NHS England/ Improvement

National Pressure Ulcer Prevalence and Quality of Care Audit – Cohorts 1 and 2 National Stop the Pressure Programme

Audit report

John Stephenson, Jacqui Fletcher,
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Foreword

Pressure ulcers remain a concerning and mainly avoidable harm associated with healthcare delivery. In the NHS in England, 24,674 patients were reported to have developed a new pressure ulcer between April 2015 and March 2016 (data from Safety Thermometer) and treating pressure damage costs the NHS more than £3.8 million every day. Finding ways to improve the prevention of pressure damage is therefore a priority for policy-makers, managers and practitioners alike.

Whilst the prevalence of pressure ulcers has been measured in many settings over the last 50 years or so, with a small number of exceptions, these have usually been in individual organisations or specific sub-groups of patients. Few studies have sought to review the number of pressure ulcers present or to link this to the level and type of care patients have received. This approach is a significant undertaking, and for this instance has initially been undertaken only in hospital settings, in which it is much easier to capture data on a large scale. There is an intent to further develop the data capture mechanism to encompass other care settings such as community and nursing homes.

This inaugural National Stop the Pressure Ulcer audit of over ten thousand patients in England across 36 hospitals in 18 NHS Trusts has been undertaken against the key elements of the aSSKINg clinical care bundle during 2019/20.

The results provide insight into both the range of pressure ulcers harms seen in individual patients and importantly also the care provision for those patients supporting a deeper understanding of clinical care delivery in practice and an ability to understand opportunities for further quality improvement approaches.

The findings from this audit will now further support quality improvement work being undertaken at a national level by the NSTPP programme. Importantly it will also support individual hospitals to continue their focus to reduce the harm from pressure ulcers for patients.

Ruth May

Chief Nursing Officer for England

Contents

This document was prepared by Dr John Stephenson and Jacqui Fletcher

Dr John Stephenson PhD CMath MIMA

Senior Lecturer in Biomedical Statistics

School of Human and Health Sciences

University of Huddersfield

Jacqui Fletcher RN MSc BSc PG Cert (Edn)

Senior Clinical Advisor NHS England NHS Improvement

National Outcomes

Background information

Patients continue to develop harm within our care, and it is recognised that pressure ulcers are in the top 3 burdensome harms (Slawomirski, Auraaen and Klazinga 2017). Whilst strenuous efforts have been made to reduce occurrence of pressure ulcers through bespoke local and national programmes of work, much of the large-scale activity and national activity has focussed on accurately enumerating the problem, rather than understanding how and why they occur.

Pressure ulcer occurrence is the most often reported outcome in pressure ulcer prevention research (Lechner et al. 2020) and high quality data exists to show that existing data capture mechanisms to highlight that the measurement of frequency of pressure ulcer occurrence has been inaccurate (Fletcher 2012, Coleman 2016). This has led to the introduction of new guidance for definition and measurement to strengthen measurement approaches with Quality Improvement activity at a local level (NHS I 2018a), and an education curriculum to support the endeavour through focussed approaches to the raining of staff (NHS I 2018b). Following the introduction and implementation of this framework, it is important to ascertain whether the level of accuracy of reporting has improved, and if the number of pressure ulcers is reducing.

Whilst the prevalence of pressure ulcers has been measured in many settings over the last 50 years or so (Moore et al. 2019, Li et al. 2020), with a small number of exceptions, these have usually been in individual organisations or specific sub-groups of patients, such as critical care (Barakat-Johnson et al. 2019) or paediatrics (Delmore et al. 2020). Few studies have sought to review the number of pressure ulcers present or to link this to the level and type of care patients have received. This approach is a significant undertaking, and for this instance has initially been undertaken only in hospital settings, in which it is much easier to capture data on a large scale. For this data capture, Trusts were invited to participate; invitations were sent out via the Tissue Viability networks and via Regional Nurses who may have insight into their areas requiring support with pressure ulcer data. There is an intent to further develop the data capture mechanism to encompass other care settings such as community and nursing homes.

The methodology of the audit is described in more detail in Appendix 1.

High level messages from the audit

In total, **10,144** patients from **36** hospitals representing **18** NHS Trusts (see appendix 2) were included in the audit. Over half of the sample was elderly, with 55.2% of patients being over 70 years of age, and 33.5% over 80 years of age.

The number of patients with 1 or more pressure ulcers (PUs), excluding moisture-associated skin damage (MASDs), was **917**.

Hence the overall prevalence of PUs recorded, in terms or proportion of patients with 1 or more PUs, was **9.04%** (95% confidence interval (CI) 8.48% to 9.60%).

Individual Trust proportions ranged from **3.90%** to **27.7%**.

Excluding MASDs, the total number of PUs observed was **1136** (some patients had more than 1 PU).

687 (64.1%) of the PU allocated a category (i.e. 1,2,3,4, US or DTI) were superficial, involving only the skin (categories 1 and 2) a further **220 (20.5%)** were in an evolving category i.e. Unstageable or Deep Tissue Injury (DTI).

587 patients were observed to have 1 or MASDs, corresponding to a prevalence of **5.78%.** There is a strong link between patients having MASD and the presence of incontinence.

Key elements of the aSSKINg bundle were measured. **7086** patients **(69.8%)** had a risk assessment completed within 6 hours. **6576** out of 8076 patients considered to be at risk **(81.4%)** had a care plan in place, but only **5216** patients **(51.3%)** had a planned repositioning regimen in place. **26.9%** of patients were incontinent.

A variety of risk assessment tools were in use, with Waterlow being the most common (used in **56.6%** of cases), Braden/Braden Q the 2nd most popular **(21.3%)** and PURPOSE the 3rd most popular **(9.44%)**.

There continues to be over prescription of equipment with patients being allocated higher specification equipment than their risk score identifies and no clinical reason apparent.

MUST Scores were completed for **88.9%** of the reported patients. **43.6%** of patients received verbal or written information with individual Trust proportions ranging from 7.29% to 65.1%.

Evidence for patients being given or understanding information about pressure ulcer prevention was poor.

Discussion

The overall prevalence of PUs recorded, in terms or proportion of patients with 1 or more PUs, was **9.04%** (95% confidence interval (CI) 8.48% to 9.60%). This is similar to the prevalence estimate of 8.9% obtained from a previous audit in Wales (Clark et al., 2017); slightly higher than the prevalence estimate of 7.1% obtained from a previous audit for the UK (Smith et al., 2016); but lower than the median prevalence (10.8%) obtained in a review of literature from across Europe (Moore et al. 2019) and a global review of pooled data (12.8%) in hospitalised adult patients (Li et al. 2020) . Both of the larger reviews (Li et al. 2020 and Moore et al. 2019) reported a broad range of prevalence's, with Moore et al. identifying a range of 4.6% – 27.2%; very much in line with the range of 3.90% to 27.7% identified in this audit.

The most common sites for PU occurrence were the sacrum and heels. This concurs with data from the systematic review by Li et al. (2020) who found the most affected body sites were the sacrum, heels, and hip. Findings regarding implementation of preventative actions vary considerably between organisations and even between sites within organisations. Identification of these areas is important to the individual organisations as it allows them to focus quality improvement efforts into the areas that may make a difference.

Audit and feedback are relatively easy to implement at a local level and can enhance adherence to preventive measures and reduce pressure ulcers prevalence (Righi et al. 2020). At larger scales, such as this audit, feedback and subsequent sustainable quality improvement can be more difficult; however, key themes have been identified and will be used to inform the National Stop the Pressure Programme work going forward. More localised feedback for quality improvement work will be provided to each organisation based on their individual results (see appendix 3) with support provided where required.

Acknowledgements

The team wish to thank the organisations involved for their participation in the audit particularly the clinical staff that planned and undertook the audit.

Particular thanks must also go to Arjo UK Ltd. and Medstrom Healthcare for the significant support provided with data input and management; and to the various commercial companies who provided staff to support data capture throughout the audit.

Summary of sites involved

18 Trusts across 36 sites participated in the audit over 2 periods in April / May and September 2019. Organisations were spread geographically across England. A range of organisations including Acute Trauma Centres, University Teaching Hospitals, Specialist Hospitals and District General Hospitals were included.

Participating Trusts are listed in Table 1 below, with the number of patients observed, the number and proportion of those patients observed to have 1 or more pressure ulcers, and a 95% confidence interval for the proportion. Trusts are coded in this table in order according to the overall proportion of audited patients with 1 or more pressure ulcers, with 1 representing the Trust with the lowest proportion and 18 representing the Trust with the highest proportion. This coding is applied throughout the document, regardless of the parameter being assessed.

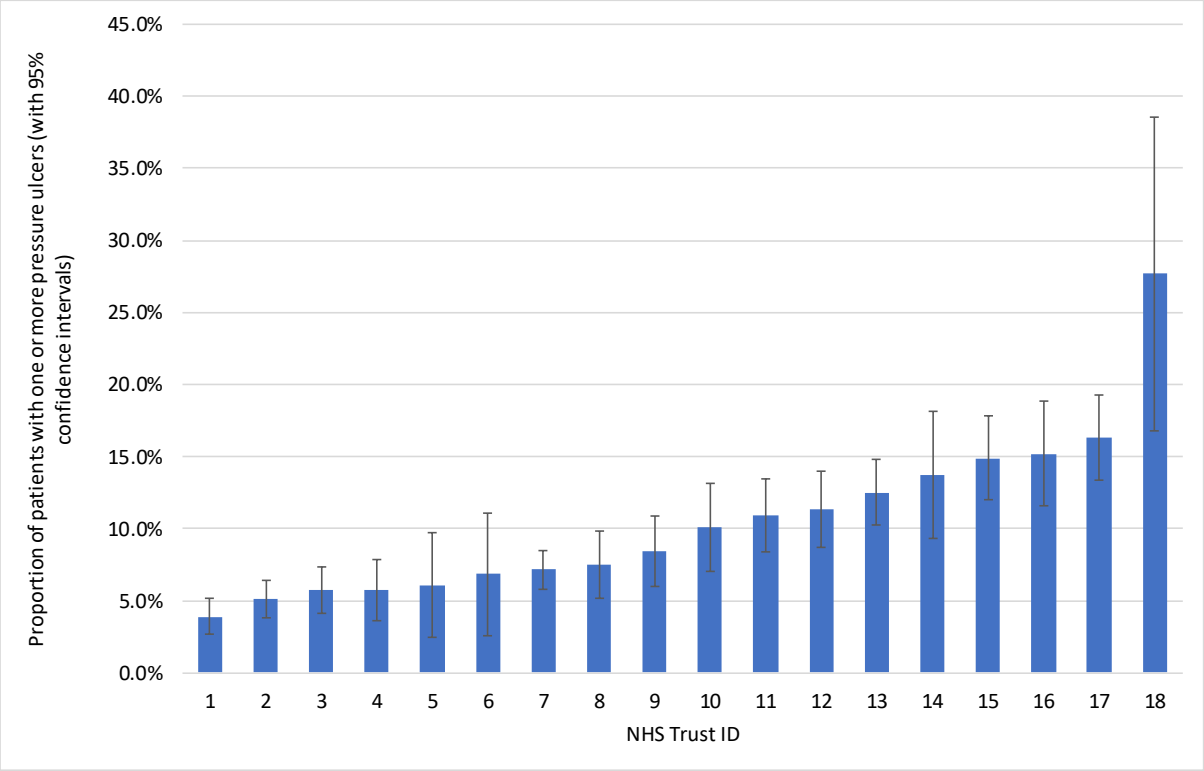
The number of patients in included Trusts ranged from 65 to 1411. It may be expected that data extracted from smaller sites will generally shower greater variability than data extracted from larger sites, and hence are likely to be associated with recordings of extreme values in either direction.

Table 1: numbers of patients audited and numbers and proportions of patients with 1 or more pressure ulcers (with 95% confidence intervals (CIs)): by Trust

Trust Number	Number of patients with 1 or more PUs observed	Number of patients in audit	Proportion of patients with PU	95% CI for proportion
1	38	975	3.90%	(2.68%, 5.11%)
2	53	1034	5.11%	(3.78%, 6.47%)
3	47	821	5.72%	(4.14%, 7.31%)
4	26	452	5.75%	(3.61%, 7.90%)
5	10	165	6.06%	(2.42%, 9.70%)
6	9	132	6.82%	(2.52%, 11.2%)
7	101	1411	7.16%	(5.81%, 8.50%)
8	37	494	7.49%	(5.17%, 9.81%)
9	43	509	8.45%	(6.03%, 10.9%)
10	38	377	10.1%	(7.04%, 13.1%)
11	63	577	10.9%	(8.37%, 13.5%)
12	62	549	11.3%	(8.65%, 13.9%)
13	100	802	12.5%	(10.2%, 14.8%)
14	32	234	13.7%	(9.27%, 18.1%)
15	87	583	14.9%	(12.0%, 17.8%)
16	57	374	15.2%	(11.6%, 18.9%)
17	96	590	16.3%	(13.3%, 19.3%)
18	18	65	27.7%	(16.8%, 38.6%)
ALL TRUSTS	**917**	**10144**	**9.04%**	**(8.48%, 9.60%)**

The proportion of audited patients with 1 or more pressure ulcers is also summarised in Figure 1 below. Error bars indicate 95% confidence intervals for the proportion. Larger confidence intervals, indicating greater uncertainty in parameter estimates, are generally associated with smaller Trusts.

Figure 1: proportions of patients with 1 or more pressure ulcers (with 95% CIs): by Trust



Certain Trusts provided more than one participating site to the audit. Table 2 below summarises the same data by participating site (Table 2).

