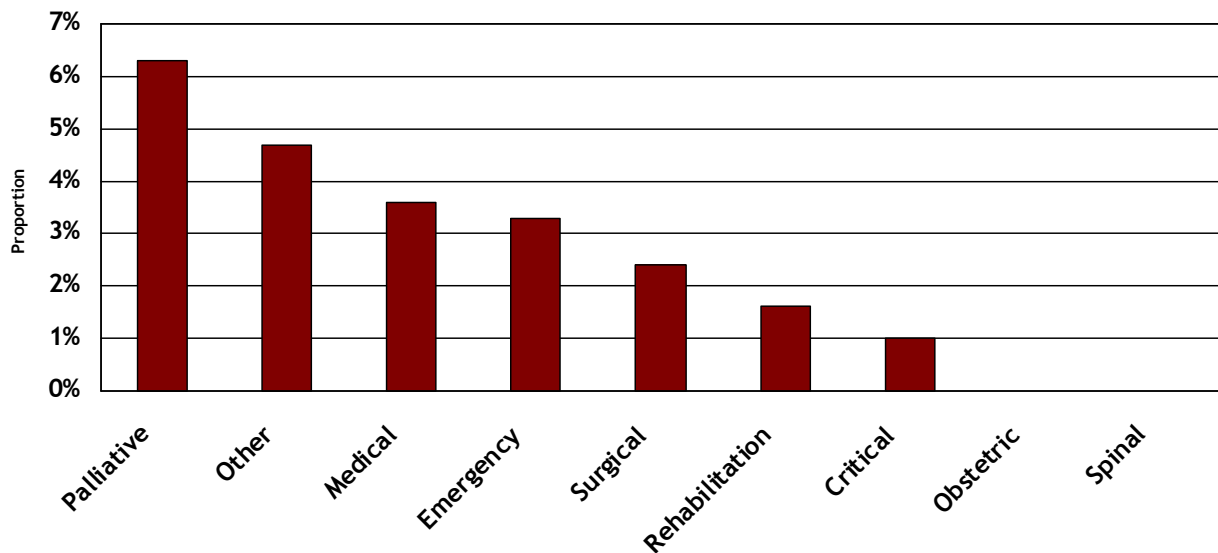
Medical Specialty	Total patients ¹	Patients with 1 or more leg ulcers present	Proportion of patients with leg ulcers ²
Palliative	16	1	6.3%
Other	64	3	4.7%
Medical	1,112	40	3.6%
Emergency	61	2	3.3%
Surgical	763	18	2.4%
Rehabilitation	319	5	1.6%
Critical	191	2	1.0%
Obstetric	220	0	0.0%
Spinal	31	0	0.0%
Total	2,777	71	2.6%

Notes:

¹ n = includes only patients who consented to a skin inspection (2,777)

² Proportion = number of patients with leg ulcers within that medical specialty/total number of patients within that medical specialty

Figure 27. Leg ulcer category by medical specialty



2.3.5 Presence of current documentation in leg ulcer category

Table 26 and Figure 28 show the presence of current documentation within the leg ulcer category.

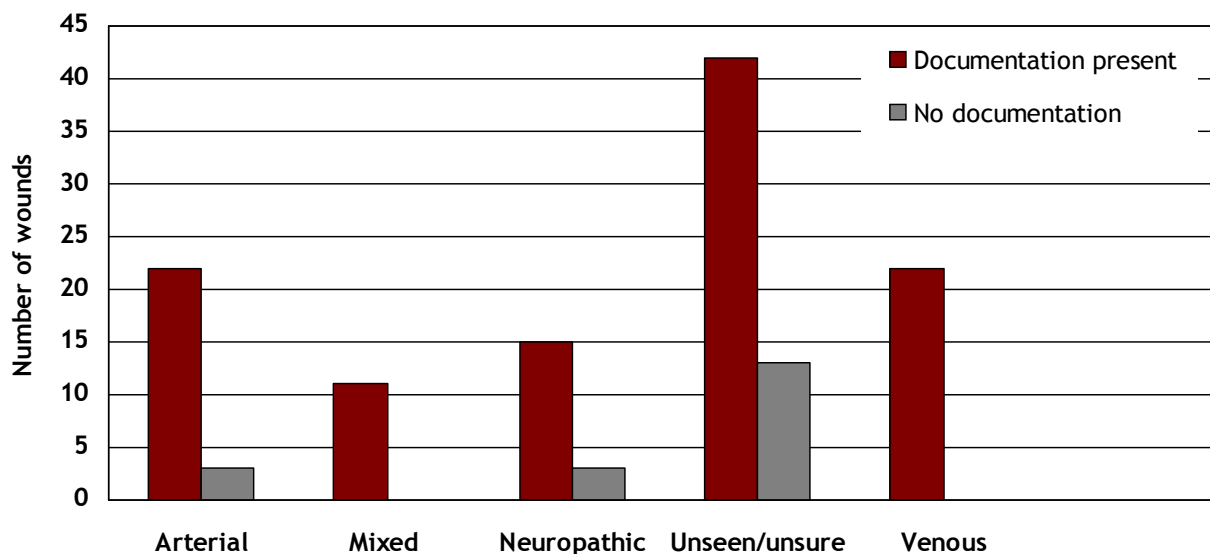
Table 26. Presence of current documentation by leg ulcer category

Leg ulcer category	Wound count	Current documentation present ¹	Proportion with current documentation present	No documentation	Proportion with no documentation
Arterial	25	22	88.0%	3	12.0%
Mixed	11	11	100.0%	0	0.0%
Neuropathic	18	15	83.3%	3	16.7%
Unseen/unsure	55	42	76.4%	13	23.6%
Venous	22	22	100.0%	0	0.0%
Total	131	112	85.5%	19	14.5%

Note:

¹ Current documentation was deemed to be present if any notation relating to the identified wound was found anywhere in the medical record on the survey day or in the 4 days prior to the survey day

Figure 28. Presence of current documentation by leg ulcer category



2.4 Pressure ulcers

2.4.1 Pressure ulcer category patients

Table 27 and Figure 29 show the proportion of patients identified with pressure ulcers and hospital-acquired pressure ulcers within the pressure ulcer category. The National Pressure Ulcer Advisory Panel (NPUAP) pressure ulcer classification system which is endorsed by the Australian Wound Management Association (AWMA) was used to categorise pressure ulcers in this survey. Additional information on the pressure ulcer classification system is in [Appendix H](#). Patients with Stage 1 pressure ulcers accounted for 49.5% (n = 150) of patients with pressure ulcers. Patients with hospital-acquired pressure ulcers accounted for 71.6% (n = 217) of all patients with pressure ulcers.

