

# **ANALYSIS OF THE IMPACT OF A NATIONAL INITIATIVE TO PROMOTE EVIDENCE-BASED NURSING PRACTICE**

**(Evidence-based practice initiative)**

## **Authors**

**Nicola Ring MSc BSc RGN RSCN Dip HV**

Lecturer, Department of Nursing & Midwifery, University of Stirling

**Alison Coull MSc BN RGN PgCTHE**

Lecturer, Department of Nursing & Midwifery, University of Stirling

**Catherine Howie BSc (Hons)**

Teaching Fellow/Statistical Consultant, Department of Computing Science & IT,  
University of Stirling

**Tricia Murphy-Black PhD MSc RGN RM RCNT**

Professor (Retired), Department of Nursing & Midwifery, University of Stirling

**Andrew Watterson PhD BA FIOSH**

Professor, Department of Nursing & Midwifery, University of Stirling

## **Address for correspondence**

Nicola Ring, Department of Nursing & Midwifery, RG Bomont Building, University  
of Stirling, Stirling, FK7 4LA

[nicola.ring@stir.ac.uk](mailto:nicola.ring@stir.ac.uk)

Telephone: +44 (0) 1786 466351

Fax: +44 (0) 1786 466344

## **Contributions**

Study design: NR, AC, CH, TMB, AW

Data collection and analysis: NR, CH

Manuscript preparation: NR, AC, CH, TMB, AW.

## **ABSTRACT**

Best Practice Statements are designed to facilitate evidence-based practice. This descriptive, exploratory study evaluated the impact of five of these statements in Scotland. A postal survey of 1278 registered nurses was undertaken to determine use of these statements and their perceived benefits (response rate: 42%, n=539). Use of the Best Practice Statements differed across clinical sites and some statements were more likely to be used than others. Identified barriers and drivers to their use were similar to factors known to encourage or hinder evidence-based practice generally. Although approximately 25% of clinical respondents reported using the Best Practice Statements, most respondents reported perceived benefits to patients usually through quality improvement. Results highlight the importance of facilitation and supportive contexts in encouraging clinical use of these statements. Findings suggest that variation in clinical implementation of the BPS need to be addressed locally and nationally if their benefits are to be maximised.

(Word count: 150)

## **KEYWORDS**

Evidence-based practice, implementation, research utilisation

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## **INTRODUCTION**

Evidence-based practice (EBP) is central to the modernisation of the UK National Health Service (NHS).<sup>1</sup> Best Practice Statements (BPS) were launched by the NHS in Scotland (NHSScotland) in 2002 to promote EBP amongst nurses. These statements were a response to recognised variations in nursing practice and complement existing multi-disciplinary guidelines, which often obscure the nursing contribution to care.<sup>2,3</sup> By describing best and achievable practice in specific areas, the BPS should guide nurses in the consistent application of EBP and their implementation should promote comparable standards of nursing care and quality improvement across Scotland.<sup>3</sup>

As the BPS were developed to encourage EBP, literature on guideline and research utilisation provided a conceptual framework for this study. Although guidelines can improve practice by promoting clinical effectiveness,<sup>4,5</sup> healthcare professionals experience difficulties in utilising research and guidelines in practice. For example, practitioners report poor availability and accessibility of research findings; and, lack awareness of available research, critical appraisal skills, and time to read research.<sup>6,7,8</sup> Lack of organisational support and authority to implement change are other barriers to research and EBP utilisation.<sup>7,9,10,11</sup> Given these challenges, it is not surprising that the impact of guidelines on practice has been 'patchy'.<sup>12</sup>

## **METHODS**

### **Aim**

This exploratory and descriptive study evaluated the impact of the BPS within NHSScotland one year after the statements were launched. Research objectives were to:

- determine awareness and use of the first five BPS (Table 1) amongst a sample of nurses; and
- identify any benefits resulting from the BPS.