Table 2: numbers of patients audited and numbers and proportions of patients with 1 or more pressure ulcers (with 95% CIs): by Trust and participating hospital

Trust / Hospital Site	Number of patients with 1 or more PUs observed	Number of patients in audit	Proportion of patients with PU	95% CI for proportion
1	38	975	3.90%	(2.68%, 5.11%)
2	53	1034	5.11%	(3.78%, 6.47%)
3				
a	9	219	4.11%	*1.48%, 6.73%)*
b	38	602	6.31	(4.37%, 8.26%)
Trust total	*47*	*821*	*5.72%*	*(4.14%, 7.31%)*
4				
a	19	321	5.92%	(3.34%, 8.50%)
b	7	131	5.34%	(1.49%, 9.20%)
Trust total	*26*	*452*	*5.75%*	*(3.61%, 7.90%)*
5				
a	3	82	3.66%	(<0.1%, 7.72%)
b	7	84	8.33%	(2.42%, 14.2%)
Trust total	*10*	*166*	*6.02%*	*(2.41%, 9.64%)*
6	9	132	6.82%	(2.52%, 11.2%)
7				
a	27	678	3.98%	(2.51%, 5.45%)
b	14	152	9.21%	(4.61%, 13.8%
c	60	581	10.3%	(7.85%, 12.8%)
Trust total	*101*	*1411*	*7.16%*	*(5.81%, 8.50%)*
8	37	494	7.49%	(5.17%, 9.81%)
9				
a	43	493	8.72%	(6.23%, 11.2%)
b	0	16	0.0%	-
Trust total	*43*	*509*	*8.45%*	*(6.03%, 10.9%)*
10	38	377	10.1%	(7.04%, 13.1%)
11				
a	59	528	11.2%	(8.49%, 13.9%)
b	4	49	8.16%	(0.50%, 15.8%)
Trust total	*63*	*577*	*10.9%*	*(8.37%, 13.5%)*
12				
a	1	14	7.14%	(0.00%, 20.6%)
b	39	298	13.1%	(9.26%, 16.9%)
c	0	12	0.00%	-
d	22	225	9,78%	(5.90%, 13.7%)
Trust total	62	549	11.3%	(8.65%, 13.9%)
13				
a	12	83	14.5%	(6.89%, 22.0%)
b	7	102	6.86%	(1.96%, 11.8%)
c	80	520	15.4%	(12.3%, 18.5%)
d	1	97	1.03%	(<0.1%, 3.04%)
Trust total	*100*	*802*	*12.5%*	*(10.2%, 14.8%)*
14	32	234	13.7%	(9.27%, 18.1%)
15	87	583	14.9%	(12.0%, 17.8%)
16				
a	11	90	12.2%	(5.46%, 19.0%)
b	46	284	16.2%	(11.9%, 20.5%)
Trust total	*57*	*374*	*15.2%*	*(11.6%, 18.9%)*
17				
a	9	59	15.3%	(6.08%, 24.4%)
b	46	201	22.9%	(17.1%, 28.7%)
c	22	104	21.2%	(13.3%, 29.0%)
d	19	227	8.37%	(4.77%, 12.0%)
Trust total	*77*	*364*	*21.2%*	*(17.0%, 25.3%)*
18	18	65	27.7%	(16.8%, 38.6%)
ALL TRUSTS	**917**	**10144**	**9.04%**	**(8.48%, 9.60%)**

The diversity of proportions of PUs observed across different Trusts, and across institutions within the same Trust suggest that institution-level and Trust-level commonalities may be an important factor and possibly should be subject to further investigation by the individual Trusts.

As expected, a high percentage of patients in the audit were elderly, with 55.2% being over the age of 70 years of age and 33.5% over 80. There were slightly more women (51.5%) than men (48.5%) and over a quarter of the patient population were incontinent (26.9%).

Delivery of care to patients

The audit sought to understand not just the number of pressure ulcers that were present, but the care that was being delivered to the patients to prevent pressure ulcers occurring. This was measured against the elements of the aSSKINg framework (see Box 1) and, where existing, NICE Pressure Ulcer standards (Quality Standard QS89 / Preventing Pressure Ulcers in Adults).

Box 1: The aSSKINg Framework (NHS Improvement 2018)

a	Assessment of risk (including NICE Quality Standard 89 (2015) risk assessment within 6 hours of admission)
S	Skin assessment and management
S	Surface selection and use
K	Keeping Moving
I	Incontinence
N	Nutrition and Hydration
g	Giving Information

Patient details are summarised in Table 3 below.

Table 3: patient demographic and treatment summary

Variable	Frequency (valid %)
Age group (years)	
0-9	183 (1.80%)
10-19	166 (1.64%)
20-29	422 (4.16%)
30-39	557 (5.49%)
40-49	632 (6.23%)
50-59	1104 (10.9%)
60-69	1461 (14.4%)
70-79	2217 (21.9%)
80-89	2518 (24.8%)
90-99	863 (8.51%)
100+	21 (0.20%)
Sex	
Male	4914 (48.5%)
Female	5226 (51.5%)
Risk assessment completed within 6 hours	
Yes	7086 (69.9%)
No	2300 (22.7%)
Not known	758 (7.47%)
Skin assessment completed by audit team	
Yes	7856 (77.4%)
No	2288 (22.6%)
Patient positioned on dynamic/hybrid mattress	
Yes	4701 (46.3%)
No	5443 (53.7%)
Patient positioned on pressure re-distributing cushion	2400 (23.7%)
Yes	7744 (76.3%)
No	
Patient given heel protection equipment	
Yes	1874 (18.5%)
No	8270 (81.5%)
At-risk patients only: Care plan in place	
Yes	6576 (81.4%)
No	1500 (19.6%)
Patient has planned re-positioning regimen	
Yes	5216 (51.4%)
No	4928 (49.6%)
Patient has moving/handling equipment at bedside	3927 (61.9% of applicable cases)
Yes	2414 (38.1% of applicable cases)
No	3803
Not applicable	
Patient is incontinent	
Yes	2732 (26.9%)
No	7412 (73.1%)

Key factors in the aSSKINg assessment are given by Trust in Table 4 below.

Table 4: key elements of care by Trust

Trust	Number of patients in audit	Risk assessment completed within 6 hours	Skin assessment completed by audit team within 24 hours (valid records only)	Care plan in place (e.g. SSKIN bundle) for patients at risk	Patient has planned re-positioning regimen
1	975	665 (68.2%)	723/935 (77.3%)	444/594 (74.8%)	176 (18.1%)
2	1034	779 (75.3%)	941/989 (95.1%)	800/891 (89.8%)	742 (71.8%)
3	821	557 (67.8%)	648725 (89.4%)	523/664 (78.8%)	283 (34.5%)
4	452	383 (84.7%)	425/442 (96.2%)	389/406 (95.8%)	301 (66.6%)
5	165	125 (75.8%)	142/161 (88.2%)	76/120 (63.3%)	46 (27.7%)
6	132	118 (89.4%)	98/127 (77.2%)	105/111 (94.6%)	29 (22.0%)
7	1411	724 (51.3%)	1057/1380 (76.6%)	840/1112 (75.5%)	784 (55.6%)
8	494	426 (86.2%)	466/490 (95.1%)	416/436 (95.4%)	407 (82.4%)
9	509	292 (57.4%)	417/495 (84.2%)	391/443 (88.3%)	228 (44.8%)
10	377	319 (84.6%)	357/375 (95.2%)	235/343 (68.5%)	203 (53.8%)
11	577	442 (76.6%)	444/524 (84.7%)	293/328 (89.3%)	234 (40.6%)
12	549	341 (62.1%)	433/484 (89.5%)	292/427 (68.4%)	279 (50.8%)
13	802	545 (68.0%)	694/731 (94.9%)	382/587 (65.1%)	298 (37.2%)
14	234	176 (75.2%)	198/218 (90.8%)	170/191 (89.0%)	191 (81.6%)
15	583	356 (61.1%)	465/550 (84.6%)	343/476 (72.1%)	404 (69.3%)
16	374	342 (91.4%)	359/368 (97.6%)	352/359 (98.1%)	321 (85.8%)
17	590	447 (75.8%)	564/580 (97.2%)	460/524 87.8%)	234 (39.7%)
18	65	50 (76.9%)	60/65 (92.3%)	65/65 (100.0%)	65 (100.0%)
ALL TRUSTS	**10144**	**7086 (69.9%)**	**8490/9638 (88.1%)**	**6576/8076 (81.4%)**	**5216 (51.4%)**

Assessment of risk

Risk assessment tools used

A variety of risk assessment tools are in use across England. There is little evidence to support which is the most appropriate, with the recent 2019 guidance (EPUAP et al., 2019) once again not making a recommendation for any particular tool. As the tools describe risk in different ways, data has to be presented by the specific tool.

Table 5 summarises the risk assessment tool used in each hospital concerned. The primary tool used in each Trust is highlighted. It can be seen that almost all risk assessments are conducted using the Waterlow, Braden or PURPOSE T tools. Figure 2 provides this information graphically by Trust: Figure 3 illustrates the distribution of the frequency of overall tool use.

Table 5: risk assessment tools used (by Trust)

Trust	**Risk assessment tool used (number of patients used)**						
	Braden / Braden Q	**Glamorgan**	**Maternity**	**PURAT**	**PURPOSE T**	**Waterlow**	**Unknown/other**
1	34 (3.49%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**891 (91.4%)**	50 (5.13%)
2	45 (4.4%)	15 (1.5%)	23 (2.2%)	**915 (88.5%)**	26 (2.5%)	0 (0.0%)	10 (1.0%)
3	48 (5.8%)	0 (0.0%)	17 (2.1%)	0 (0.0%)	0 (0.0%)	**712 (86.7%)**	44 (5.4%)
4	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**441 (97.6%)**	11 (2.43%)
5	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**154 (91.8%)**	12 (7.23%)
6	**132 (100.0%)**	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
7	0 (0.0%)	0 (0.0%)	1 (0.1%)	0 (0.0%)	0 (0.0%)	**1382 (97.9%)**	28 (2.0%)
8	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**491 (99.4%)**	3 (0.6%)
9	0 (0.0%)	9 (1.77%)	21 (4.13%)	0 (0.0%)	0 (0.0%)	**477 (93.7%)**	2 (0.39%)
10	0 (0.0%)	4 (1.06%)	0 (0.0%)	0 (0.0%)	**362 (96.0%)**	2 (0.53%)	9 (2.39%)
11	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**570 (98.8%)**	0 (0.0%)	7 (1.2%)
12	**512 (93.3%)**	0 (0.0%)	20 (3.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (0.7%)
13	**798 (99.5%)**	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (0.50%)
14	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**219 (93.6%)**	15 (6.4%)
15	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	18 (3.09%)	**540 (92.6%)**	25 (4.29%)
16	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**373 (99.7%)**	1 (0.27%)
17	**590 (100.0%)**	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
18	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	**65 (100.0%)**	0 (0.0%)
ALL TRUSTS	**2159 (21.3%)**	**46 (0.5%)**	**82 (0.8%)**	**915 (9.0%)**	**958 (9.4%)**	**5746 (56.6%)**	**238 (2.3%)**

Figure 2: risk assessment tools used (by Trusts)

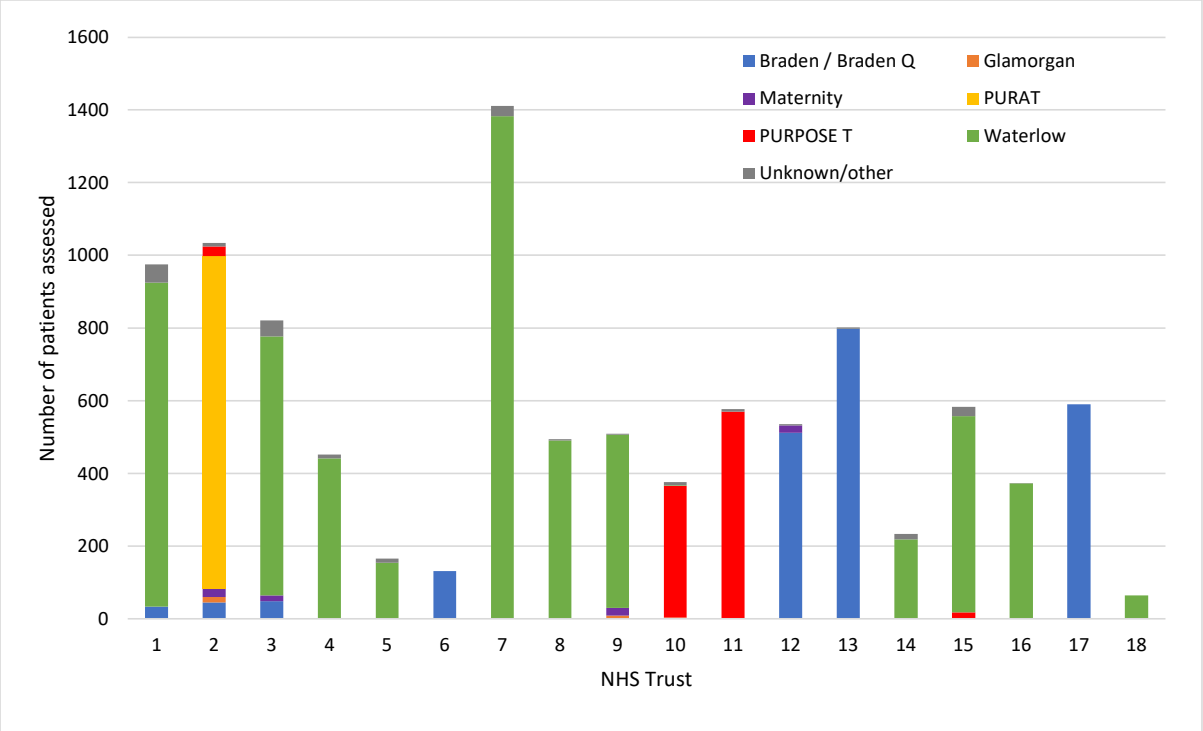


Figure 3: risk assessment tools used (all Trusts)