Table 27. Proportion of patients within the pressure ulcer category

Pressure ulcer category	Patients ¹	Proportion of patients with pressure ulcers ²	Patients with hospital-acquired pressure ulcers ³	Proportion of patients with hospital-acquired pressure ulcers
Patients with Stage 1	150	49.5%	125	41.3%
Patients with Stage 2	147	48.5%	101	33.3%
Patients with Stage 3	21	6.9%	7	2.3%
Patients with Stage 4	22	7.3%	5	1.7%
Patients with unseen/unsure ⁴	16	5.3%	10	3.3%
Total patients with pressure ulcers⁵	303		217	71.6%

Notes:

¹ Patients = number of consented patients identified with 1 or more wounds in the pressure ulcer category

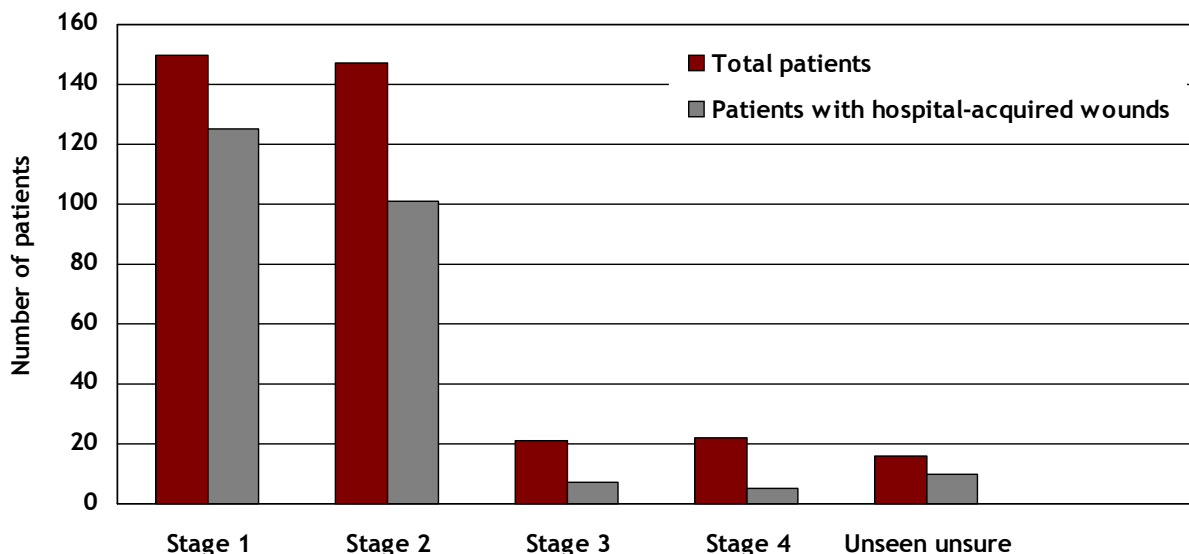
² Proportion = number of consented patients who had 1 or more wounds identified in this pressure ulcer subcategory/total number of consented patients who had 1 or more pressure ulcers identified

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hours of admission; it is presumed the wound was acquired between admission and day of survey

⁴ Unseen/unsure = patients with a pressure ulcer where a definitive subcategory could not be identified due to an intact dressing or unclear documentation

⁵ Patients with multiple pressure ulcers may appear in more than one row

Figure 29. Proportion of patients within the pressure ulcer category



2.4.2 Pressure ulcer category wounds

Table 28 and Figure 30 show the proportion of wounds and hospital-acquired wounds identified within the pressure ulcer category.

Table 28. Proportion of wounds by pressure ulcer subcategory

Pressure ulcer category	Wounds ¹	Proportion of pressure ulcers ²	Proportion of hospital-acquired pressure ulcers ³	Proportion of hospital-acquired pressure ulcers
Stage 1	213	42.4%	177	83.1%
Stage 2	199	39.6%	124	62.3%
Stage 3	26	5.2%	8	30.8%
Stage 4	37	7.4%	8	21.6%
Unseen/unsure ⁴	27	5.4%	11	40.7%
Total pressure ulcers	502	100.0%	328	65.3%

Notes:

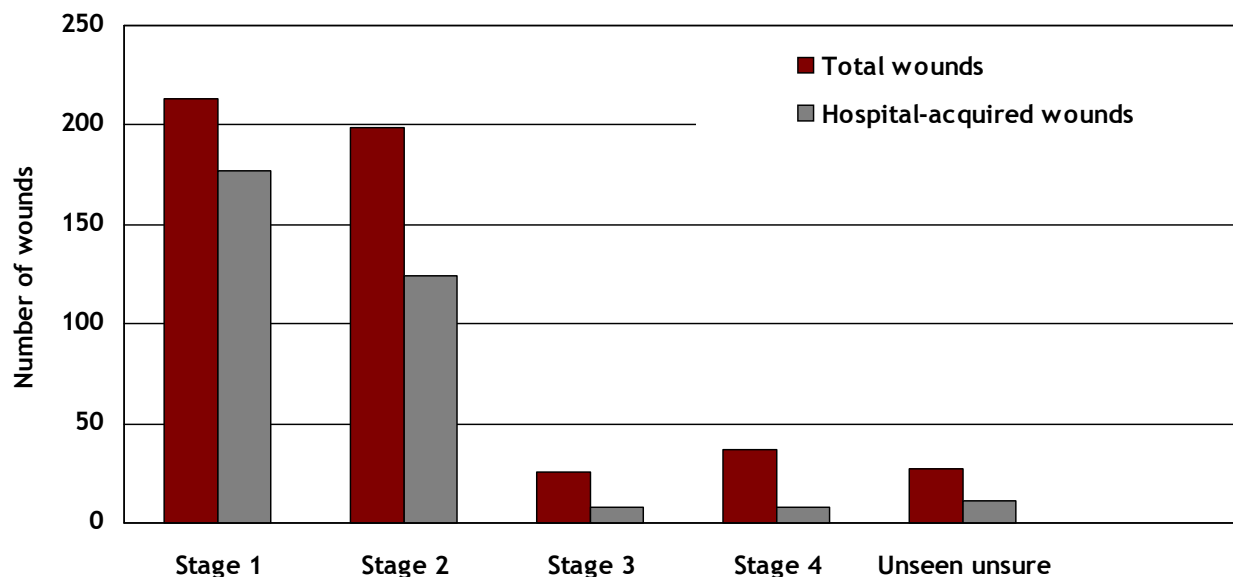
¹ n = number of wounds identified in the pressure ulcer category (n=502)

² Proportion = number of wounds identified in the pressure ulcer subcategory/total number of wounds identified in the pressure ulcer category

³ Hospital-acquired = No documentation recording the presence of the pressure ulcer was identified within the first 24 hours of admission; it is presumed the pressure ulcer was acquired between admission and day of survey

⁴ Unseen/unsure = patients with a pressure ulcer where a definitive subcategory could not be identified due to an intact dressing or unclear documentation

Figure 30. Proportion of wounds by pressure ulcer category



2.4.3 Pressure ulcer category demographic variables

Table 29 shows the proportion of patients who had 1 or more pressure ulcers by age and gender. Figure 31 shows the proportion of patients who had 1 or more pressure ulcers by age.