A postal survey was conducted using a specially designed self-report questionnaire and proforma. Both tools were tested in a separate pilot study. The 20-item questionnaire used closed and open questions to gather data in seven categories (Table 2). The proforma gathered details of local initiatives to support BPS use.

### **Participants**

From across Scotland, 1278 registered nurses from clinical practice, practice development (PD) and nursing management were invited to participate in the study (Table 3). Nursing management and PD participants were purposively selected. This included all Directors of Nursing (DN) in Scotland (n=30) and nurses from NHS Trusts who were members of a Scottish PD network (n=82). Clinical practitioners (n=1166) were recruited from seven NHS Trust areas using stratified random sampling (including 1125 NHS nurses and 41 nurses from private nursing homes). This approach ensured NHS sites were representative of NHSScotland and registered nurses were selected across the clinical grading structure with representation from grade C (lowest level registered nurses) to grade I (highest level registered nurses).

### **Ethical issues**

Ethical approval was obtained from the appropriate local NHS Research Ethics Committee and University Ethics Committee. Consent to approach clinical staff was obtained from NHS Trusts. Return of completed questionnaires and proforma was taken as implied consent to participate. Anonymity of participants and clinical sites was preserved throughout. Researchers did not know the identity of clinical participants. A coding system was used for purposively selected participants, ensuring these participants were only 'known' to researchers by their code. All data were stored in accordance with data protection legislation.

### **Data collection and analysis**

The postal survey was undertaken between May and July 2003. Selected individuals received a project pack including a questionnaire, proforma and project information. Project packs were distributed to clinical participants via a locally identified contact within each NHS site. Project packs were sent directly to purposively selected participants as their contact details were publicly available. As a similar evaluation of Australian Nursing Best Practice Information Sheets obtained a response rate of 27%,<sup>13</sup> steps were taken to maximise project returns.

Questionnaire data were analysed using the Statistical Package for Social Sciences version 11.5 (SPSS Inc., Chicago, IL, USA). Analysis was descriptive with Pearson chi squared tests used where appropriate (a p value of <0.05 was deemed statistically significant). Proforma content was analysed manually to identify similar initiatives, which were then quantified.

## **FINDINGS**

### **Response**

The overall questionnaire response rate was 42% (n=539); and 28% (n=353) for the proforma (Table 3). Clinical practitioners were the largest group of questionnaire respondents (n=451).

### **BPS awareness**

Amongst all respondents, 53% (n=287) were aware of the BPS concept prior to the survey; 99% of DN and PD respondents (n=85) and 45% of clinical respondents (n=202). BPS awareness varied amongst the NHS sites (29-46%). There was a statistically significant relationship between BPS awareness and clinical grade, that is, the lower the grade, the lower the level of BPS awareness. For example, only 20% of C grade respondents were aware of the BPS compared to 90% of H/I grade respondents ( $X^2=110.599$ ;  $df=6$ ;  $p<0.001$ ). Clinical awareness of the specific BPS was highest for the pressure ulcer, continence and nutrition (frail elderly) statements (approximately 60% of respondents, respectively n=138, n=130, n=123), compared with 56% (n=114) for nutrition (assessment and referral) and 31% (n=63) for home oxygen.

Respondents usually learned about the BPS from employers (36%, n=101), by receiving a personal copy (36%, n=102) and through journals (31%, n=88). Whilst most DN and PD respondents owned copies of the BPS, most clinical respondents did not. For example, a third of clinical respondents (n=59) owned copies of the continence BPS compared with all DN and three-quarters of PD respondents. Thirty percent of clinical respondents (n=68) did not know how to access the statements.