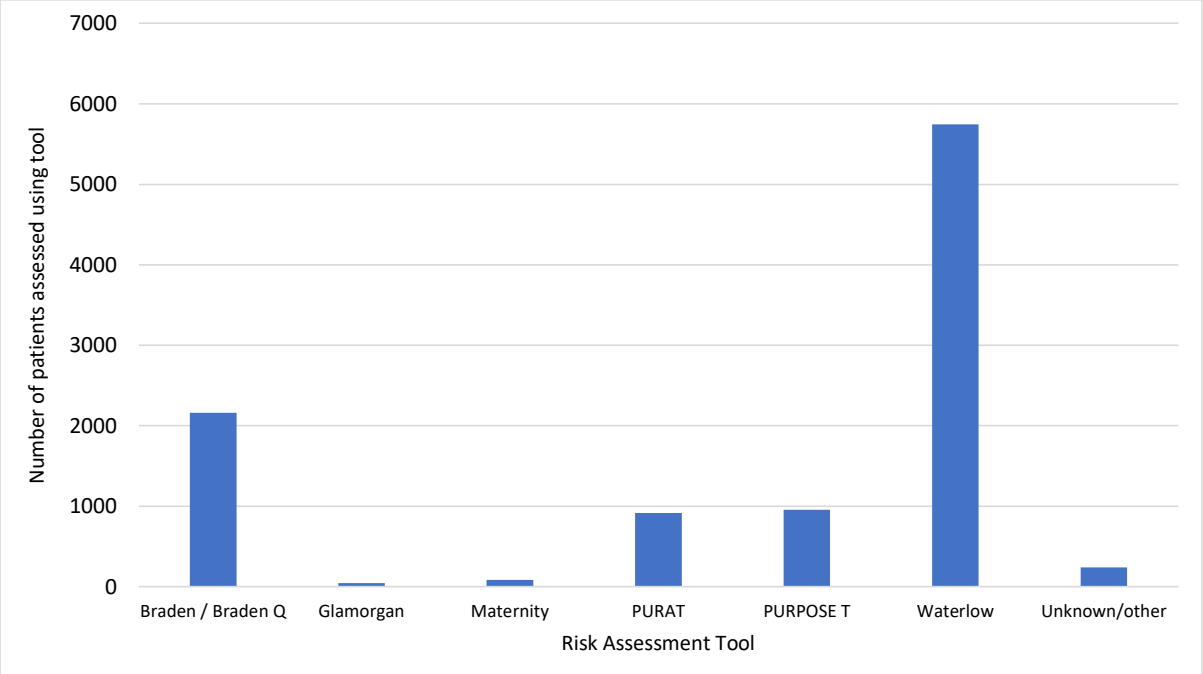


Figure 4(a): distribution of risk category frequencies for patients assessed using the Braden tool

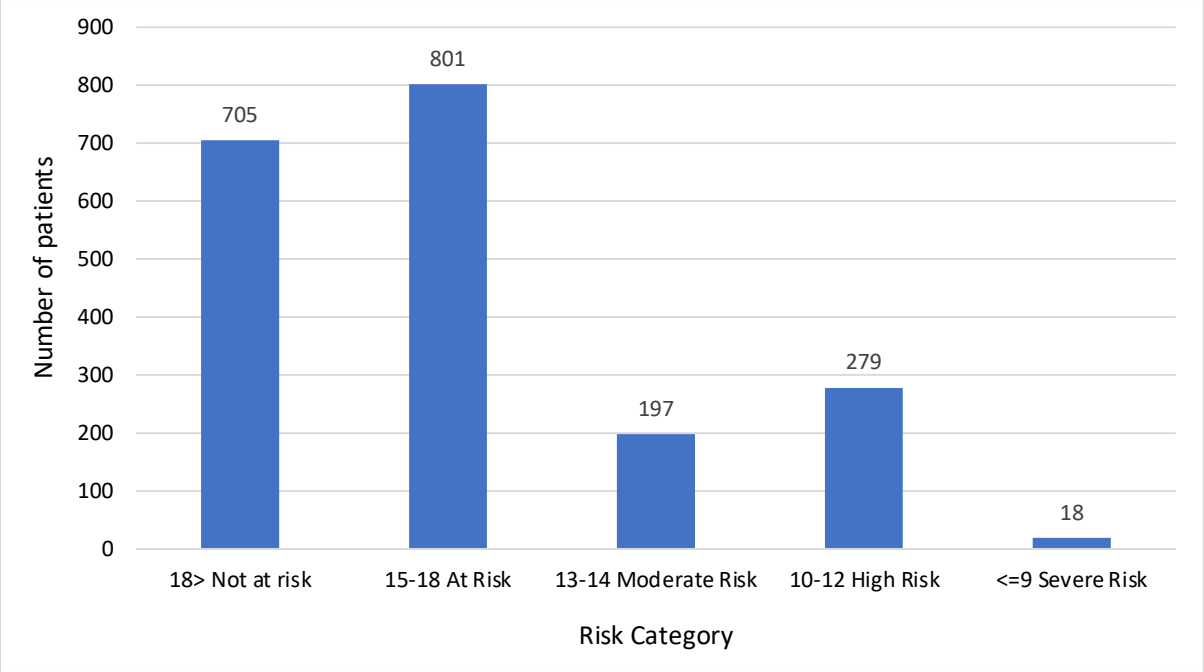


Figure 4(b): distribution of risk category frequencies for patients assessed using the Braden Q tool

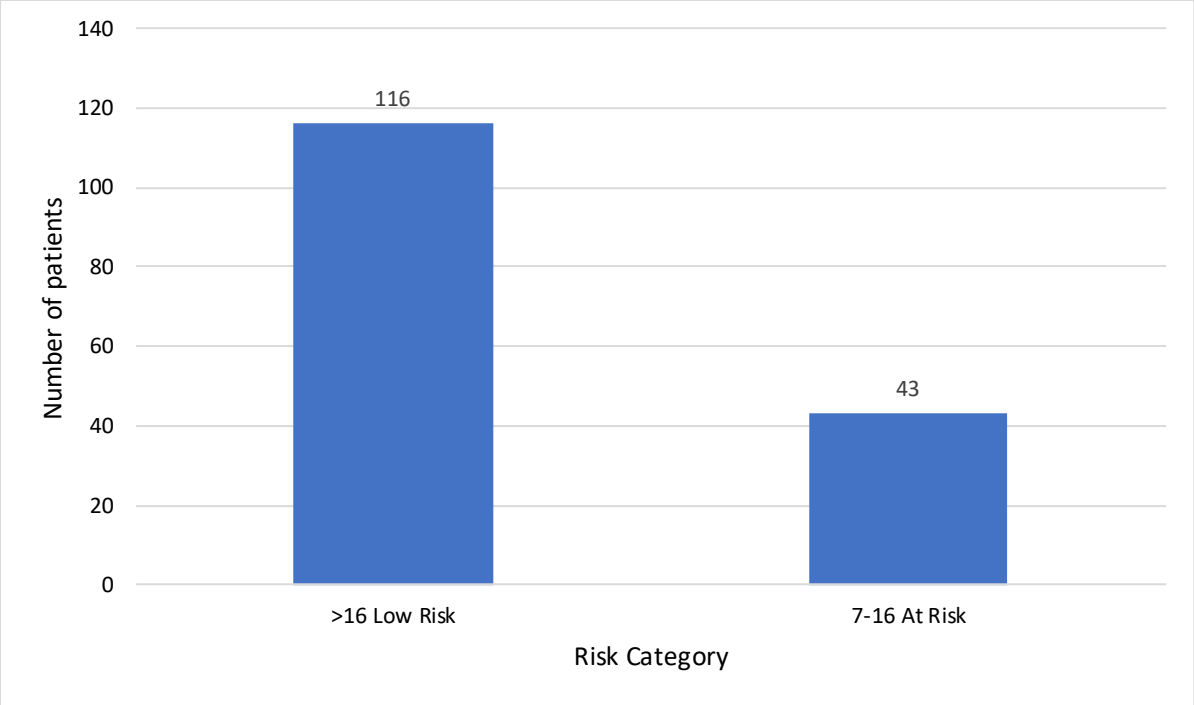


Figure 4(c): distribution of risk category frequencies for patients assessed using the Glamorgan tool

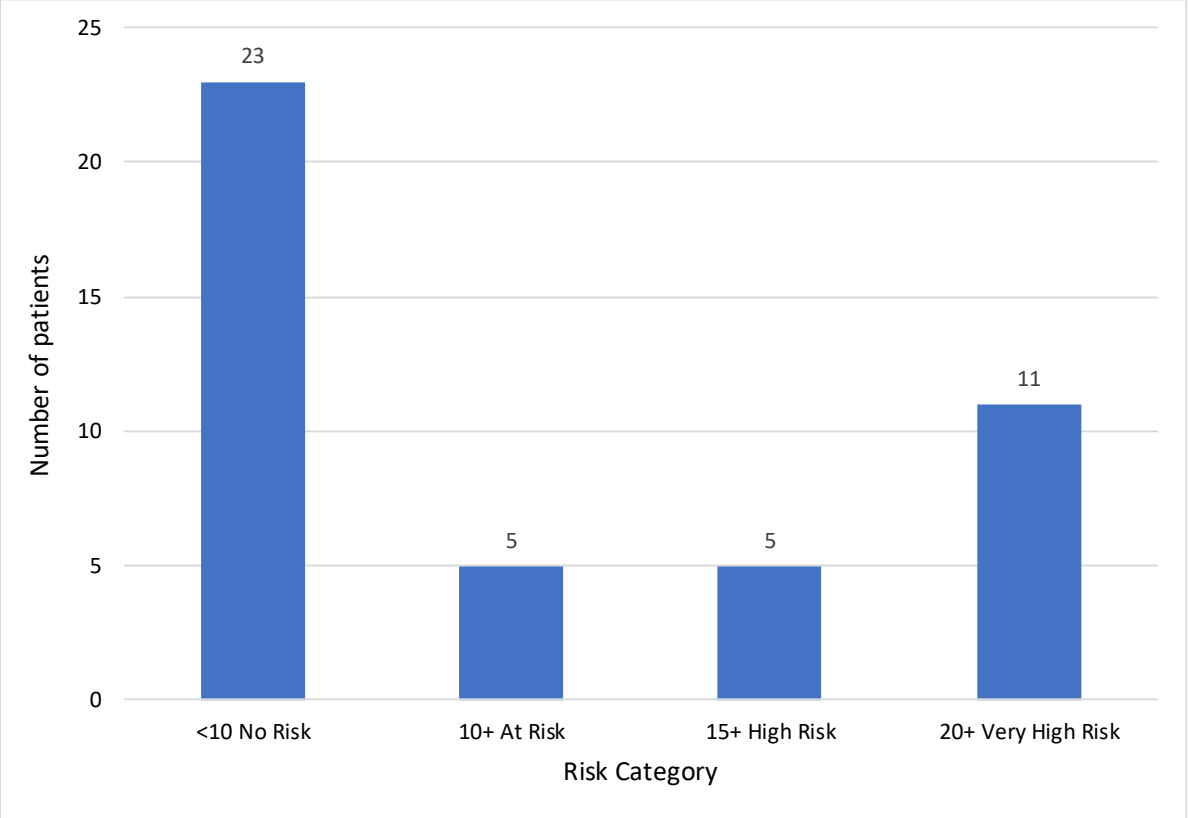


Figure 4(d): distribution of risk category frequencies for patients assessed using the Maternity tool

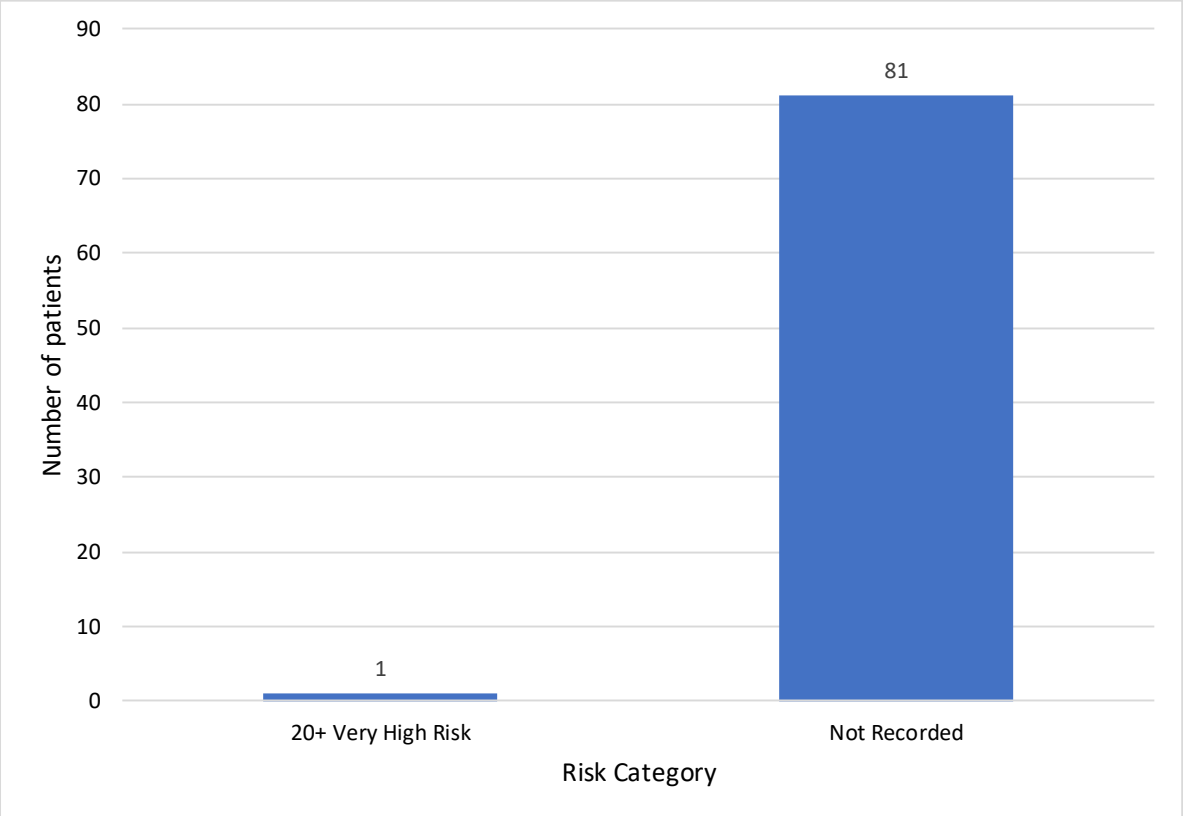


Figure 4(e): distribution of risk category frequencies for patients assessed using the PURAT tool