Table 29. Pressure ulcer category by demographic variables

Variable	Total patients with 1 or more pressure ulcers ²	Proportion of patients with 1 or more wounds within the pressure ulcer category	Total wounds ³	Proportion of wounds within the pressure ulcer category
Age				
0-42 days ¹	4	1.3%	6	1.2%
43-364 days	3	1.0%	4	0.8%
1-9 yrs	2	0.7%	3	0.6%
10-19 yrs	2	0.7%	2	0.4%
20-29 yrs	11	3.6%	16	3.2%
30-39 yrs	12	4.0%	21	4.2%
40-49 yrs	11	3.6%	17	3.4%
50-59 yrs	32	10.6%	52	10.4%
60-69 yrs	39	12.9%	57	11.4%
70-79 yrs	66	21.8%	120	23.9%
80-89 yrs	85	28.1%	138	27.5%
90-99 yrs	34	11.2%	63	12.5%
100+ yrs	2	0.7%	3	0.6%
Total	303	100.0%	502	100.0%
Gender				
Female	151	49.8%	250	49.8%
Male	152	50.2%	252	50.2%
Total	303	100.0%	502	100.0%

Note:

¹ 0-42 days represents the neonatal period of birth to 6 weeks and is included to allow comparisons with other published literature for this group

² n = Number of patients who had 1 or more pressure ulcers (303)

³ n = Number of pressure ulcers (502)

Figure 31. Patients with 1 or more pressure ulcers by age group

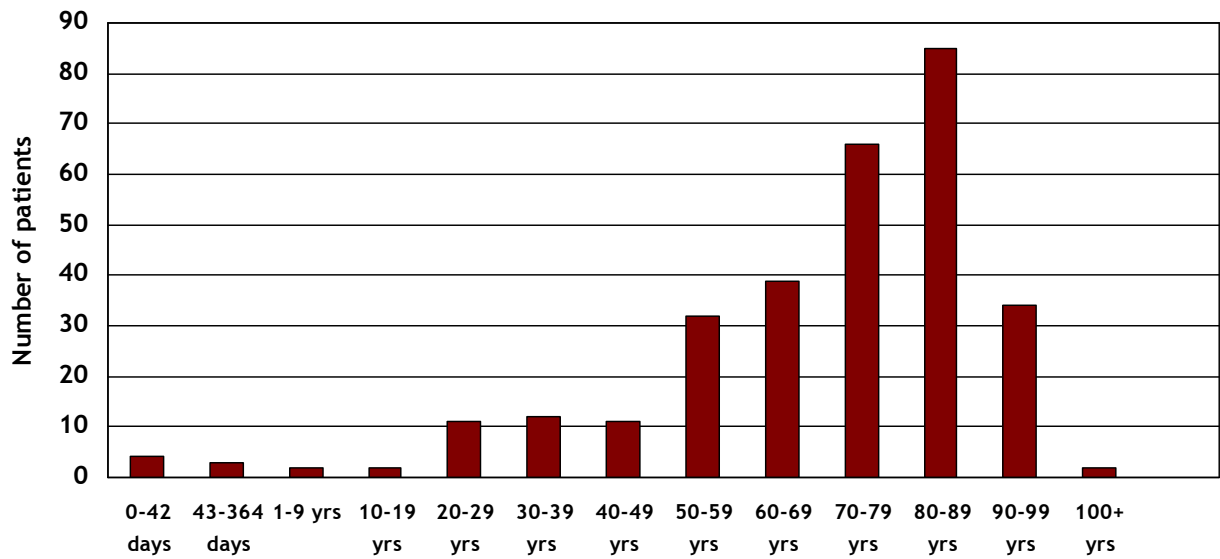
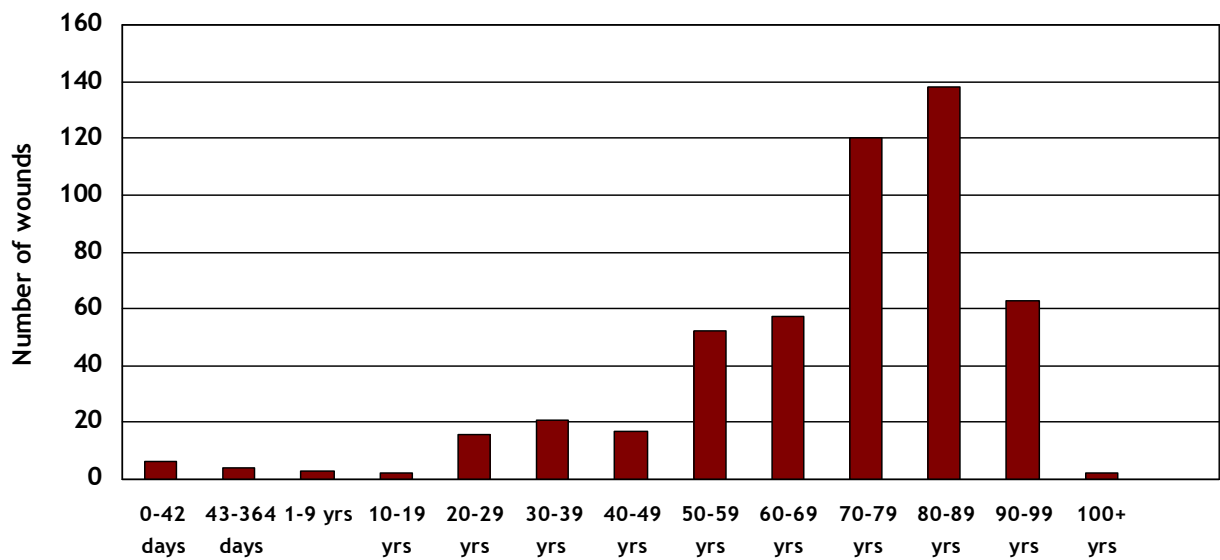


Figure 32 shows the number of identified pressure ulcers by age group for the consented population.

Figure 32. Pressure ulcers by age group



2.4.4 Pressure ulcer category medical specialties

Table 30 and Figure 33 show the proportion of patients within the pressure ulcer category by medical specialty.