### **BPS implementation**

Across all sites, clinical respondents were most likely to use the pressure ulcer, continence and nutrition (frail elderly) statements but parts of the BPS rather than the full document, for example the pressure ulcer statement was most likely to be used in full but only by 22% (n=23) of clinical respondents (Table 4). Such variations in use between statements were statistically significant (Table 4). BPS use also varied between different sites but this was not statistically significant (Table 5). Again, referring to the pressure ulcer statement, 42% of clinical respondents in one site reported using the full BPS compared to 7% in another yet, the statement applied to both areas (Table 5). Even where the BPS were being used, they were not always used with all relevant patients (Table 6). For example, only 29% (n=49) of clinical respondents reported using the pressure ulcer BPS with all relevant patients (Table 6). Additionally, more clinical respondents reported *planning* to use the BPS than were currently using the BPS with *all* relevant patients and, this relationship was statistically significant (Table 6). Only a few respondents specified how they used the BPS including integration into clinical guidelines (n=6) and care plans (n=4), or as a basis for audit (n=5) or teaching (n=9).

### **Benefits of the BPS**

All groups reported they considered the BPS to benefit patients (Table 7). For example, 74% (n=144) of all respondents considered the BPS for continence to have at least minor benefits for patients. Where questionnaire respondents specified what they thought these benefits were, quality improvement through the application of best practice, was most frequently cited (n=24). Reported patient benefits usually related to the process of care, including development of new assessment forms and care

plans. Instances of improved clinical outcome, such as a reduction in pressure sores, were cited less often.

Most respondents reported the BPS had benefited nurses, including 74% (n=140) who reported at least minor nursing benefits resulting from the continence statement (Table 8). Where respondents specified how nurses benefited from the BPS, respondents most frequently cited the availability of good evidence on which to guide practice (n=25) and raised awareness of the topic (n=11).

### **Barriers to, and drivers for, BPS use**

Overall, respondents reported the pressure ulcer BPS had least barriers to use (14%, n=27) but nutrition (assessment and referral) had the most (22%, n=34). Free text questionnaire comments detailing barriers to BPS use, generated 109 responses. From these comments, the most frequently cited barriers were lack of resources, especially time, staff and training (n=27); relevance of the BPS to practice (n=25) and that the BPS competed against other guidelines for implementation (n=15).

All groups reported drivers encouraging BPS use, especially for the continence (39%, n=78) and pressure ulcer (37%, n=72) statements. Respondents specified 274 drivers for implementation, most frequently specialist nurses (n=56), local leaders facilitating change (n=42), availability of the BPS (n=23) and the desire to change practice (n=21). Amongst clinical respondents, specialist nurses were the most commonly cited driver.



### **Local initiatives to support BPS use**

From the 353 returned proforma, only 59 respondents (17%) detailed local initiatives to support BPS use. For each clinical site, the number of completed proforma ranged from one to nine. Clinical sites, with the highest number of local initiatives to support BPS use reported via the proforma, also reported the highest levels of BPS awareness and use via the questionnaire. For example, an NHS site with only one proforma reported initiative to support BPS use, reported 30% BPS awareness amongst clinical questionnaire respondents. Whereas an NHS site with eight proforma reported initiatives to support BPS use had 59% clinical awareness. Initiatives considered effective in encouraging local BPS use included training, working groups, performance assessment and identification of local leads.

### **DISCUSSION**

This evaluation was undertaken too soon after the BPS became available to investigate their impact on clinical outcome. Nonetheless, most respondents reported patient benefits from the BPS and there was a perception the statements could improve quality of care. Local variations in BPS awareness and use suggest that like guidelines, impact and implementation of the BPS was 'highly variable'.<sup>14</sup>

The role of guidelines in achieving health gain through improved clinical practice has been recognised.<sup>4,15</sup> Results suggest the BPS could have a similar role although their consistent use needs to be improved if potential benefits are to be realised. As evidence, context and facilitation are influential in the implementation of EBP generally,<sup>16</sup> these factors also need to be considered if consistent BPS use is to be increased.