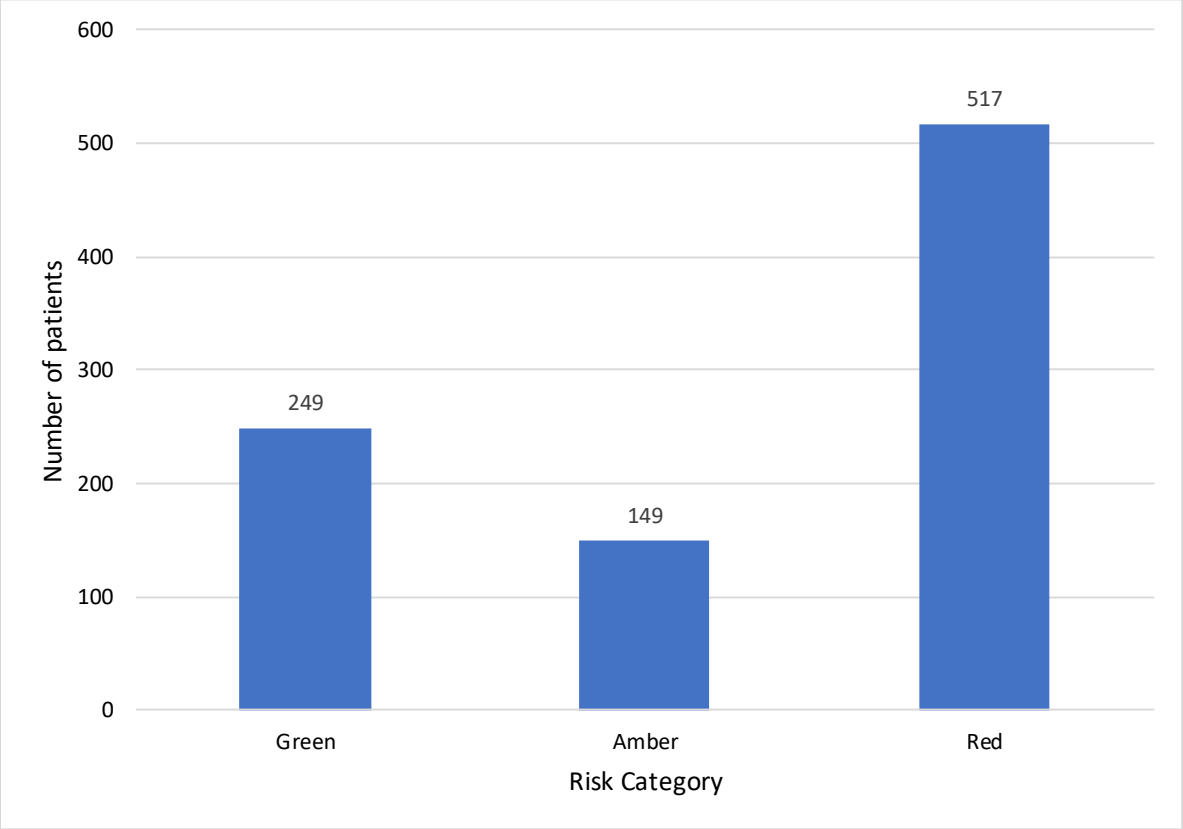


Figure 4(f): distribution of risk category frequencies for patients assessed using the PURPOSE T tool

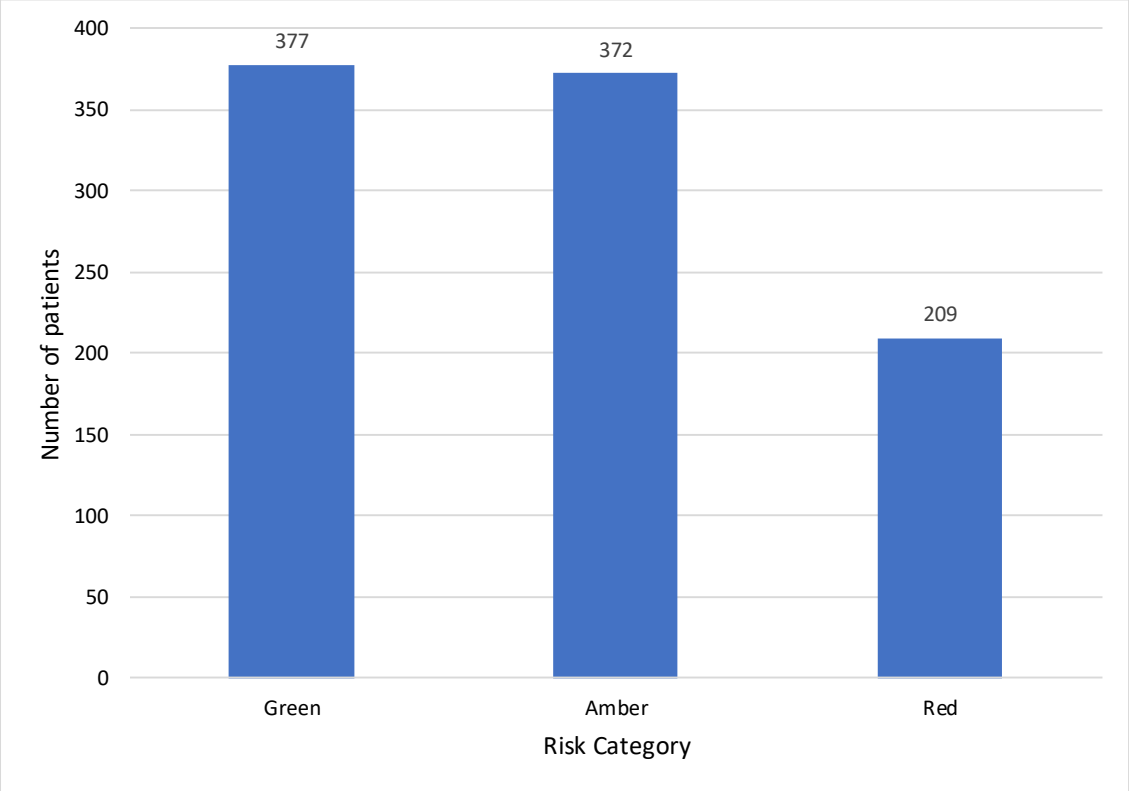
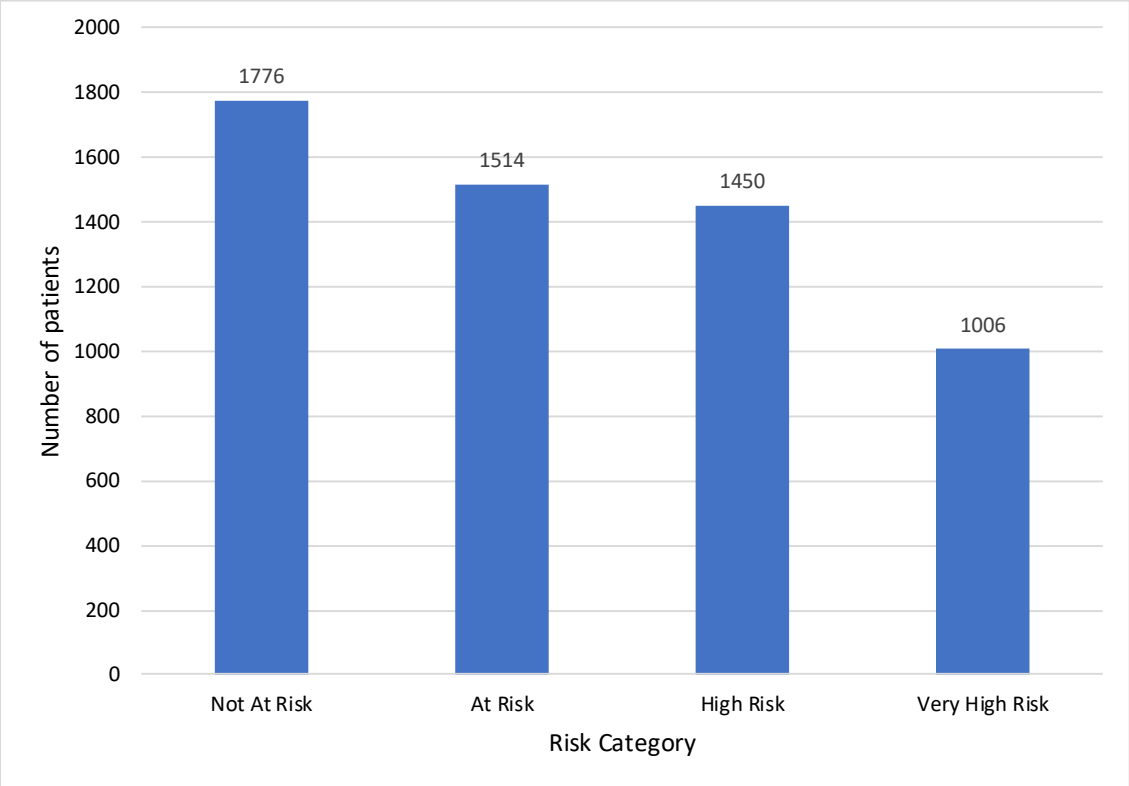


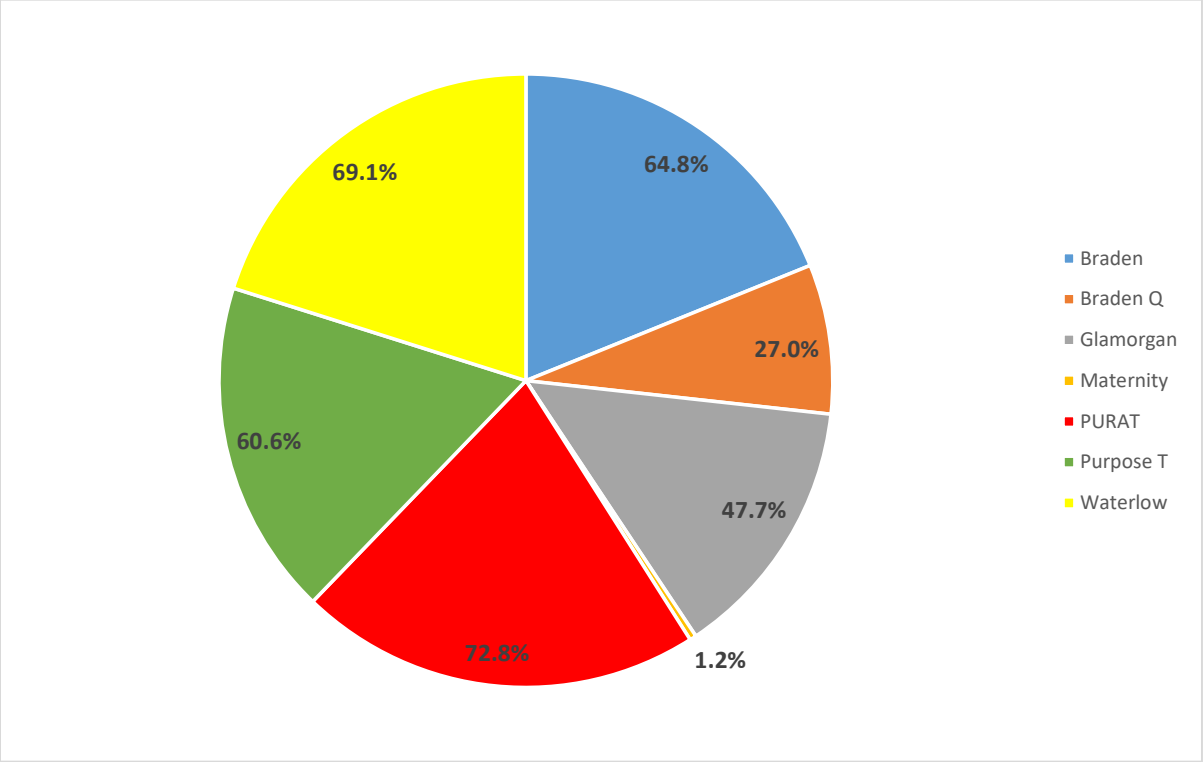
Figure 4(g): distribution of risk category frequencies for patients assessed using the Waterlow tool



It was not possible to assign a risk category to patients assessed using an unknown risk assessment tool.

Figure 4 (h) below illustrates the proportion of patients designated to be at risk according to the tool used. The proportion applies to a category created by merging all categories on each tool other than “Not at risk” or “Green”.

Figure 4(h): distribution of proportions of patients assessed to be at risk by tool used



Timing of risk assessment

The time of completion of the risk score was recorded in 8162 patients (80.5% of all patients; 82.2% of patients with a risk score recorded). Timings for remaining patients were either reported as not known or left blank. Of those patients for whom a timing was recorded, 6102 patients (74.8%) had a risk score completed within 6 hours of admission; and 2060 patients (25.2%) had a risk score completed after 6 hours.

There were some differences between the risk assessment tools utilised in terms of the proportion of risk assessments completed within 6 hours, as summarised in Table 6 below. In one organisation a space for the time was not provided on the form which increased the percentage that did not meet the 6-hour target (in many instances a time was documented free hand or was obvious from other documentation).

Table 6: completion of risk assessment within 6 hours (by risk assessment tool	**Risk assessments recorded as complete within 6 hours**	**Risk assessments recorded but not completed within 6 hours**	**Proportion of risk assessments recorded as complete within 6 hours**
Braden	1338	503	72.7%
Braden Q	58	44	56.9%
Glamorgan	25	2	92.6%
Maternity	21	0	100.0%
PURAT	361	76	82.6%
PURPOSE T	633	80	88.8%
Waterlow	3624	1347	72.9%

The NICE Quality Standard 89 (NICE 2015) states that risk assessment should be completed within 6 hours. In several previous audits achieving this has been recorded as a yes / no question; however, it was felt useful to determine the actual time frame within which most risk assessment occurred. A large percentage (74.8%) were completed within the NICE standard, with a further 18.7% being completed within 24 hours (i.e. 93.5% of all recorded risk assessments completed within 24 hours).

The times of completion (by tool) are summarised in Table 7 below, with colour coding to indicate the severity of the risk.