Table 30. Pressure ulcer category by medical specialty

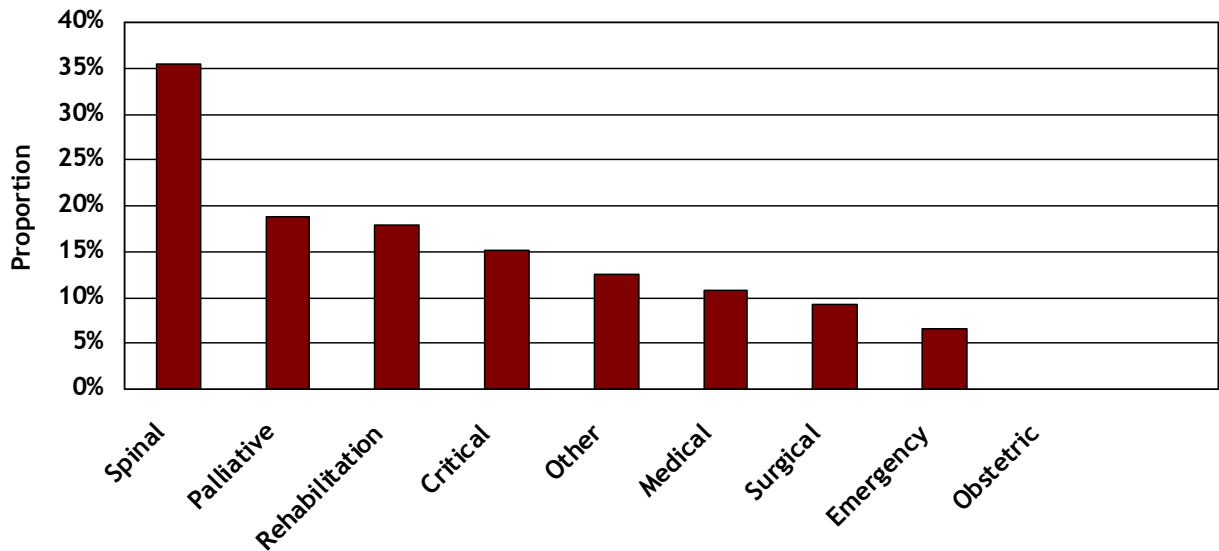
Medical Specialty	Total patients ¹	Patients with 1 or more pressure ulcer present	Proportion of patients with pressure ulcer ²
Spinal	31	11	35.5%
Palliative	16	3	18.8%
Rehabilitation	319	57	17.9%
Critical	191	29	15.2%
Other	64	8	12.5%
Medical	1,112	120	10.8%
Surgical	763	71	9.3%
Emergency	61	4	6.6%
Obstetric	220	0	0.0%
Total	2,777	303	10.9%

Notes:

¹ n = includes only patients who consented to a skin inspection (2,777)

² Proportion = number of patients with acute wounds within that medical specialty/total number of patients within that medical specialty

Figure 33. Pressure ulcer category by medical specialty



2.4.5 Presence of current documentation in pressure ulcer category

Table 31 and Figure 34 show the presence of current documentation within the pressure ulcer category.

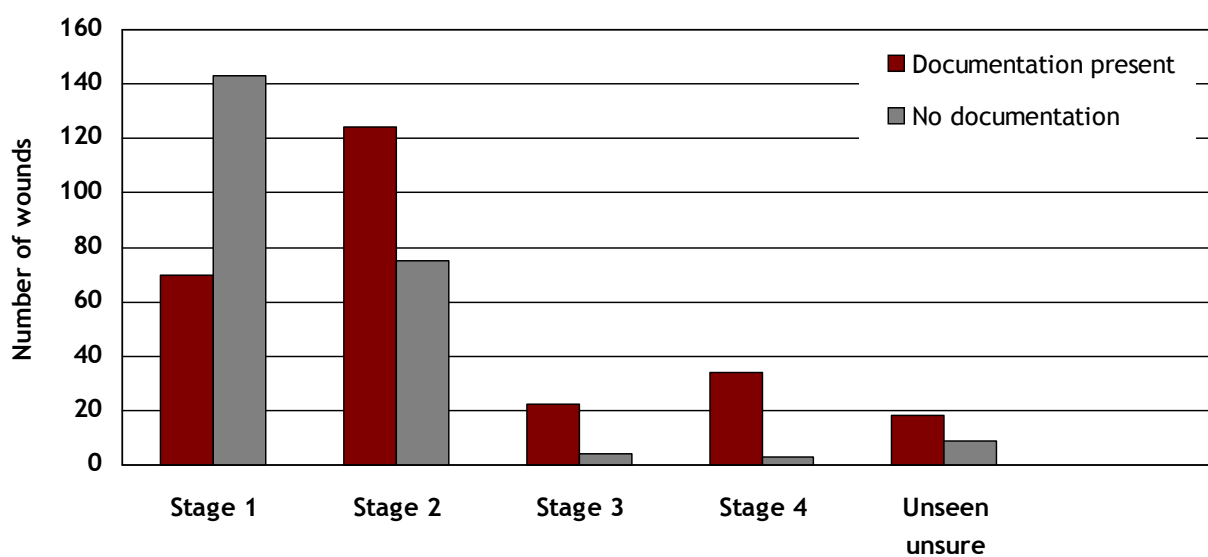
Table 31. Presence of current documentation by pressure ulcer category

Pressure ulcer category	Wound count	Current documentation present ¹	Proportion with current documentation present	No documentation	Proportion with no documentation
Stage 1	213	70	32.9%	143	67.1%
Stage 2	199	124	62.3%	75	37.7%
Stage 3	26	22	84.6%	4	15.4%
Stage 4	37	34	91.9%	3	8.1%
Unseen/unsure	27	18	66.7%	9	33.3%
Total	502	268	53.4%	234	46.6%

Note:

¹ Current documentation was deemed to be present if any notation relating to the identified wound was found anywhere in the medical record on the survey day or in the 4 days prior to the survey day

Figure 34. Presence of current documentation by pressure ulcer category



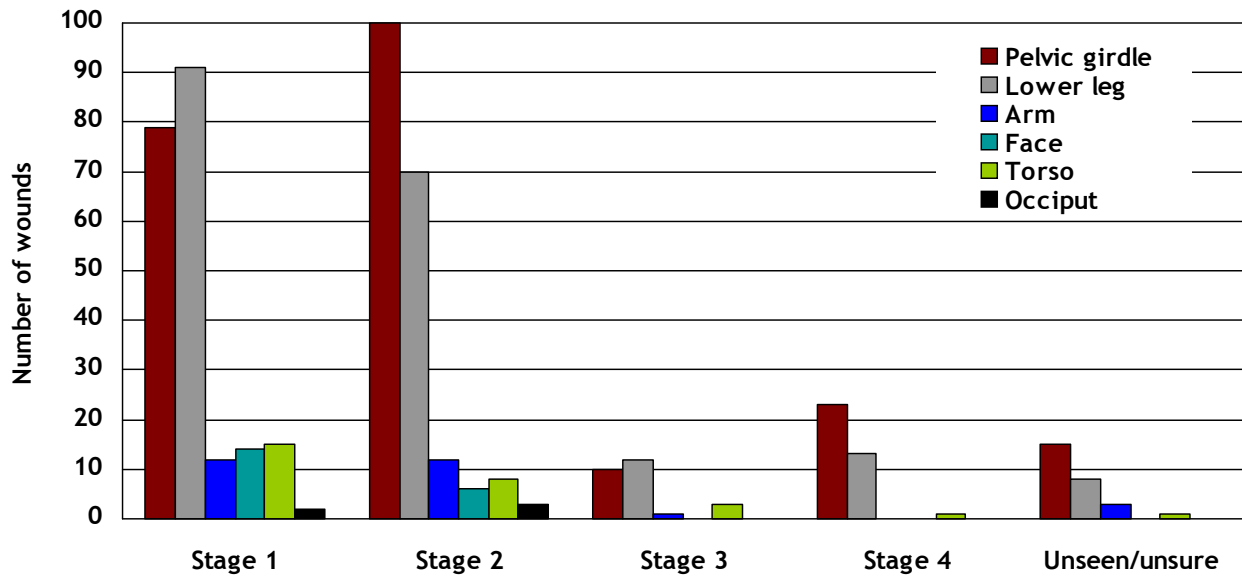
2.4.6 Pressure ulcer anatomical location

Pressure ulcers were grouped into broad anatomical locations by stage as shown in Table 32 and Figure 35. Pressure ulcers located on the pelvic girdle and lower limb accounted for 84% (n = 421) of ulcers found.