## **Evidence**

Evidence for effective EBP utilisation influenced development of the BPS. For example, as authoritative endorsement can encourage guideline implementation,<sup>17</sup> BPS nurse developers were experts with professional credibility. The BPS were designed to be easy-to-read and free of jargon and complicated statistics, because poor presentation and ‘understandability’ of evidence can prevent its utilisation,<sup>6,7,8</sup> Importantly, the BPS provided clear recommendations for practitioners because, if research is to be used, practical implications need to be apparent.<sup>6,7</sup>

Overall, respondents were positive about the BPS as a form of evidence. As practitioners are unlikely to implement guidelines not perceived as credible,<sup>18</sup> reported levels of actual and planned BPS use suggest the statements were regarded as credible. However, credibility was not enough to ensure BPS implementation they also had to be perceived as relevant to nursing practice. In this study, perceived relevance of the BPS to practice was the second reported barrier to implementation (n=25) and there were many instances of nurses reporting none of the BPS related to their area of practice when at least one statement applied.

Earlier studies have identified and ranked barriers to research utilisation. Within these hierarchies, barriers such as difficulty in understanding statistics, or research reports with poorly identified implications for practice, ranked higher in significance to practitioners than the relevance of research to nursing practice.<sup>6,7,10</sup> The BPS as a form of evidence were designed to address high ranked barriers to research utilisation, such as readability. Results suggest that whilst BPS design had been fairly effective in reducing these barriers to implementation, the perceived relevance of the BPS to

nurses, reported in earlier studies as a lower rated barrier, became a more significant barrier in this study. Clinical respondents reporting that none of the BPS applied to their practice when at least one did, seemed unable to make connections between these statements and their practice. This suggests that if usage of the BPS as evidence is to be maximised in future, links between each BPS and the relevant nursing disciplines need to be clearly identified for practitioners during dissemination.

### **Context**

Context is the environment in which EBP implementation takes place.<sup>19</sup> All clinical contexts in this study reported barriers to BPS implementation and these were similar to those hampering guideline and research utilisation, including lack of resources, time and guideline overload.<sup>6,8,11,14,20,21</sup> Although all clinical sites reported similar barriers to implementation, some areas were still able to work towards BPS implementation. What appeared to differ between these different contexts was the level of priority assigned to BPS implementation.

As a national nursing specific initiative, supported by relevant professional groups, the BPS should have been considered a local priority for implementation however this was not always the case. For the BPS to be regarded as a priority, clinical *and* management staff need to be convinced of the value to be gained from implementation. This is especially important when respondents from all groups and sites reported the BPS competed against other EBP tools for local implementation. Although nursing specific, the BPS had implications for other disciplines including allied health professionals. BPS implementation was therefore also dependent on them being regarded as a priority for the wider multi-disciplinary team. From our

findings, this was not always the case and sometimes, as one respondent put it, the BPS were ‘not deemed an urgent organisational need’.

In this study, one means of encouraging BPS implementation within the wider context was clinical audit. Some respondents used audit to provide evidence of sub-optimal care, an approach previously recommended in relation to guideline implementation.<sup>18,22</sup> In such a way, past performance data can be used to change future performance.<sup>23</sup> Evidence from respondents showed that, by identifying areas for quality improvement, audit data could be useful in encouraging teams and organisations to assign greater priority to BPS implementation.

### **Facilitation**

BPS awareness and usage was greatest where there was an association between the statement and a clinical speciality. The importance of clinical champions and opinion leaders in guideline implementation has previously been identified.<sup>14,21</sup> In this evaluation, specialist nurses frequently adopted such roles, working to make their local context amenable to BPS implementation by, for example, establishing working groups and providing training. Specialist nurses also usually have authority to make local changes in practice, which is important, as lack of authority to support change is another barrier to research utilisation.<sup>7,9,10,24</sup>

The role of facilitators in implementing guideline and quality initiatives has been previously highlighted<sup>5,25</sup> and designated ‘experts’ or opinion leaders have been suggested as worthwhile during guideline implementation.<sup>26</sup> Thompson *et al.*<sup>27</sup> also suggest that to encourage the use of evidence in nursing, specialist and PD nurses

should be used as ‘conduits’ through which research based messages for practice should flow. In clinical sites where BPS awareness and use was highest, ‘facilitator’ nurses appeared to have adopted such a role. If facilitator nurses have such an important role in the implementation of EBP, this has implications for those initiatives which are not closely associated with a specialist nursing group and, for those clinical areas where specialist nurses are not employed.