Table 7: times of completion of risk assessment (by risk assessment tool)

Tool	**Time of completion of risk assessment (hours)**						
	Less than 2	**2-4**	**4-6**	**6-12**	**12-24**	**24-48**	**Over 48**
Braden	624	391	323	250	134	44	75
Braden Q	26	26	6	12	18	6	8
Glamorgan	2	1	22	1	1	22	0
Maternity	14	1	6	0	0	0	0
PURAT	143	30	188	46	26	1	3
PURPOSE T	322	70	241	44	15	8	13
Waterlow	1532	882	1210	474	501	199	272

An estimate of the mean time of completion associated with each tool was derived by considering the completion time for each patient to be the mid-point of each interval; with the time of completion in the “over 48 hours” group set to 48 hours. Under the estimates, the following mean times to completion (and associated standard deviations) were derived:

- **Braden** 7.20 hours (SD 10.7 hours);
- **Braden Q** 11.4 hours (SD 14.1 hours);
- **Glamorgan** 5.26 hours (SD 2.90 hours);
- **Maternity** 2.24 hours (SD 1.84 hours);
- **PURAT** 5.11 hours (SD 5.67 hours)
- **PURPOSE T** 4.65 hours (SD 7.52 hours);
- **Waterlow** 7.84 hours (SD 10.9 hours).

Of the 3 main risk assessment tools PURPOSE T had the "best" average completion time of 4.65 hours; comparing favourably to Waterlow (7.84 hours) and Braden (7.20 hours), perhaps reflecting the relative simplicity of the PURPOSE T tool.

Reassessment of risk

The proportion of patients for whom evidence for reassessment of risk was found was also summarised by the risk assessment tool used. Disregarding the not applicable responses (due to the risk assessment period being too short), the evidence for re-assessment is given in Table 8 below. There did not seem to be any significant difference between the 3 main tools in terms of encouraging staff to reassess risk.

Table 8: evidence for risk re-assessment (by risk assessment tool)

Risk assessment tool	Evidence for reassessment	No evidence for reassessment (valid cases only)	Proportion of valid cases with evidence for re-assessment
Braden	1683	237	87.7%
Braden Q	94	20	82.5%
Glamorgan	24	12	66.7%
Maternity	7	46	13.2%
PURAT	624	30	95.4%
PURPOSE T	802	146	84.6%
Waterlow	3850	1133	77.3%

Skin assessment

7856 patients received a skin assessment (77.4%) by the audit team, as stated in Table 3 above. Of the 2288 patients (22.6%) who did not receive a skin assessment the reasons given were as follows:

- Consent not obtained: 1119 cases (48.9% of those not receiving skin assessment)
- Patient off the ward: 643 cases (28.1% of those not receiving skin assessment)
- Patient too sick: 368 cases (16.1% of those not receiving skin assessment)
- Post-audit data entry: 158 cases (6.90% of those not receiving skin assessment)

Table 9 below summarises the number of PUs of each different type recorded in each Trust. Note that some patients had more than one PU recorded.

Table 9: distribution of PU occurrence by type across Trusts

Trust	Number of PUs of different types recorded										
	Cat. 1	**Cat. 2**	**Cat. 3**	**Cat. 4**	**DTI**	**U/S[1]**	**Other**	**MASD[2]**	**DNR[3]**	**Total**	**Total ex.MASD**
1	19	12	6	3	1	2	4	53	0	100	47
2	2	21	15	4	7	10	3	7	0	69	62
3	6	34	7	2	8	9	1	49	0	116	67
4	1	9	5	2	3	7	0	29	0	56	27
5	2	4	2	0	1	2	1	3	0	15	12
6	5	6	0	0	0	0	2	23	0	36	13
7	34	53	5	1	30	10	9	80	0	222	142
8	6	8	8	1	10	5	0	57	0	95	38
9	10	20	7	3	2	7	2	46	0	97	51
10	2	28	2	0	3	3	2	15	0	55	40
11	10	38	4	3	4	20	0	14	0	93	79
12	17	28	13	4	5	0	6	51	0	124	73
13	13	65	17	4	3	1	13	16	0	132	116
14	5	27	3	0	3	1	0	11	0	50	39
15	18	47	6	7	23	9	7	95	0	212	117
16	15	30	9	1	7	2	2	38	0	104	66
17	19	52	9	10	4	11	12	19	0	136	117
18	11	10	1	1	3	4	0	4	0	34	30
ALL	**195**	**492**	**119**	**46**	**117**	**103**	**64**	**610**	**0**	**1746**	**1136**

[1]*Unstageable*
[2]*Moisture-associated skin damage*
[3]*Dressing not removed*

Figures 5(a) and 5(b) below show the distribution of the proportion of categories of pressure ulcers reported; including (Figure 5(a)) and excluding (Figure 5(b)) MASD.

Figure 5(a): distribution of pressure ulcer categories (including MASD)

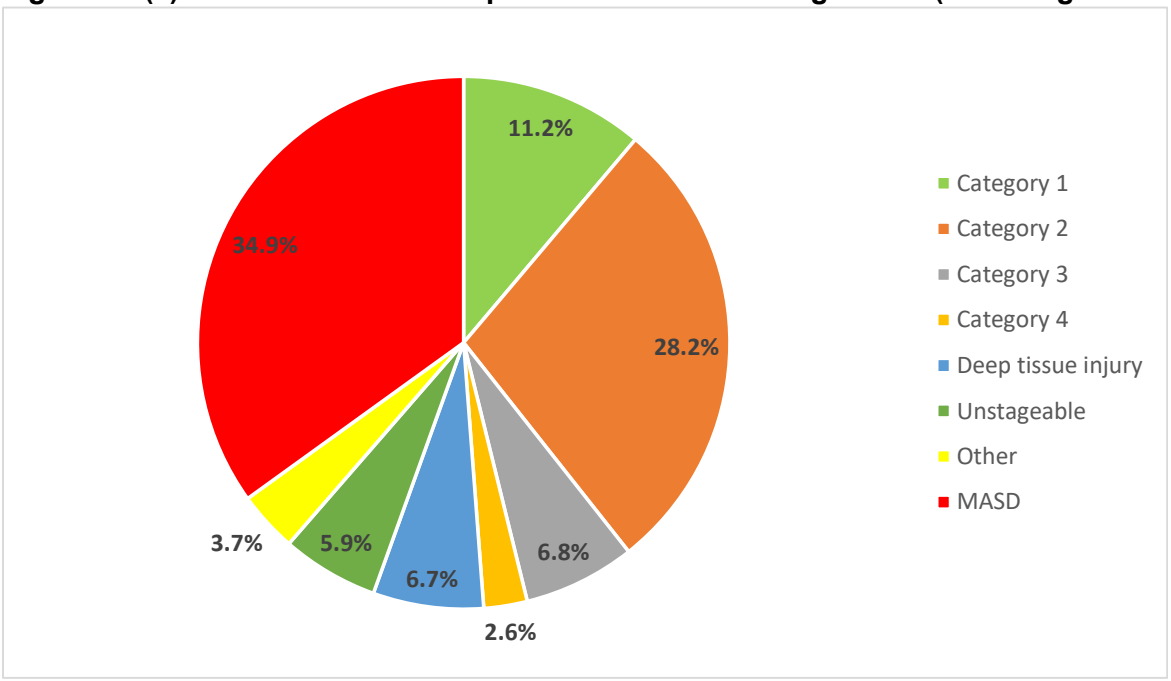
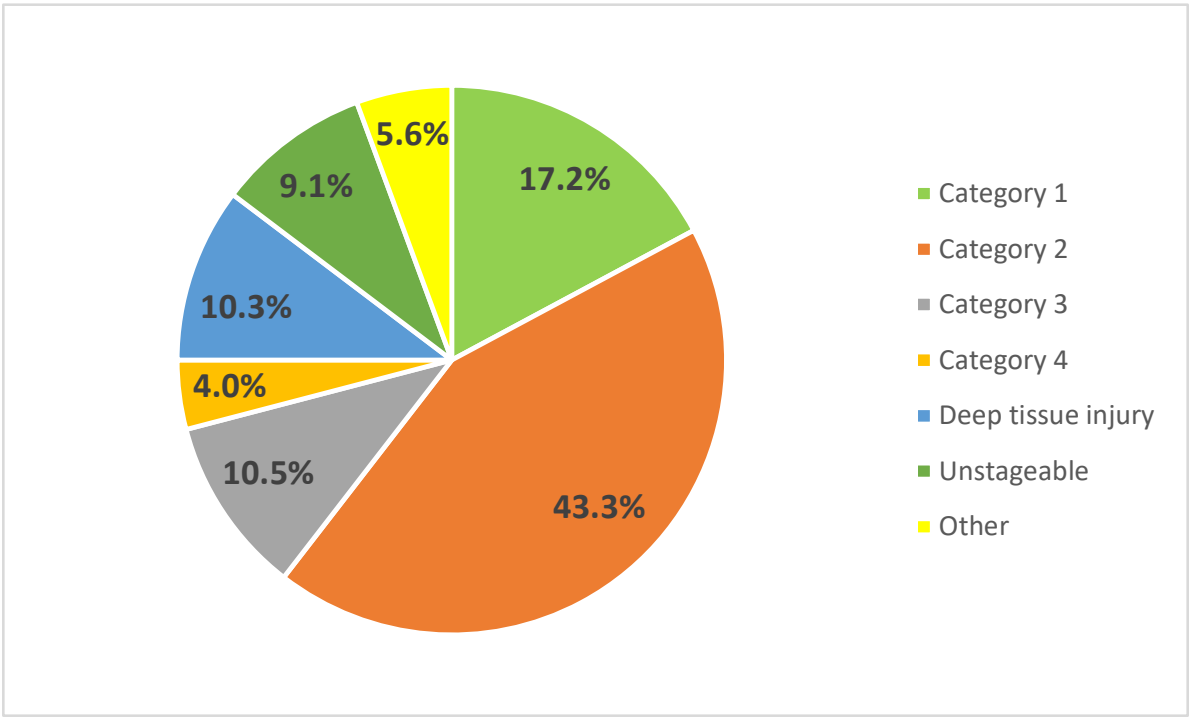
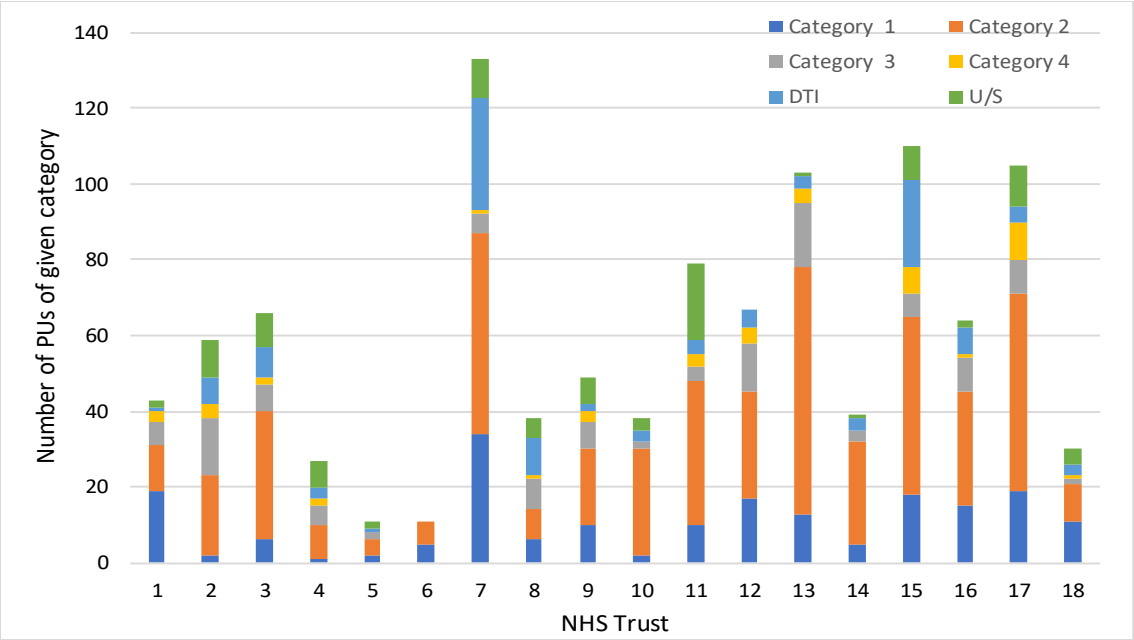


Figure 5(b): distribution of pressure ulcer categories (excluding MASD)



The distribution of categories 1-4, DTI and unstageable PUs in each Trust is summarised in Figure 6 below. It can be seen that category 2 PU is the most commonly occurring PU in all Trusts except for 1 and 18; in which category 1 predominates. Trusts 5, 6, 10 and 14 had no category 4 PUs recorded.

Figure 6: distribution of PU occurrence (Category 1- 4 only) by type across Trusts



PU characteristics

Details of 1136 pressure ulcers and 610 MASD are summarised in Table 10. This is a similar pattern to other published data, with the proportion of PU associated with the buttocks or sacrum being associated with the highest prevalences at 30.4% and 29.5% respectively (i.e. 59.9% in total); and followed by PU at the heel, with a prevalence of 13.2%. About half of the recorded incidences of MASD were due to incontinence-associated dermatitis. The proportion of device related pressure ulcers, at 5.99%, was smaller than that observed in previous surveys.

Table 10: summary of reported PU characteristics

Variable	**Frequency (valid %)**
Location	
Ankle	39 (2.23%)
Buttocks	530 (30.4%)
Ear	27 (1.55%)
Elbow	31 (1.78%)
Genitals	28 (1.60%)
Heel	230 (13.2%)
Hip	29 (1.66%)
Sacrum	515 (29.5%)
Spine	36 (2.06%)
Toe	27 (1.55%)
Other	254 (14.5%)
Device-related (non-MASD only)	
Yes	68 (5.99%)
No	1068 (94.0%)
MASD category (MASD only)	
Incontinence-associated dermatitis	289 (47.4%)
Intertrigo	115 (18.9%)
Other / not recorded	206 (33.8%)

The distribution of reported PUs across different anatomical sites is also reported graphically in Figures 7 and 8 below; including Categories 1 to 4; DTI and Unstageable PUs. Figure 7 gives overall totals in each location; Figure 8 gives the same information broken down by category.