Table 32. Anatomical location of pressure ulcers by stage

Pressure ulcer category	Pelvic girdle	Lower leg	Arm	Face	Torso	Occiput	Total
Stage 1	79	91	12	14	15	2	213
Stage 2	100	70	12	6	8	3	199
Stage 3	10	12	1		3		26
Stage 4	23	13			1		37
Unseen/unsure	15	8	3		1		27
Total	227	194	28	20	28	5	502

Figure 35. Anatomical location of pressure ulcers by stage



2.4.7 Pressure ulcer risk assessment

The proportion of patients who had a pressure ulcer risk assessment tool identified within the first 24 hours of admission was 38.6% (n = 1,149). The proportion of each type of risk assessment tools (RAT) in use during the survey are detailed in Table 33 below. The Braden Scale for Predicting Pressure Sore Risk (Braden) was the most commonly used tool 78.5% (n = 902).

Table 33. Pressure ulcer risk assessment

Risk assessment tool (RAT)	Number of patients	Proportion of total patients ¹
RAT present	1,149	38.6%
No RAT present	1,830	61.4%
Total	2,979	100.0%
RAT type		Proportion of total RAT used
Braden	902	78.5%
Norton	106	9.2%
Waterlow	102	8.9%
Other	39	3.4%
Total patients with RAT	1,149	100.0%

Note:

¹ n = all patients whether they consented to a skin inspection or not

Table 34 shows the proportion of each level of predicted risk for developing pressure ulcers for each type of pressure ulcer risk assessment tool used.

Table 34. Pressure ulcer risk assessment and level of risk

RAT used ¹	Number of patients ²	Proportion of patients with this risk class score within the RAT ³ type
Braden		
No risk (>=19)	423	46.9%
At risk (15-18)	281	31.2%
Moderate risk (13-14)	89	9.9%
High risk (10-12)	86	9.5%
Very high risk (<=9)	23	2.5%
Total Braden	902	100.0%
Norton		
At risk (<14)	22	20.8%
Not at risk (>14)	84	79.2%
Total Norton	106	100.0%
Waterlow		
No risk (<10)	43	42.2%
At risk (10+)	28	27.5%
High (15+)	16	15.7%
Very high risk (20+)	15	14.7%
Total Waterlow	102	100.0%
Other tool (includes in-house)		
No risk	8	20.5%
Low risk	3	7.7%
Medium risk	0	0.0%
High risk	2	5.1%
Very high	26	66.7%
Total Other	39	100.0%
Grand total	1,149	

Note:

Identified with RAT = documented evidence of a completed pressure ulcer risk assessment within the first 24 hours of admission

² n = all patients identified with a RAT whether they consented to a skin inspection or not (1,149)

³ Proportion = number of patients identified with this level of risk/total number of patients who were assessed by this type of RAT

2.4.8 Pressure reducing/relieving devices

Table 35 shows the presence of pressure reducing/relieving devices identified for patients with pressure ulcers by stage of pressure ulcer. The survey protocol allowed up to two devices per patient to be recorded if present. No devices were insitu for 54 patients with pressure ulcers (17.8%). Devices were categorised in accordance with the AWMA Guidelines for Prediction and Prevention of Pressure Ulcers [1].

Table 35. Presence of pressure reducing/relieving devices in patients with pressure ulcers

Device ¹	Number of patients (%) ⁴ with pressure ulcers										Total ⁵
	Stage 1 (%)		Stage 2 (%)		Stage 3 (%)		Stage 4 (%)		Unseen/unsure (%)		
Comfort/adjunct	14	9.3%	10	6.8%	1	4.8%	1	4.5%	2	12.5%	24
Cushions & overlays dynamic	16	10.7%	19	12.9%	3	14.3%	7	31.8%	1	6.3%	35
Cushions & overlays static	16	10.7%	13	8.8%	2	9.5%	0	0.0%	1	6.3%	27
Replacement mattresses dynamic	15	10.0%	20	13.6%	4	19.0%	7	31.8%	5	31.3%	40
Replacement mattresses static	62	41.3%	55	37.4%	7	33.3%	5	22.7%	3	18.8%	119
Specialty beds	1	0.7%	3	2.0%	0	0.0%	0	0.0%	1	6.3%	4
No device present	26	17.3%	27	18.4%	4	19.0%	2	9.1%	3	18.8%	54
Total patients^{2,3}	150	100%	147	100%	21	100%	22	100%	16	100%	303

Notes:

¹ Presence of device = only recorded if the device was insitu (on or under the patient) at the time of survey

² n = only those patients who consented to a skin inspection and were identified with a pressure ulcer (303)

³ Patients with more than 1 device may appear in more than 1 row

⁴ % = number of patients with that device/total number of patients with that stage of pressure ulcer

⁵ Patients with multiple pressure ulcers may appear in more than 1 column

2.5 Skin tears

2.5.1 Skin tear category patients

Table 36 and Figure 36 show the number and proportion of patients identified with skin tears within the skin tear category. The STAR Skin Tear Classification System was used to categorise skin tears in this survey. Additional information on the STAR skin tear classification system is in [Appendix H](#). Patients with Category 3 skin tears represented the largest proportion of skin tears identified 32.7% (n = 72).

Table 36. Proportion of patients within the skin tear category

Skin tear category	Patients ¹	Proportion of total patients with skin tears ²	Patients with hospital-acquired skin tears ³	Proportion of patients with hospital-acquired skin tears
Patients with Category 1a	51	23.2%	35	15.9%
Patients with Category 1b	42	19.1%	29	13.2%
Patients with Category 2a	22	10.0%	18	8.2%
Patients with Category 2b	46	20.9%	32	14.5%
Patients with Category 3	72	32.7%	44	20.0%
Patients with Unseen/unsure ⁴	35	15.9%	22	10.0%
Total patients with skin tears⁵	220		153	69.5%

Notes:

¹ Patients = number of consented patients identified with 1 or more wounds in the skin tear category