## **CONCLUSION**

This was an exploratory study and it is important to be cautious about the level of BPS awareness and use that could have been expected 12 months after their launch. Whilst actual and planned BPS use was encouraging, levels of usage varied considerably amongst the clinical sites. So, although these BPS were designed to reduce inconsistencies in clinical care in five specific areas, the evaluation indicates that disparity in their local use meant variations in care still existed after these statements became available. This suggests that whilst national EBP initiatives, such as the BPS, are aimed at reducing variations in care, in the period immediately following their introduction, variations in practice are likely to continue whilst clinical areas adopt such initiatives at different speeds.

The importance of evidence, context and facilitation in the implementation of EBP has been acknowledged.<sup>16</sup> Successful implementation requires high rated evidence, a context receptive to change and appropriate facilitation.<sup>19</sup> All groups appeared to rate the BPS highly as a form of nursing evidence. What differentiated clinical sites reporting higher BPS awareness and use from areas with lower levels was a

supportive context that identified the BPS as a priority for implementation and the availability of facilitator nurses to support local change.

Greenhalgh *et al.*<sup>28</sup> highlighted a continuum for the spread of innovation which moves from ‘let it happen’ to ‘make it happen’. In relation to BPS implementation, it appears the clinical sites occupied different positions along this continuum. It could be argued some sites were simply letting BPS implementation happen, or rather, were leaving it to chance. By comparison, sites with supportive contexts and facilitation were actively helping to *make* BPS implementation happen. For nurses with a role in encouraging evidence-based practice generally, the challenge therefore seems to be increasing the level of support and facilitation within the different clinical contexts.

## **LIMITATIONS**

A poor postal survey response rate can compromise data quality so approaches known to increase return rates were adopted within this study<sup>29</sup> including a second distribution of project packs. As respondents may provide socially desirable responses,<sup>30</sup> participant anonymity was guaranteed to encourage respondents to be open with their responses. Sampling bias can also adversely affect data quality<sup>30</sup> so stratified random sampling was used to identify clinical sites and practitioners representative of nurses and NHS Trusts in Scotland. Although our overall response rate was satisfactory, lower graded registered nurses (C/D grades) are under-represented amongst respondents and, BPS awareness and use may be lower amongst these non-respondents. Whilst questionnaires are excellent at capturing the views of large groups relatively quickly, data gathered can be superficial.<sup>30</sup> To provide depth

of data, semi-structured interviews were also conducted but are reported separately.<sup>31,32</sup>

### **ACKNOWLEDGEMENTS**

We thank all participants, those who facilitated project pack distribution and NHS Quality Improvement Scotland, NHSScotland, who funded the project.

### **WORD COUNT**

2932

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**Table 1: First five Best Practice Statements (BPS) launched in Scotland during 2002.**

- Continence in adults with urinary dysfunction
- Home oxygen therapy for children being cared for in the community
- Nutrition assessment and referral in the care of adults in hospital
- Nutrition for physically frail older people
- Pressure ulcer prevention

(Abbreviated as: continence, home oxygen, nutrition (assessment & referral), nutrition (frail elderly) and pressure ulcer)

Available at: [www.nhshealthquality.org](http://www.nhshealthquality.org)