Figure 7: distribution of reported PUs across different anatomical sites

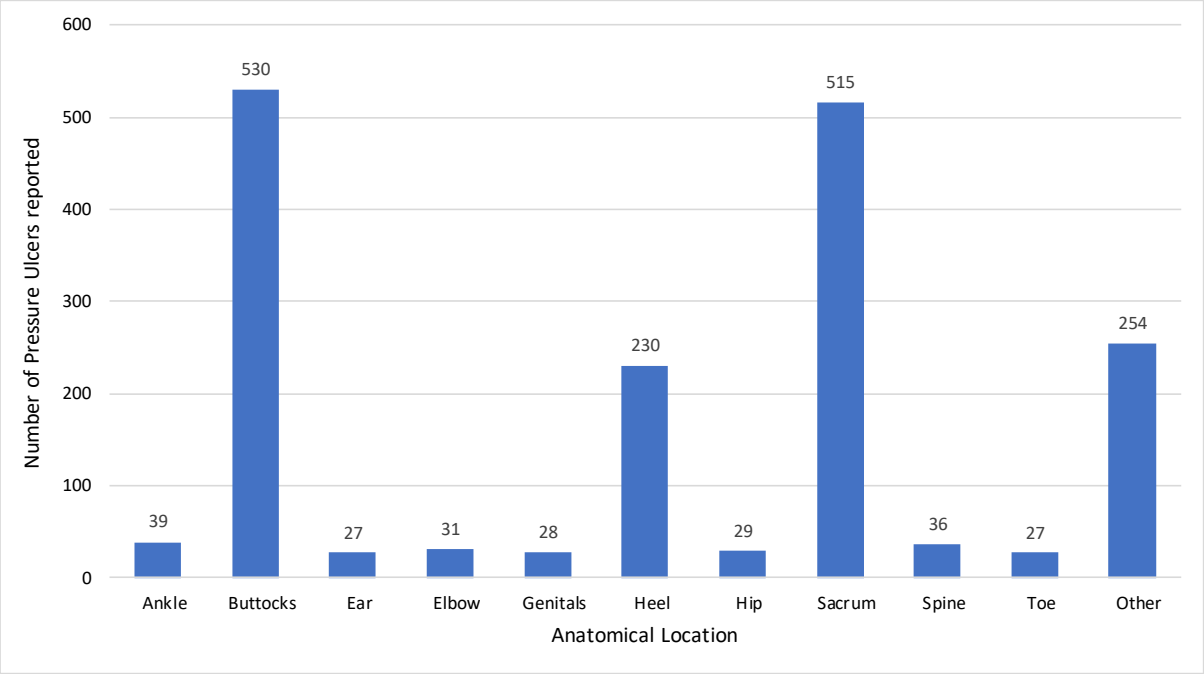
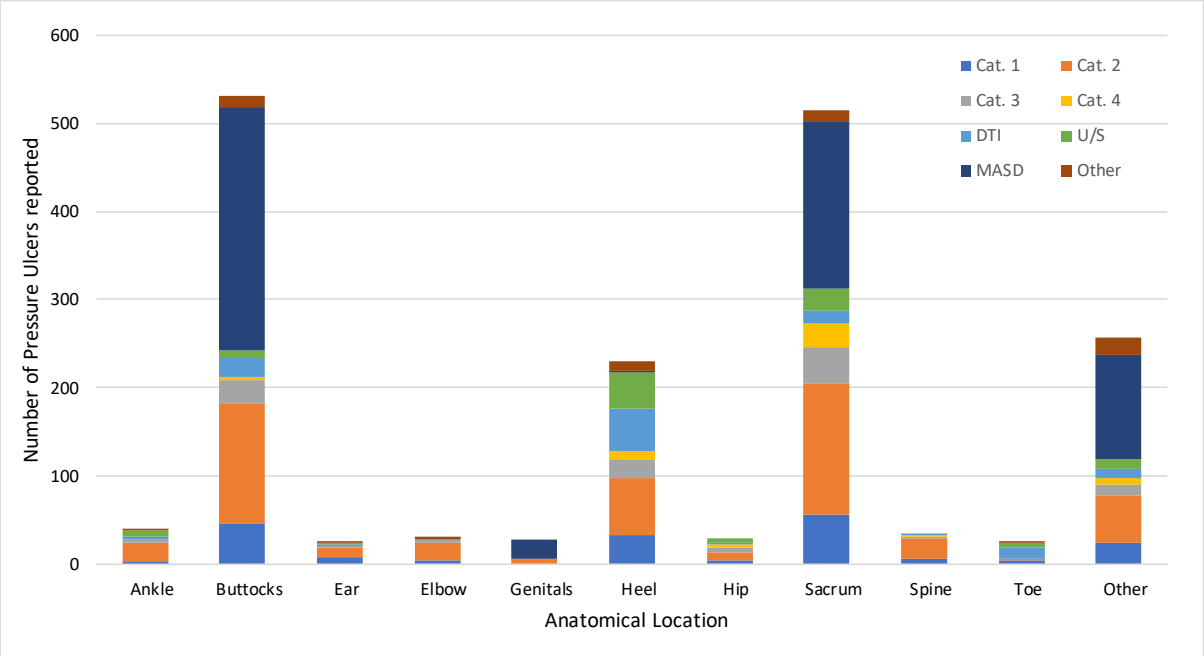


Figure 8: distribution of reported PUs across different anatomical sites (by category)



PU occurrence in individual patients

Table 11 below summarises the number of pressure ulcers of each category by Trust. The total of PUs recorded in each Trust may be higher than the number of patients with one or more PUs recorded, as some patients have multiple PUs recorded.

Table 11: distribution of PU occurrence by type across Trusts

Trust	Number of pressure ulcers of different types recorded										
	Cat. 1	**Cat. 2**	**Cat. 3**	**Cat. 4**	**DTI**	**U/S[1]**	**Other**	**MASD[2]**	**DNR[3]**	**Total PU**	**Total PU ex. MASDs**
1	18	11	4	3	1	2	4	50	0	93	43
2	2	2	15	4	7	9	3	7	0	49	42
3	6	34	7	2	8	9	1	49	0	116	67
4	1	9	5	2	3	7	0	28	0	55	27
5	2	3	0	0	1	2	1	3	0	12	9
6	4	5	0	0	0	0	1	16	0	26	10
7	35	53	5	1	30	10	9	79	0	222	143
8	6	8	8	1	10	5	0	57	0	95	38
9	10	17	5	3	2	6	2	45	0	90	45
10	2	27	2	0	3	3	2	15	0	54	39
11	9	34	4	3	4	16	0	14	0	84	70
12	17	13	8	4	3	0	5	34	0	84	50
13	11	59	17	4	3	1	13	16	0	124	108
14	5	25	3	0	2	1	0	11	0	47	36
15	17	44	4	6	21	8	7	92	0	199	107
16	15	28	9	1	7	2	2	38	0	102	64
17	19	53	9	10	4	11	12	19	0	96	83
18	11	10	1	1	3	4	0	4	0	34	30
ALL	**190**	**435**	**106**	**45**	**112**	**96**	**62**	**577**	**0**	**1623**	**1046**

[1]*Unstageable*
[2]*Moisture-associated skin damage*
[3]*Dressing not removed*

627 patients had 1 or more PUs reported. Table 12 below summarises the locations of PUs within this sub-group of patients.

Table 12: summary of reported PU characteristics

Variable	Number of patients with 1 or more PU including given location
Location[1]	
Ankle	24 (3.83%)
Buttocks	150 (23.9%)
Ear	14 (2.23%)
Elbow	18 (2.87%)
Genitals	5 (0.78%)
Heel	121 (19.3%)
Hip	16 (2.55%)
Sacrum	154 (24.6%)
Spine	19 (3.03%)
Toe	14 (2.24%)
Other	92 (14.7%)
Device-related[1]	
Yes	17 (2.71%)
No	610 (97.3%)
MASD category (MASD only)[2]	
Incontinence-associated dermatitis	107 (69.9%)
Intertrigo	27 (17.6%)
Other	19 (12.4%)

[1]Based on a denominator of 627 patients.

[2]Based on a denominator of 153 patients.

Surface selection and use

Cross-tables 13-15 below summarise the frequencies of cases where patients were provided with special equipment (i.e. a dynamic or hybrid mattress, a pressure re-distributing cushion, or heel protection), and, in addition, by whether or not the use of such equipment was in line with, or out with, local policy. The tables were constructed from individual patient cases for which a positive or negative response to the "in line with policy" item was recorded. In the majority of cases for which equipment was not provided, no policy compliance rating was stated. The totality of cases which correspond to use of equipment out with local policy are highlighted in red text.

Table 13: cross-tabulation of use of dynamic/hybrid mattress use versus policy status

Does patients have dynamic/hybrid mattress?	**Is use of equipment in line with policy (if applicable)?**		
	Yes	**No**	**Total**
Yes	4601	100	4701
No	112	6	118
Total	4713	106	4819

Table 14: cross-tabulation of use of pressure re-distributing cushion use versus policy status

Does patient have a pressure re-distributing cushion?	**Is use of equipment in line with policy (if applicable)?**		
	Yes	**No**	**Total**
Yes	2347	53	2400
No	102	11	113
Total	2449	64	2513

Table 15: cross-tabulation of use heel protection use versus policy status

Does patient have heel protection?	**Is use of equipment in line with policy (if applicable)?**		
	Yes	**No**	**Total**
Yes	1863	11	1874
No	69	3	72
Total	1932	14	1946

For each piece of equipment, the stated reasons for cases in which use of equipment was out with hospital policy are listed in Table 16.

Table 16: stated reasons for use of equipment out with hospital policy

Reason	**Mattress**	**Cushion**	**Heel protection**
Clinical reason for change	5	5	1
Contra-indicated for medical reasons	1	0	0
Not available	4	7	4
Over prescription	90	38	3
Patient refused	1	9	3
Under prescription	5	5	3
Total	**106**	**64**	**14**

Cross-tables 17-19 below summarise the frequencies of cases where patients were deemed to require special equipment, by whether or not such equipment was actually provided to the patient. Instances of use of equipment inconsistent with need is highlighted in red text.

Table 17: cross-tabulation of requirement for use of dynamic/hybrid mattress use versus actual use

Should have special mattress	**Does have special mattress**		
	Yes	**No**	**Total**
Yes	4309	432	4741
No	392	5011	5403
Total	4701	5443	10144

Table 18: cross-tabulation of requirement for use of pressure re-distributing cushion use versus actual use

Should have cushion	**Does have cushion**		
	Yes	**No**	**Total**
Yes	2033	677	2710
No	367	7067	7434
Total	2400	7744	10144

Table 19: cross-tabulation of requirement for use of heel protection use versus actual use

Should have heel protection	**Does have heel protection**		
	Yes	**No**	**Total**
Yes	1844	433	2277
No	30	7837	7867
Total	1874	8270	10144

Keep Moving

Information on patients requiring repositioning

Repositioning information was available on all patients. 5216 patients (51.4%) had a planned repositioning regimen. 4928 patients (48.6%) did not have a planned repositioning regimen.

Of the 5216 patients with a planned repositioning regimen, the risk status of 5127 could be determined by reference to a categorisation by a risk assessment tool. 4505 of these patients (87.9%) were deemed to be “at risk”; and 622 (12.1%) were deemed to be “not at risk”.

Of the 4928 patients without a planned repositioning regimen, the risk status of 4357 could be determined by reference to a categorisation by a risk assessment tool. 2072 of these patients (47.6%) were deemed to be “at risk”; and 2285 (52.4%) were deemed to be “not at risk”.

Of the 5216 patients with a planned repositioning regimen, 47 (0.90%) had an hourly repositioning regimen, 2122 (40.7%) had a 2-hourly regimen, and 2301 (44.1%) had a 4-hourly regimen. The repositioning frequency of 591 patients (19.7%) was given as “other”, with values ranging from 30 minutes to 24 hours; as well as large numbers of unknown, inconsistent or uncertain values.

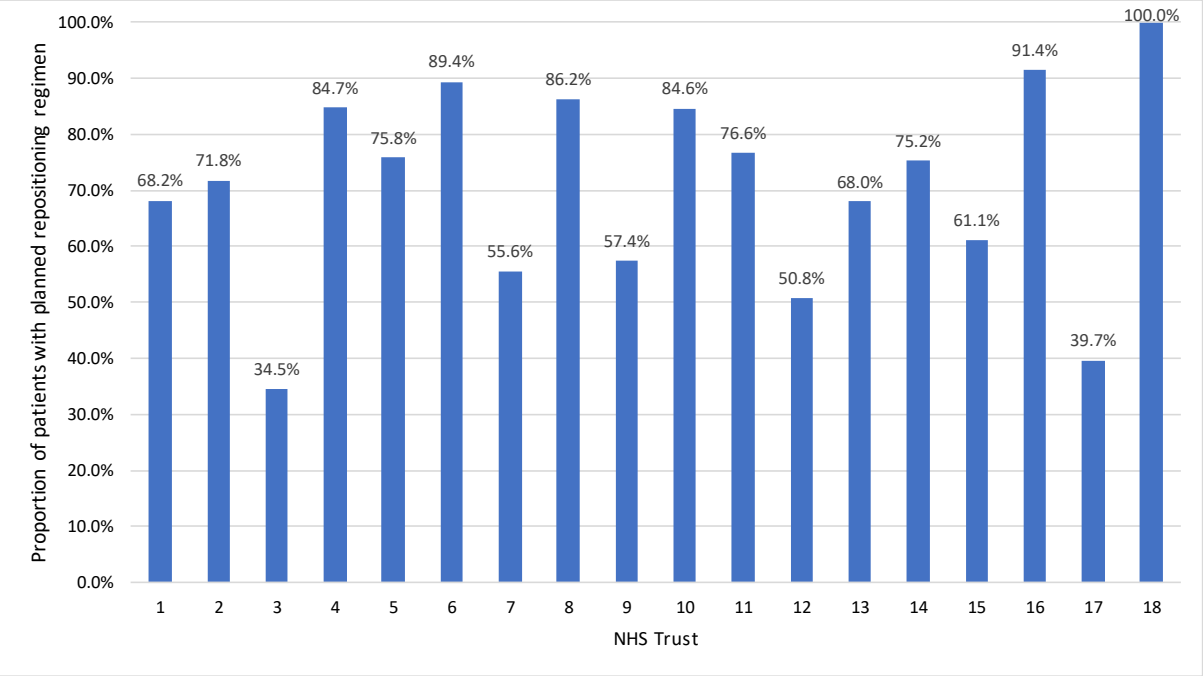
Of the 5216 patients with a planned repositioning regimen, evidence of implementation of this regimen was available for 5004 patients (95.9%); and evidence for moving and handling equipment at the patient’s bedside was available for 3278 patients (62.8%).