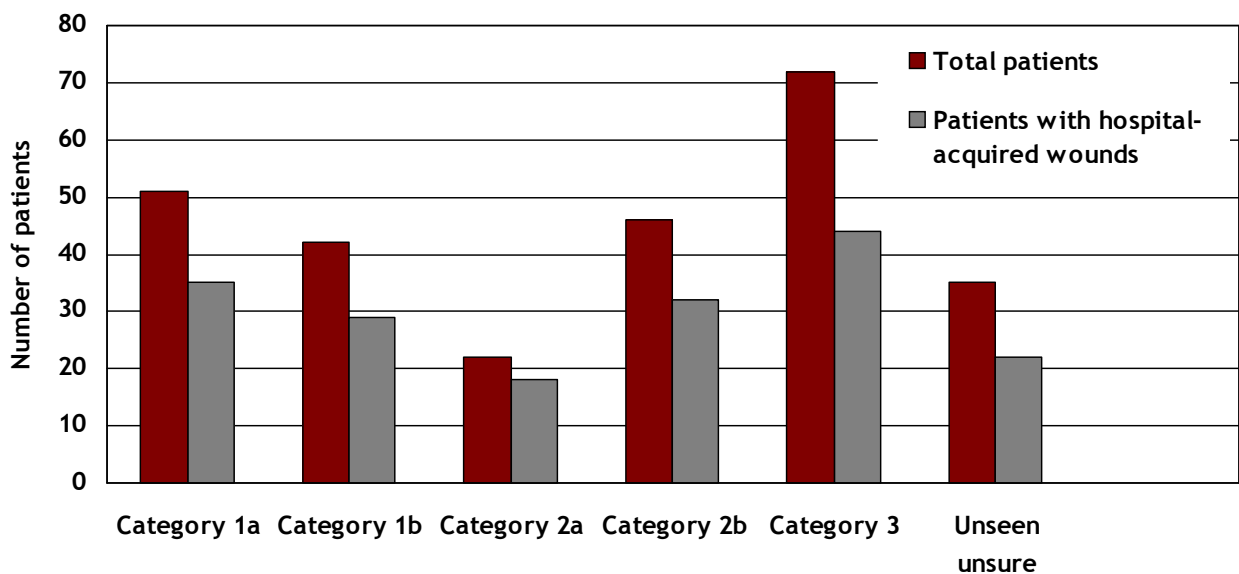
² Proportion = number of consented patients who had 1 or more wounds identified in this skin tear subcategory/total number of consented patients who had 1 or more skin tears identified

³ Hospital-acquired = No documentation recording the presence of the wound was identified within the first 24 hrs of admission; it is presumed the skin tear was acquired between admission and day of survey

⁴ Unseen/unsure = patients with a skin tear where a definitive subcategory could not be identified due to an intact dressing or unclear documentation

⁵ Patients with multiple skin tears may appear in more than one row

Figure 36. Proportion of patients within the skin tear category



2.5.2 Skin tear category wounds

Table 37 and Figure 37 show the proportion of wounds and hospital-acquired wounds identified within the skin tear category.

Table 37. Proportion of wounds by skin tear category

Skin tear category	Wounds ¹	Proportion of skin tears ²	Hospital-acquired skin tears ³	Proportion of hospital-acquired skin tears
Category 1a	62	17.5%	39	62.9%
Category 1b	48	13.6%	33	68.8%
Category 2a	27	7.6%	21	77.8%
Category 2b	56	15.8%	36	64.3%
Category 3	97	27.4%	56	57.7%
Unseen/unsure	64	18.1%	40	62.5%
Total skin tears⁴	354		225	63.6%

Notes:

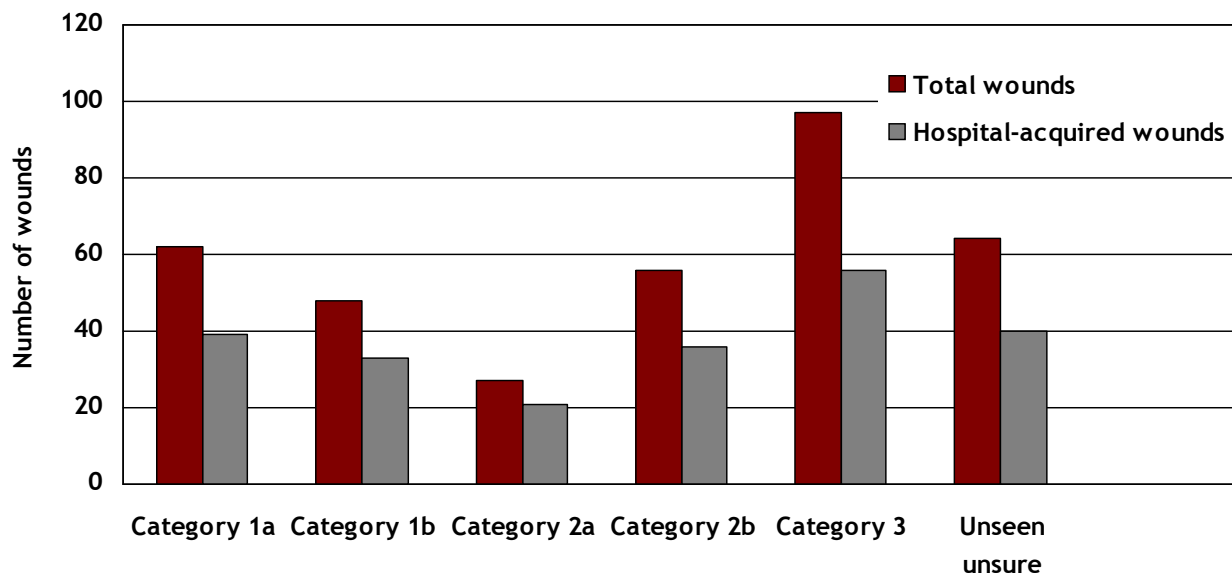
¹ n = number of wounds identified in the skin tear category (354)

² Proportion = number of wounds identified in the skin tear subcategory/total number of wounds identified in the skin tear category

³ Hospital-acquired = No documentation recording the presence of the skin tear was identified within the first 24 hours of admission; it is presumed the skin tear was acquired between admission and day of survey

⁴ Patients with multiple skin tears may appear in more than one row

Figure 37. Proportion of wounds by skin tear category



2.5.3 Skin tear category demographic variables

Table 38 shows the proportion of patients who had 1 or more skin tears by age and gender. Figure 38 shows the proportion of patients who had 1 or more skin tears by age.

Table 38. Skin tear category by demographic variables

Variable	Total patients with 1 or more skin tears ²	Proportion of patients with 1 or more wounds within the skin tear category	Total wounds ³	Proportion of wounds within the skin tear category
Age				
0-42 days ¹	1	0.5%	1	0.3%
43-364 days	0	0.0%	0	0.0%
1-9 yrs	0	0.0%	0	0.0%
10-19 yrs	3	1.4%	3	0.8%
20-29 yrs	1	0.5%	1	0.3%
30-39 yrs	4	1.8%	4	1.1%
40-49 yrs	3	1.4%	4	1.1%
50-59 yrs	10	4.5%	11	3.1%
60-69 yrs	13	5.9%	21	5.9%
70-79 yrs	50	22.7%	68	19.2%
80-89 yrs	90	40.9%	162	45.8%
90-99 yrs	43	19.5%	75	21.2%
100+ yrs	2	0.9%	4	1.1%
Total	220	100.0%	354	100.0%
Gender				
Female	125	56.8%	199	56.2%
Male	95	43.2%	155	43.8%
Total	220	100.0%	354	100.0%

Note:

¹ 0-42 days represents the neonatal period of birth to 6 weeks and is included to allow comparisons with other published literature for this group

² n = Number of patients who had 1 or more skin tears (220)

³ n = Number of skin tears (354)

Figure 38. Patients with 1 or more skin tears by age group

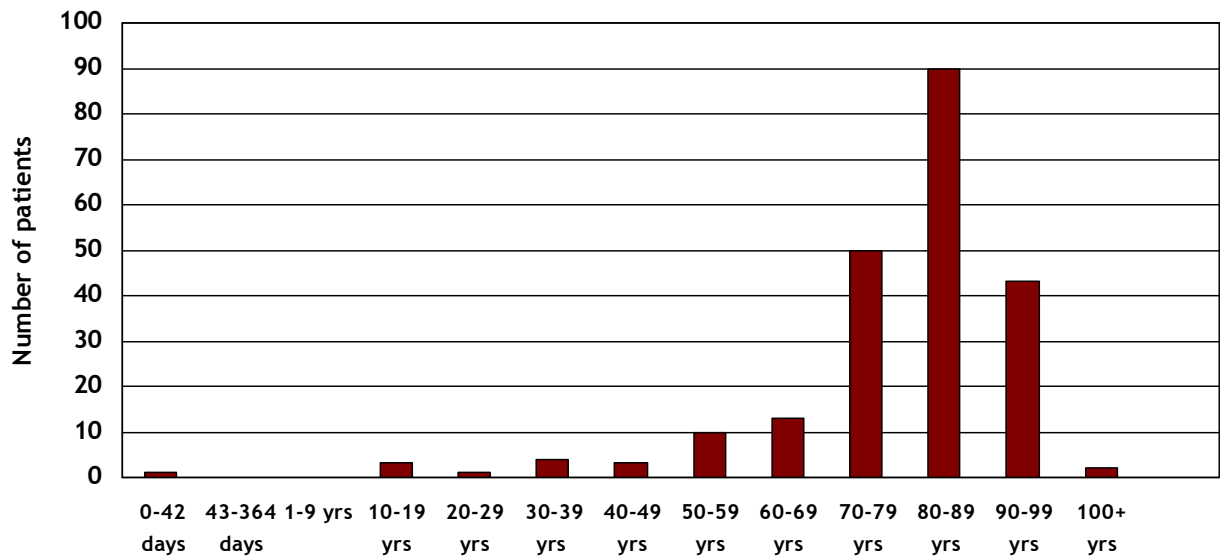
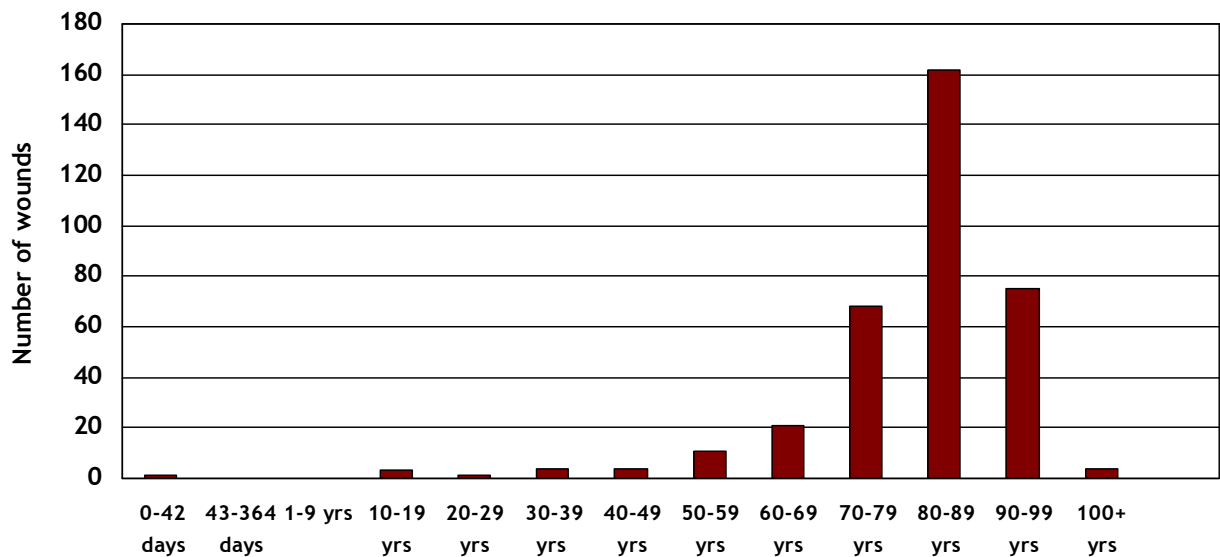


Figure 38 shows the number of identified skin tears by age group for the consented population.

Figure 39. Skin tears by age group



2.5.4 Skin tear category medical specialties

Table 39 and Figure 40 show the proportion of patients within the skin tear category by medical specialty.

Table 39. Skin tear category by medical specialty

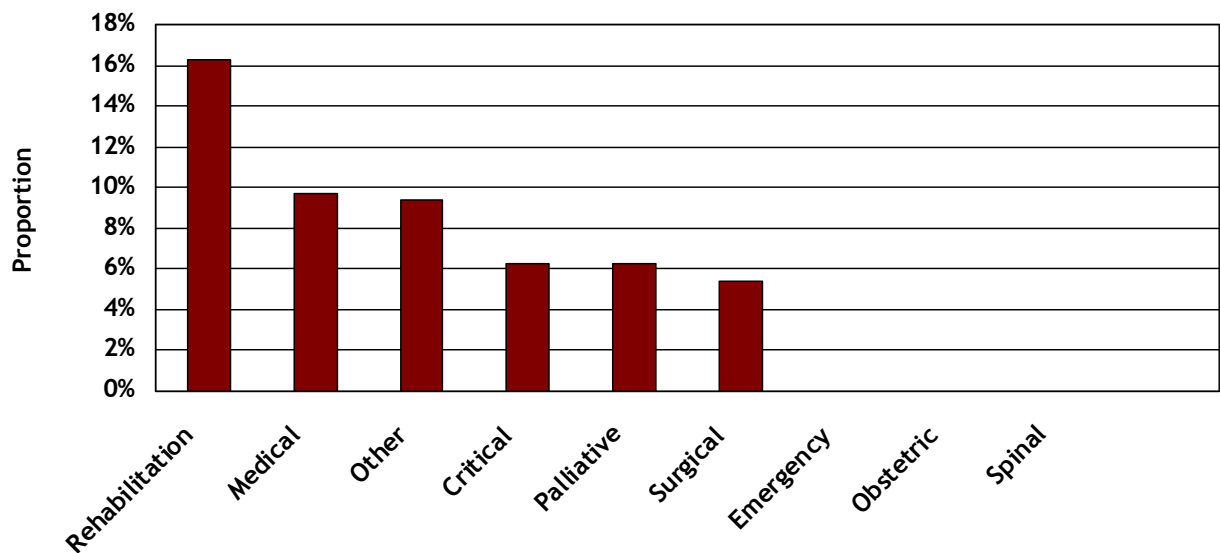
Medical Specialty	Total patients ¹	Patients with 1 or more skin tears present	Proportion of patients with skin tears ²
Rehabilitation	319	52	16.3%
Medical	1,112	108	9.7%
Other	64	6	9.4%
Critical	191	12	6.3%
Palliative	16	1	6.3%
Surgical	763	41	5.4%
Emergency	61	0	0.0%
Obstetric	220	0	0.0%
Spinal	31	0	0.0%
Total	2,777	220	7.9%

Notes:

¹ n = includes only patients who consented to a skin inspection (2,777)

² Proportion = number of patients with skin tears within that medical specialty/total number of patients within that medical specialty

Figure 40. Skin tear category by medical specialty



2.5.5 Presence of current documentation in skin tear category

Table 40 and Figure 41 show the presence of current documentation within the skin tear category.