References: <sup>33-36</sup>

<b>Table 2: Questionnaire – categories of questions</b>
<p><i>Category 1: Knowledge of Best Practice Statements (BPS), when &amp; how learned about statements</i></p> <p><i>Category 2: Relevance and use of BPS</i></p> <p><i>Category 3: Benefits of BPS</i></p> <p><i>Category 4: Barriers to, and drivers for, BPS use</i></p> <p><i>Category 5: Ownership of and access to the BPS</i></p> <p><i>Category 6: Suggestions for encouraging future BPS use</i></p> <p><i>Category 7: Demographic data</i></p>

<b>Table 3: Response rates for questionnaires and proforma</b>			
<i>Study site or group</i>	<i>Questionnaires &amp; Proforma Sent</i>	<i>Questionnaires Returned Completed</i>	<i>Proforma Returned</i>
Clinical sites:			
• 7 NHS Trust sites <sup>†</sup>	1125	430 (38%)	276 (25%)
• Private nursing homes	41	21 (51%)	13 (31%)
PD Network	82	66 (81%)	47 (57%)
Directors of Nursing	30	22 (73%)	17 (57%)
Total	1278	539 (42%) <sup>††</sup>	353 (28%) <sup>§</sup>
<p>Notes:</p> <p><sup>†</sup>NHS Trusts are geographically defined areas with responsibility for providing state funded health care within that local area. NHS Trusts in this study included providers of hospital care (n=3), community care (n=3) and hospital &amp; community care (n=1)</p> <p><sup>††</sup> Questionnaire respondents included 55 midwives.</p> <p><sup>§</sup> Participants were asked to return a blank proforma if unaware of any local initiatives to support BPS use.</p>			

**Table 4: Reported use of Best Practice Statements (BPS) by clinical respondents**

Statement	<i>Full statement used</i>	<i>Significant parts</i>	<i>Few key points used only</i>	<i>BPS did not apply to area</i>	<i>Total</i>
Continence	23 (21.5%)	38 (35.5%)	23 (21.5%)	23 (21.5%)	107 (100.0%)
Home oxygen	2 (2.2%)	4 (4.5%)	2 (2.2%)	81 (91.0%)	89 (100.0%)
Nutrition (assessment & referral)	11 (11.6%)	29 (30.5%)	19 (20.0%)	36 (37.9%)	95 (100.0%)
Nutrition (frail elderly)	16 (16.2%)	35 (35.4%)	24 (24.2%)	24 (24.2%)	99 (100.0%)
Pressure ulcer prevention	23 (22.4%)	41 (39.8%)	20 (19.4%)	19 (18.4%)	103 (100.0%)
Note: Differences in usage amongst the statements were statistically significant ( $X^2=148.08$ ; $df=12$ ; $p<0.001$ ).					

<b>Table 5: Reported use of Pressure Ulcer statement by clinical respondents</b>					
<i>Clinical site</i>	<i>Full statement used</i>	<i>Significant parts</i>	<i>Few key points used only</i>	<i>BPS did not apply to area</i>	<i>Total</i>
NHS site 1	1 (6.7%)	7 (46.7%)	4 (26.7%)	3 (20.0%)	15 (100.0%)
NHS site 2	1 (9.1%)	4 (36.4%)	2 (18.2%)	4 (36.4%)	11 (100.0%)
NHS site 3	1 (16.7%)	3 (50.0%)	1 (16.7%)	1 (16.7%)	6 (100.0%)
NHS site 4	10 (40.0%)	10 (40.0%)	2 (8.0%)	2 (12.0%)	25 (100.0%)
NHS site 5	1 (9.1%)	3 (27.3%)	5 (45.5%)	2 (18.2%)	11 (100.0%)
NHS site 6	3 (15.0%)	10 (50.0%)	4 (20.0%)	3 (15.0%)	20 (100.0%)
NHS site 7	5 (41.7%)	3 (25.0%)	1 (8.3%)	3 (25.0%)	12 (100.0%)
Independent sector	1 (33.3%)	1 (33.3%)	1 (33.3%)	0 (0%)	3 (100.0%)
PD nurses†	9 (25.0%)	11 (30.6%)	9 (25.0%)	7 (19.4%)	36 (100.0%)
Directors of Nursing†	4 (28.6%)	9 (64.3%)	0 (0%)	1 (7.1%)	14 (100.0%)
Total	36 (23.5%)	61 (39.9%)	29 (19.0%)	27 (17.6%)	153‡ (100%)
Notes: † These respondents were asked to comment about BPS use by clinical nurses in their areas, clinical respondents were asked to comment on personal use. ‡ Due to small numbers, statistical tests were not appropriate as data categories could not be combined.					