Differences between included Trusts in proportions of patients with a planned repositioning regimen were observed. These are summarised in Table 20 and Figure 9 below.

Table 20: Number and proportion of patients with planned repositioning regimen (by Trust)

Trust	Number of patients in audit	Number (%) of patients with planned repositioning regimen
1	975	665 (68.2%)
2	1034	742 (71.8%)
3	821	283 (34.5%)
4	452	383 (84.7%)
5	165	125 (75.3%)
6	132	118 (89.4%)
7	1411	784 (55.6%)
8	494	426 (86.2%)
9	509	292 (57.4%)
10	377	319 (84.6%)
11	577	442 (76.6%)
12	549	279 (50.8%)
13	802	545 (68.0%)
14	234	176 (75.2%)
15	583	356 (61.1%)
16	374	342 (91.4%)
17	590	234 (39.7%)
18	65	65 (100.0%)
ALL TRUSTS	**10144**	**6576 (64.8%)**

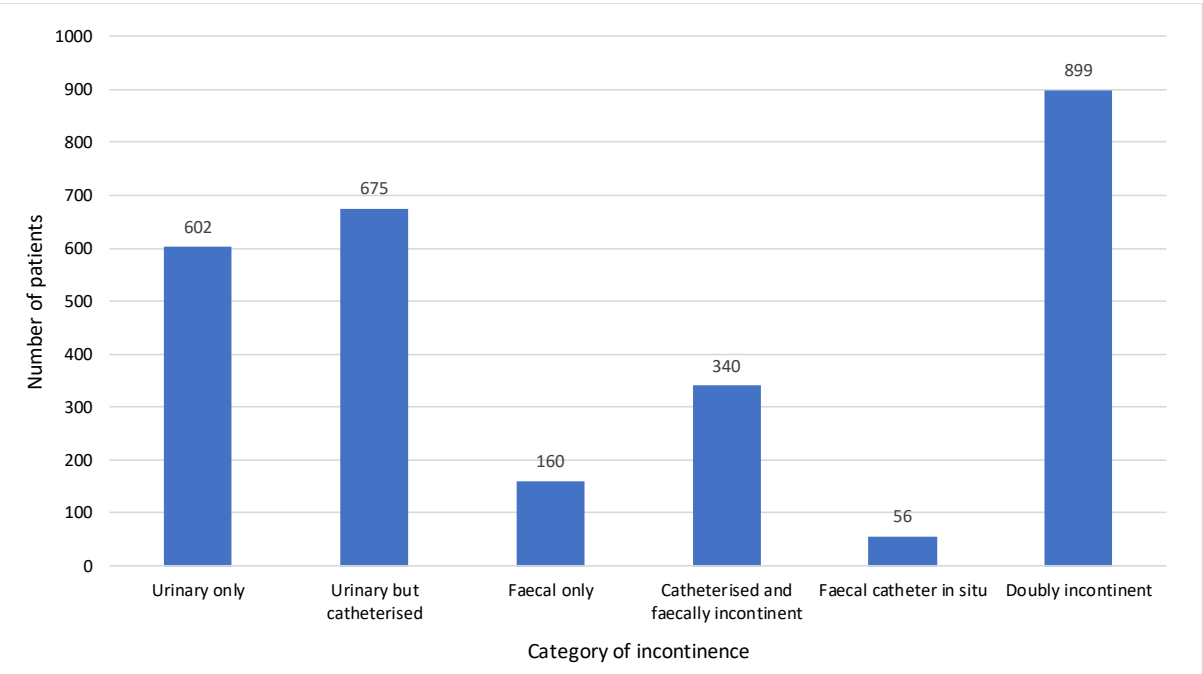
Figure 9: Number and proportion of patients with planned repositioning regimen (by Trust)



Incontinence

2732 patients (26.9%) were reported to be incontinent; categorised as follows: urinary only: 602; urinary but catheterised: 675; faecal only: 160; catheterised and faecally incontinent: 340; faecal catheter in situ: 56; doubly incontinent: 899. This data is summarised in Figure 10 below.

Figure 10 Categories of incontinence



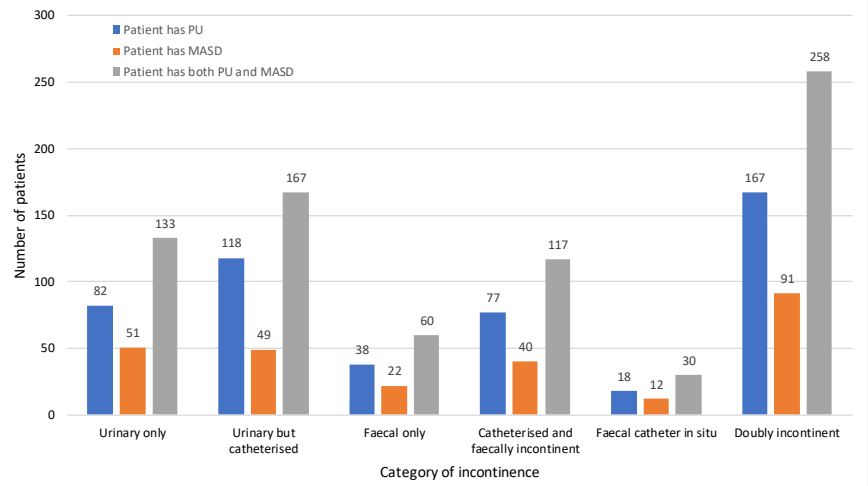
The frequency and proportion of each category of incontinence by Trust is summarised in Table 21 below.

Table 21: categories of incontinence by Trust

	Number of patients within Trust with given incontinence condition					
Trust	Urinary	Urinary but catheterised	Faecal	Faecal but catheterised	Faecal catheter in situ	Double
1	40	92	12	49	9	68
2	45	77	11	44	3	101
3	28	23	8	45	2	76
4	52	60	7	6	1	57
5	3	8	0	1	0	2
6	0	5	2	3	0	2
7	197	59	21	52	4	70
8	35	36	35	10	11	60
9	11	43	5	4	24	48
10	10	6	6	6	1	22
11	31	32	2	7	4	30
12	37	52	11	27	0	56
13	13	60	32	1	0	105
14	11	12	0	10	0	15
15	35	46	1	16	2	54
16	24	8	4	14	5	75
17	61	32	7	17	11	52
18	5	9	0	9	0	16
ALL TRUSTS	**638**	**660**	**164**	**321**	**77**	**909**

Frequency and type of incontinence can be shown to be linked to PU and MASD and occurrence; with higher frequencies of occurrence in catheterised patients, and, in particular, in doubly incontinent patients (Figure 11).

Figure 11: relationship between incontinence and PU/MASD occurrence



Summarising data by Trust, Table 22 indicates that within each Trust, higher proportions of incontinent patients had one or more PUs than the proportion of all patients with PUs.

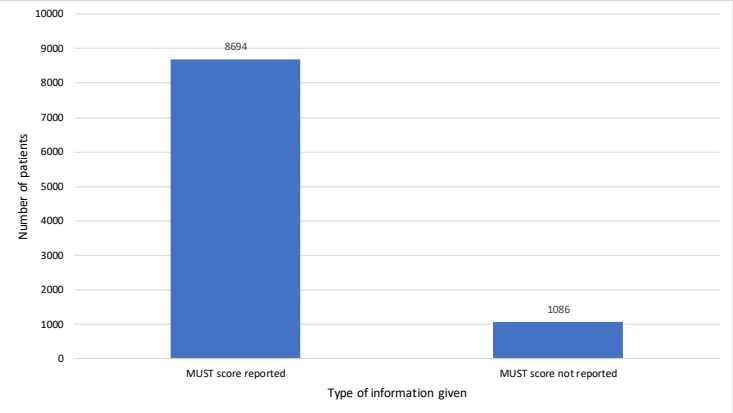
Table 22: summary of PU status of incontinent patients by Trust

	Patients with incontinence				
Trust	**PU**	**No PU**	**Total**	**Proportion of incontinent patients with PU**	**Proportion of all patients with PU**
1	20	250	270	7.4%	3.90%
2	29	244	273	10.6%	5.11%
3	29	153	182	15.9%	5.72%
4	18	165	183	9.8%	5.75%
5	3	11	14	21.4%	6.06%
6	1	11	12	8.3%	6.82%
7	54	345	399	13.5%	7.16%
8	27	160	187	14.4%	7.49%
9	28	107	135	20.7%	8.45%
10	15	36	51	29.4%	10.1%
11	23	83	106	21.7%	10.9%
12	41	141	182	22.5%	11.3%
13	49	162	211	23.2%	12.5%
14	12	36	48	25.0%	13.7%
15	47	107	154	30.5%	14.9%
16	33	97	130	25.4%	15.2%
17	58	121	179	32.4%	16.3%
18	12	27	39	30.8%	27.7%
ALL TRUSTS	**319**	**1301**	**1620**	**19.7%**	**9.04%**

Nutritional Assessment

Nutritional information was available for 9780 patients. Amongst valid patient data, MUST scores were reported for 8694 patients (88.9%) (Figure 12).

Figure 12: Nutritional assessment



The proportion of all patients whose MUST score was reported by Trust is summarised in Table 23.

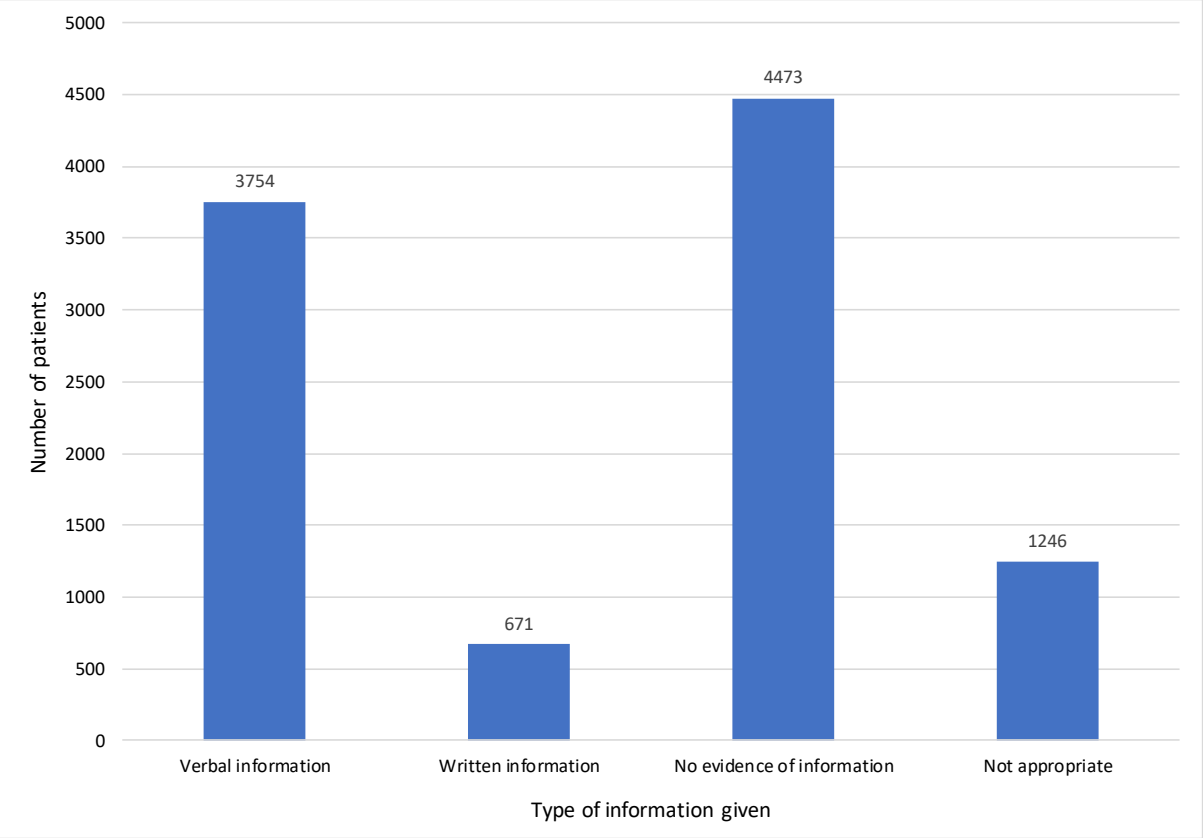
Table 23: summary of reporting of MUST scores by Trust

Trust	MUST score reported	MUST score not reported or not known	All patients in study	Proportion of patients with MUST score
1	874	101	975	89.6%
2	893	141	1034	86.4%
3	648	173	821	78,9%
4	414	38	452	91.6%
5	147	18	165	89.1%
6	131	1	132	99.2%
7	1216	195	1411	86.2%
8	443	51	494	89.7%
9	435	74	509	85.5%
10	314	63	377	83.3%
11	493	84	577	85.4%
12	444	105	549	80.9%
13	643	159	802	80.2%
14	200	34	234	85.5%
15	481	102	583	82.5%
16	331	43	374	88.5%
17	522	68	590	88.5%
18	65	0	65	100.0%
ALL TRUSTS	**8694**	**1450**	**10144**	**85.7%**

Giving information

4425 patients (43.6%) reported to have received information about PU prevention, including 3754 (37.0%) who received verbal information and 671 (6.61%) who were given a leaflet. No evidence for information receipt was reported in 4473 cases (44.1%); with the remainder (1246; 12.3%) judged to be not appropriate or left blank (Figure 13).