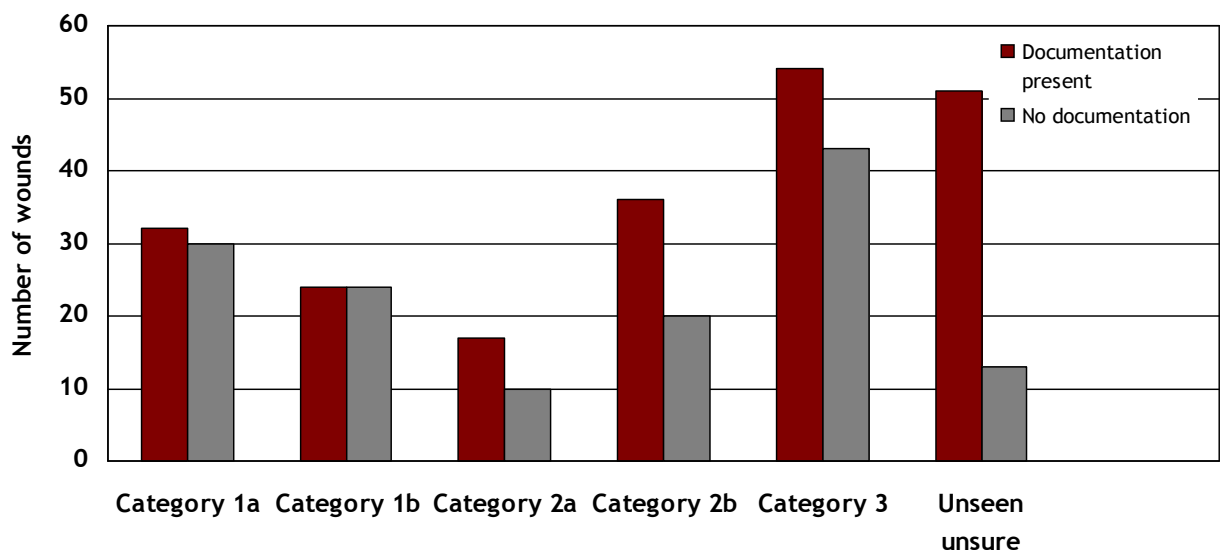
Table 40. Presence of current documentation by skin tear category

Skin tear category	Wound count	Current documentation present ¹	Proportion with current documentation present	No documentation	Proportion with no documentation
Category 1a	62	32	51.6%	30	48.4%
Category 1b	48	24	50.0%	24	50.0%
Category 2a	27	17	63.0%	10	37.0%
Category 2b	56	36	64.3%	20	35.7%
Category 3	97	54	55.7%	43	44.3%
Unseen/unsure	64	51	79.7%	13	20.3%
Total	354	214	60.5%	140	39.5%

Note:

¹ Current documentation was deemed to be present if any notation relating to the identified wound was found anywhere in the medical record on the survey day or in the 4 days prior to the survey day

Figure 41. Presence of current documentation by skin tear category



Part 3 - Contextual data and education program

3.1 Contextual data

All participating health services completed a 21 question contextual data questionnaire. The questions aimed to generate information about factors that contribute to or influence wound management in Western Australian health services. The quantitative responses to this questionnaire are shown below in Table 41.

The Western Australian Office of Safety & Quality in Healthcare is undertaking the SQulRe Clinical Practice Improvement initiative to reduce pressure ulcer development¹. The participation of 24.7% of the health services in this initiative has been recognised as a confounding issue for establishing the baseline prevalence survey results in this area.

Table 41. Quantitative contextual data

Factors	Number of hospitals with a positive response ¹	Proportion of total hospitals with a positive response
Wound management practices		
Existing protocols and policies on wounds in place	55	65%
Evidence-based clinical guidelines (or similar) used for policy development	50	59%
Pressure ulcer risk assessment tool completed on admission	59	69%
Individual wound prevention and management plans developed	80	94%
Patient literature regarding wound prevention and/or care in use	40	47%
Data collection/reporting processes		
Wound data collected as part of clinical risk management program	29	34%
Wound prevention and management education for staff		
Access to education program on wound prevention and management	57	67%
Existing resources		
Executive or senior manager responsible for wound prevention and management	17	20%
Active wound committee	25	29%
Specialist wound management staff with allocated time	10	12%
Static pressure reduction foam mattress replacement program	15	18%
Existing strategies		
Organisation-wide strategy to improve general wound management	23	27%
Organisation-wide strategy to reduce preventable wounds	24	28%
Participation in SQulRe Clinical Practice Improvement in pressure ulcers	21	25%
Wound prevention and management improvement initiatives planned	21	25%

Note:

¹ n = all participating hospitals whether or not they had eligible patients on survey day (n = 85)

¹ Further information on the SQulRe program can be found at <http://www.safetyandquality.health.wa.gov.au/squire/index.cfm>.

3.2 Education and surveyor competency testing

Education on acute wounds, burns, leg ulcers, pressure ulcers, skin tears, malignant and other wounds was provided in 33 locations across WA: 10 metropolitan and 23 country. The survey protocols and data collection instruments were also reviewed.

Surveyors were tested for their understanding of the definitions associated with the pressure ulcer and skin tear classification systems used in the survey and in classifying clinical slides of pressure ulcers and skin tears. A total of 31 questions were set with a pass level of 26 correct responses (84%) required. Two opportunities were provided to pass the competency tests.

For all surveyors who participated in the surveys 80% (n = 220) passed the competency assessment on the first testing and 100% passed the second test.

Core Team members (n = 32) were also required to undergo surveyor education and competency testing plus additional training on the mobile phone data entry process.

3.2 Education program evaluation

An evaluation of the education and competency testing process was conducted. Feedback on the education from surveyors was very positive. Of 220 attendees, 84% completed evaluation forms. The evaluation consisted of 3 questions which utilised a bipolar five point Likert scale (strongly agree to strongly disagree) to measure responses. Results ranged from 93 % to 98.5% positive responses (agree and strongly agree). Provision was made for comment at each of the 3 questions and a final open question requested any further comments regarding the program.

Following consideration of the evaluation feedback minor modifications to the 2008 survey education may be made.