**Table 6: Frequency of Best Practice Statement (BPS) use by clinical respondents**

Statement	<i>Used with ALL relevant patients</i>	<i>Used with SOME relevant patients</i>	<i>Not using but PLANNING to use</i>	<i>Not using &amp; not planning to use</i>	<i>BPS did not apply to area</i>	<i>Total</i>
Continence	44 (25.9%)	30 (17.6%)	49 (28.8%)	20 (11.8%)	27 (15.9%)	170 (100.0%)
Home oxygen	4 (2.9%)	3 (2.2%)	11 (7.9%)	20 (14.4%)	101 (72.7%)	139 (100.0%)
Nutrition (assessment & referral)	29 (19.3%)	26 (17.4%)	29 (19.3%)	19 (12.7%)	47 (31.3%)	150 (100.0%)
Nutrition (frail elderly)	38 (23.2%)	34 (20.7%)	44 (26.8%)	17 (10.4%)	31 (18.9%)	164 (100.0%)
Pressure ulcer prevention	49 (29.0%)	31 (18.3%)	44 (26.1%)	20 (11.8%)	25 (14.8%)	169 (100.0%)
Note: † Usage of the different BPS varied amongst clinical respondents and such differences were statistically significant ( $X^2=189.03$ ; $df=16$ ; $p<0.001$ ).						



**Table 7: Extent of benefits to patients from the Best Practice Statements (BPS) (all groups)†**

<i>Statement</i>	<i>Major Benefits</i>	<i>Minor Benefits</i>	<i>No Benefits</i>	<i>BPS did not apply to area</i>	<i>Total</i>
Continence	69	75	14	36	194
	35.6%	38.7%	7.2%	18.6%	100.0%
Home oxygen	24	15	5	109	153
	15.7%	9.8%	3.3%	71.2%	100.0%
Nutrition (assessment & referral)	51	47	15	59	172
	29.7%	27.3%	8.7%	34.3%	100.0%
Nutrition (frail elderly)	67	51	13	50	181
	37.0%	28.2%	7.2%	27.6%	100.0%
Pressure ulcer prevention	80	59	11	40	190
	42.1%	31.1%	5.8%	21.1%	100.0%

Note:†Reported patient benefits resulting from the BPS varied between the different statements. These differences were statistically significant ( $X^2=141.59$ ;  $df=12$ ;  $p<0.001$ ).

**Table 8: Extent of benefit to nurses from the Best Practice Statements (BPS) (all groups)†**

<i>Statement</i>	<i>Major Benefits</i>	<i>Minor Benefits</i>	<i>No Benefits</i>	<i>BPS did not apply to area</i>	<i>Total</i>
Continence	69	71	18	31	189
	36.5%	37.6%	9.5%	16.4%	100.0%
Home oxygen	31	14	5	103	53
	20.3%	9.2%	3.3%	67.2%	100.0%
Nutrition (assessment & referral)	49	51	18	53	171
	28.7%	29.8%	10.5%	31.0%	100.0%
Nutrition (frail elderly)	62	61	15	41	179
	34.6%	34.1%	8.4%	22.9%	100.0%
Pressure ulcer prevention	74	67	13	33	187
	39.6%	35.8%	7.0%	17.6%	100.0%
Note:†Reported benefits to nurses resulting from the BPS varied between the different statements. These differences were statistically significant ( $X^2=143.57$ ; $df=12$ ; $p<0.001$ ).					