Figure 13: types of information given to patients



Much variation in the proportion of all patients who received written or verbal information between Trusts was recorded. The proportions by Trust are summarised in Table 24.

Table 24: summary of reporting of written and verbal information scores by Trust

Trust	Verbal information given	Written information given	All patients in study	Proportion of patients with information
1	207	30	975	24.3%
2	573	91	1034	64.2%
3	407	85	821	59.9%
4	22	200	452	49.1%
5	108	0	165	65.1%
6	44	29	132	55.3%
7	533	74	1411	43.0%
8	277	0	494	56.1%
9	52	52	509	20.4%
10	231	0	377	61.3%
11	151	2	577	26.5%
12	304	53	549	65.0%
13	377	6	802	47.8%
14	35	21	234	23.9%
15	164	11	583	30.0%
16	222	10	374	62.0%
17	43	0	590	7.29%
18	4	0	65	6.15%
ALL TRUSTS	**3754**	**664**	**10144**	**43.6%**

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Appendix 1 – Methodology

The audit form was designed by a small working group (SWG) and is based around the aSSKINg format (Assess risk, Skin assessment and management, Surface selection and use, Keeping moving, Incontinence, Nutrition and hydration and Giving of information).

Rather than replication of previous prevalence audit forms the SWG members focussed on asking questions that could be used to form a baseline for quality improvement efforts. So, for example whilst a common question in prevalence capture is: 'What is the patient's weight?' This is not something that can be changed and hence was not recorded. Weight may be of interest in the selection of equipment, but as both the actual equipment, and more importantly the appropriateness of it, will be determined, it is not necessary to know the actual weight of the patient. The emphasis was on areas where standards and protocols exist, and where changes in practice may result in improved outcomes.

To ensure the sample of organisations participating was representative of the underlying population, statistical support was sought from the University of Huddersfield Institute of Skin Integrity and Infection Prevention (ISIAIP).

The sample included a mixture of sizes and specialities of organisations and organisations from each of the regional tissue viability groups.

The data capture form was available as both a paper and electronic format. Support from commercial companies[1] was fundamental to the process, but the data – whilst owned by the participating organisations were managed by the statistical team at ISIAIP.

A 'train the trainer' approach was taken to ensure the process is fully understood and followed. Conference calls were held with participating organisations prior to the data capture to both explain and discuss the process and also answer any queries.

The process

1) Recruitment of organisations (Trusts) were nominated by their regional teams or self-nominated.
2) Sample selection – this was performed by the Stop the Pressure Programme Team (STPPT) and ISIAIP to ensure a representative sample was achieved. In the event all organisations that wished to participate were included.
3) Notification of acceptance.
4) Communication between the NHS England and NHS Improvement team and the local lead to develop their local operational plan, which included:
    a. Confirmation of the date(s) of participation for their organisation
    b. Agreement of methodology (i.e. paper or electronic)[2]
    c. Confirmation of governance structures in place for staff to work across organisations
    d. Staff training

[1] Commercial companies will have no access to the data captured. The assistance they are asked to provide will include iPads (or similar) and manpower to support the process from their existing prevalence teams.
[2] Electronic data capture was available in all Trust due to commercial support for the hire of iPads / tablets where Trusts did not own them

    e. Ward notification
5) Reminder events / activities
6) Data capture.

The preferred mechanism of data capture was for the ward staff to complete a paper form overnight prior to the audit. On the day of the audit, each ward was visited by one or more audit teams (the exact number varied between organisations), comprising data entry staff and clinical assessment staff. The form completed by the ward staff formed the basis for electronic data entry. The team followed the ward form and checked the details of each patient. If details were correct, they were entered into the electronic form by the clinical member/s of the team. After seeking and obtaining consent, a skin check was then completed, including removal of any dressings to ensure any PU was correctly categorised.[3] This was then cross-checked with entries made by ward staff, with discrepancies recorded on the electronic data capture form. At the end of each ward capture, the data entry person ensured all records were complete and uploaded the data.

Data Management

Data were analysed by the statistical team of ISIAIP and the STPPT. The data contained no patient-identifiable information and has been stored only on password-protected computers or memory sticks in a locked office. Although the participating Trusts are identified, none of them can be matched to any particular statistic or graph in the report.

[3] Verification of PUs was only done by a small number of people, where possible the TVN remained out of the audit teams and verified all of the PU within their organisation.

Appendix 2

Participating organisations in alphabetical order

Barnsley Hospital NHS Foundation Trust

Cambridge University Hospitals NHS Foundation Trust

Chesterfield Royal Hospital NHS Foundation Trust

Christie NHS Foundation Trust

Dudley Group NHS Foundation Trust

East and North Hertfordshire NHS Trust

Guy's and St Thomas' NHS Foundation Trust

Hampshire Hospitals NHS Foundation Trust

Luton and Dunstable NHS Foundation Trust

Manchester University NHS Foundation Trust

Mid Yorkshire Hospitals NHS Trust

North Cumbria University Hospitals NHS Trust

Northumbria Healthcare NHS Foundation Trust

Oxford University Hospitals NHS Foundation Trust

Royal Marsden NHS Foundation Trust

University Hospitals Birmingham NHS Foundation Trust

University Hospitals of North Midlands NHS Trust

University Hospital Southampton NHS Foundation Trust

Appendix 3

Summary by Trust of Key Headlines from National PU Audit (2019/20)

Trust	Key Aspects of Care
1	• 975 patients in audit • 3.9% Prevalence • 72.1% of PU* were superficial (i.e. category 1 or 2) • 6.98% of PU* were in evolving categories (i.e. category US or DTI) • 68.2% risk assessment 6 hours / Uses Waterlow tool • 74.8% care plan in place • 18.1% repositioning regimen • Profile PU damage mostly C1/2 and MASD • Incontinent patients with PU 7.4% • 89.6% patients with MUST score • 24.3% of patients had received information
2	• 1034 patients in audit • 5.11% prevalence • 39.0% of PU* were superficial (i.e. category 1 or 2) • 28.8% of PU* were in evolving categories (i.e. category US or DTI) • 75.3% Risk assessment in 6 hours / Uses Pressure 2 tool • 89.8% care plan in place • 71.8% repositioning regimen • Profile indicate that more severe PU are high with over 60% considered to be deep or likely to be deep (categories 3 and 4, DTI and Unstageable) • Incontinent patients with PU 10.6% • 86.4% patients with MUST score • 64.2% of patients had received information
3	• 821 Patients in audit • 5.72% Prevalence variation across sites • 60.61% of PU* were superficial (i.e. category 1 or 2) • 25.76% of PU* were in evolving categories (i.e. category US or DTI) • 67.8% risk assessment in 6 hours/ Uses Waterlow Tool • 78.8% care plan in place • 34.5% repositioning regimen • Profile PU Damage mostly C3 and MASD • Incontinent patients with PU 15.9% • 78.9% patients with a MUST score • 59.9% of patients had received information
4	• 452 patients in audit • 5.75% prevalence, consistent profile across both sites • 37.0% of PU were superficial (i.e. category 1 or 2) • 37.0% of PU* were in evolving categories (i.e. category US or DTI) • 84.7% risk assessment in 6 hours / Uses Waterlow tool • 95.8% care plan in place • 66.6% repositioning regimen • Profile PU Damage mostly MASD • Incontinent patients with PU 9.8% • 91.6% patients with a MUST Score • 49.1% of patients had received information
5	• 165 patients in audit

	• 6.06% prevalence, significant change in profile across both sites • 54.6% of PU were superficial (i.e. category 1 or 2) • 37.0% of PU* were in evolving categories (i.e. category US or DTI) • 75.8% risk assessment in 6 hours / Uses Waterlow tool • 63.3% care plan in place • 27.7% repositioning regimen • Profile PU Damage: low numbers across categories • Incontinent patients with PU 21.4% • 89.1% patients with a MUST Score • 65.1% of patients had received information
6	• 132 patients in audit • 6.82% prevalence • 100% of PU* were superficial (i.e. category 1 or 2) • 89.4% risk assessment in 6 hours / Uses Braden/ Braden Q tool • 94.6% care plan in place • 22.0 % repositioning regimen • Profile PU Damage mostly MASD • Incontinent patients with PU 8.3% • 99.2% patients with a MUST Score • 55.3% of patients had received information
7	• 1411 patients in audit • 7.16% prevalence, significant change in profile across both sites • 65.4% of PU* were superficial (i.e. category 1 or 2) • 30.1% of PU* were in evolving categories (i.e. category US or DTI) • 51.3% risk assessment in 6 hours / Uses Waterlow tool • 75.5 % care plan in place • 55.6% repositioning regimen • Profile PU damage mostly DTI/MASD • Incontinent patients with PU 13.5% • 86.2% patients with a MUST Score • 43.0% of patients had received information
8	• 494 patients in audit • 7.49% prevalence • 36.8% of PU were superficial (i.e. category 1 or 2) • 39.5% of PU* were in evolving categories (i.e. category US or DTI) • 86.2% risk assessment in 6 hours / Uses Waterlow tool • 95.4% care plan in place • 82.4 % repositioning regimen • Profile PU Damage mostly DTI/ MASD • Incontinent patients with PU 14.4% • 89.7% patients with a MUST Score • 56.1% of patients had received information
9	• 509 patients in audit • 8.45 % prevalence, significant change in profile across both sites • 61.2% of PU* were superficial (i.e. category 1 or 2) • 18.4% of PU* were in evolving categories (i.e. category US or DTI) • 57.4 % risk assessment in 6 hours / Uses Waterlow tool • 88.3% care plan in place • 44.3% repositioning regimen • Profile PU Damage mostly C2/ MASD • Incontinent patients with PU 20.7%

	• 85.5% patients with a MUST Score • 20.4% of patients had received information
10	• 377 patients in audit • 10.1 % prevalence • 79.0% of PU* were superficial (i.e. category 1 or 2) • 15.8% of PU* were in evolving categories (i.e. category US or DTI) • 84.6% risk assessment in 6 hours / Uses Purpose T tool • 68.5% care plan in place • 53.3% repositioning regimen • Profile PU Damage mostly C2/ MASD • Incontinent patients with PU 29.4% • 83.3% patients with a MUST Score • 61.3% of patients had received information
11	• 577 patients in audit • 10.9% prevalence, change in profile across both sites • 60.8% of PU* were superficial (i.e. category 1 or 2) • 30.4% of PU* were in evolving categories (i.e. category US or DTI) • 76.6% risk assessment in 6 hours / Uses Purpose T tool • 89.3% care plan in place • 40.6% repositioning regimen • Profile PU Damage mostly C2/ Unstageable • Incontinent patients with PU 21.7% • 85.4% patients with a MUST Score • 26.5% of patients had received information
12	• 549 patients in audit • 11.3% prevalence, change in profile across sites • 67.2% of PU were superficial (i.e. category 1 or 2) • 7.46% of PU* were in evolving categories (i.e. category US or DTI) • 62.1% risk assessment in 6 hours / Uses Braden/ Braden Q tool • 68.4% care plan in place • 50.8% repositioning regimen • Profile PU Damage mostly C2/MASD • Incontinent patients with PU 9.8% • 91.6% patients with a MUST Score • 49.1% of patients had received information
13	• 802 patients in audit • 12.5% prevalence, significant change in profile across sites • 75.7% of PU* were superficial (i.e. category 1 or 2) • 3.88% of PU* were in evolving categories (i.e. category US or DTI) • 68.0% risk assessment in 6 hours / Uses Braden/ Braden Q tool • 65.1% care plan in place • 37.2% repositioning regimen • Profile PU Damage mostly C2/C3/MASD • Incontinent patients with PU 23.3% • 80.2% patients with a MUST Score • 47.8% of patients had received information
14	• 234 patients in audit • 13.7 prevalence • 82.1% of PU* were superficial (i.e. category 1 or 2) • 10.3% of PU* were in evolving categories (i.e. category US or DTI) • 75.2% risk assessment in 6 hours / Uses Waterlow tool

	• 89.0% care plan in place • 81.6% repositioning regimen • Profile PU Damage mostly C2/ MASD • Incontinent patients with PU 25% • 85.5% patients with a MUST Score • 23.9% of patients had received information
15	• 583 patients in audit • 14.9% prevalence • 59.1% of PU* were superficial (i.e. category 1 or 2) • 29.0% of PU* were in evolving categories (i.e. category US or DTI) • 61.1% risk assessment in 6 hours / Uses Waterlow tool • 72.1% care plan in place • 69.3% repositioning regimen • Profile PU Damage mostly C2/ MASD • Incontinent patients with PU 30.5 % • 82.5% patients with a MUST Score • 30.0% of patients had received information
16	• 374 patients in audit • 15.2% prevalence, change in profile across both sites • 70.31% of PU* were superficial (i.e. category 1 or 2) • 14.1% of PU* were in evolving categories (i.e. category US or DTI) • 91.4% risk assessment in 6 hours / Uses Waterlow tool • 98.1% care plan in place • 85.8% repositioning regimen • Profile PU Damage mostly C2/MASD • Incontinent patients with PU 25.4% • 88.5% patients with a MUST Score • 62.0% of patients had received information
17	• 590 patients in audit • 16.3% prevalence, change in profile across sites • 67.6% of PU* were superficial (i.e. category 1 or 2) • 14.3% of PU* were in evolving categories (i.e. category US or DTI) • 75.8% risk assessment in 6 hours / Uses Braden/Braden Q tool • 87.8% care plan in place • 39.7% repositioning regimen • Profile PU Damage mostly C2 • Incontinent patients with PU 32.4% • 88.5% patients with a MUST Score • 7.29% of patients had received information
18	• 65 patients in audit • 27.7% prevalence • 70.0% of PU* were superficial (i.e. category 1 or 2) • 23.3% of PU* were in evolving categories (i.e. category US or DTI) • 76.9% risk assessment in 6 hours / Uses Waterlow tool • 100% care plan in place • 100 % repositioning regimen • Profile PU Damage mostly C1/C2 • Incontinent patients with PU 30.8% • 100% patients with a MUST Score • 6.15% of patients had received information

* numbers based on those that were allocated an actual category