

# Pressure ulcer management and prevention in acute and primary care

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## Abstract

This article describes a study to ascertain what it is like to follow the processes in practice for prevention and management of pressure ulcers as one aspect of care among others. The participants in this study were bands 5 and 6 staff nurses and healthcare assistants (HCAs) (n=72) recruited from two acute and two primary NHS trusts. Data were gathered from open-ended questions via an online survey (n=61) and interviews (n=11). The interviews were transcribed and all the data were analysed by thematic analysis. The findings show that participants believe there has been a high-profile imposition of guidelines and policies by management during at least the past 18 months, resulting in perceived good outcomes in the form of fewer pressure ulcers generally and less fragmentation of care, particularly within primary care. However, a number of perceived obstacles to the implementation of recommended interventions remain, notably lack of time and lack of knowledge.

**Key words:** Pressure ulcers ■ Process ■ Imposition ■ Motivation

Much of the published research about pressure ulcers has to do with understanding how pressure ulcers occur and therefore look at patient risk factors—even though individual factors may have been overestimated in certain studies (Pancorbo-Hidalgo et al, 2006; Coleman et al, 2013)—and the use of interventions such as special mattresses and frequent repositioning of patients to minimise occurrence (Soban et al, 2011; National Institute of Health and Care Excellence (NICE), 2014). However, more research is needed into the process as to how features of the context and intervention might have led to the success or failure of the intervention itself (Soban et al, 2011). The majority of clinical papers reviewed in Soban et al (2011) were of US origin, so transferability to a UK, and specifically English, setting requires some caution.

In England, the prevention of grades 2, 3 and 4 pressure ulcers is part of the Government's 'Outcomes Framework' (Department of Health (DH), 2014) whose focus is on a change of culture and behaviour. In addition, the NHS in

England is using the Commission for Quality and Innovation (CQUIN) to measure four common harms, one being pressure-ulcer reduction, once a month (DH, 2013). An underlying point of the tool is to raise awareness to clinical staff that certain aspects of care may need to be looked at more closely and maintain 'harm-free care'. This raising of awareness may fill a gap noted in Soban et al (2011) of the breakdown between the performance monitoring and feedback to frontline staff. Importantly, there is a financial incentive for trusts to do so because once baseline data have been collected and ongoing data collection begins, there will be financial rewards for improvement—about 2.5% on top of 'actual overrun value' for 2012/13 (Power et al, 2012). It is plausible to assume that senior/executive trust staff will have an interest in meeting the CQUIN targets and have a direct influence on the process, with the aim of ensuring success of the interventions. The interventions are based on NICE using best available evidence in the form of recommendations that should be applied.

The prevention and management of pressure ulcers in clinical practice is complex and, over at least the past 18 months, become a particular priority for senior management in England. Exactly how the interventions achieve the intended results in practice is poorly understood. Therefore the research question for this study was: 'An exploration of the process of pressure-ulcer prevention and management in acute and community NHS trusts in order to understand contextual issues that promote or inhibit adherence to national guidelines and trust policies'.

## Research method

A good way to provide evidence on the process of the prevention and management of pressure ulcers would be from the experiences of staff caring daily for patients who are at risk of developing them. Thus a qualitative study with thematic analysis was decided on in order to describe and interpret staff views, including what motivates them. The use of a limited number of semi-structured questions (Box 1), developed with a group of four expert tissue viability nurses, one from each trust, would allow for the exploration of the complexity of the issues, in some depth and from a realist ontology that recognises both mind-independent and mind-dependent objects (Boghossian, 2006)—that is, it can account for the fact of pressure ulcers, as well perceptions of the complex issues affecting their prevention and management.

The coding frame was initially based on the four semi-structured questions and revised and agreed by the two researchers. Data obtained were analysed by thematic analysis

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(Boyatzis, 1998), allowing for both prevalence of the data and importance of the themes, where importance was usually gauged by relevance to the research question. Therefore, as this study was to explore a subject whose technicalities were well known, but the actual experiences of the current processes in daily clinical practice were not, a realist, experiential study using thematic analysis was appropriate.

### Research ethics

University research ethics committee approval and research and development approval from each Trust were obtained before the start of this study.

### Population and setting

The population targeted for this study was band 5 and band 6 staff nurses and healthcare assistants (HCAs) in daily contact with providing physical care for patients within the four NHS trusts (two primary care and two acute). Both primary care trusts had some inpatient beds. Three of the four NHS trusts were very large and the fourth of average size, and they were all in close enough proximity that patients and staff could move between them. The URL for the online survey and posters recruiting for the interviews were distributed by the senior tissue viability nurses in each of the trusts.

### Inclusion and exclusion criteria

The main inclusion criteria was staff nurses bands 5 and 6 and HCAs who provided physical care on a daily basis for patients. Staff not meeting the inclusion criteria were excluded. The initial recruitment target was 100 responses from the survey, 25 from each trust; and 12 interviews, 3 from each Trust. The numbers were partly determined for pragmatic reasons: the project was funded for one year and had the potential to produce a lot of data due to the semi-structured nature of the questions.

### Data collection and analysis

Due to a strictly limited time frame, data were collected simultaneously via an online survey and via face-to-face, recorded interviews, using the same four open-ended questions (Box 1). The online survey was designed so that the text boxes under each question would expand to at least 2000 words of text and there were help buttons on the survey which gave explanations of the questions. These were similar to the verbal prompts used in the interviews. The information collected was job title, name of employing trust and length of time in the role. The length of time employed ranged from 2 years to over 20 years. The participants worked in a range of settings including patients' own homes, rehabilitation wards (including specialist stroke and spinal units), intensive therapy units (ICUs), an outpatient clinic, and general medical and surgical units. Data from both the survey and interviews were analysed by thematic analysis (Boyatzis, 1998), based on Braun and Clarke (2006) (Box 2).

The initial familiarisation with the data was time-consuming but crucial, as it would ground everything else. Validity and reliability were aided by the fact that one of the researchers checked a sample of the independently transcribed transcripts with the original recorded data. Further, the two researchers

#### Box 1. The four questions put to participants

- The Government seems to want no pressure ulcers to develop in patients receiving care. What do you think of this idea?
- Why do you think some patients have or have not developed pressure ulcers in your clinical area?
- What (if anything) in your experience motivates you to place pressure ulcer prevention and management as a top priority in care?
- What has been your experience of receiving education on the prevention and management of pressure ulcers at work?

#### Box 2. Stages of thematic data analysis

- Transcription of oral data, ensuring that all that was said is included verbatim (word for word) including punctuation. Check samples of the written data with the original recorded data for accuracy.
- Familiarisation of the data by actively looking for patterns during the initial readings. This stage takes time to do thoroughly and is a crucial foundation for the rest of the analysis.
- Start to code the data whereby it is organised into groups that are meaningful for the research question. The codes are usually narrower in scope than the themes and can be data- or theory-driven, and are often both. Coding can be done manually or managed through software. Keep some of the context when coding by including text before and after the coded text. Codes can then be inserted into themes. Often one code will be in several themes.
- Start to interpret the data by developing themes, which will be the grounds for the results. The relationships between codes, themes and broader themes are developed at this stage.
- Review the themes in detail, examining the extracts within them. Ensure themes are distinct. Then broaden the review to examine themes developed from the total data set. When nothing substantially new is developing, it is time to stop.
- Analyse and discuss the themes individually and as a whole. The whole may have contradictions. But the write-up needs to be a convincing account as an interpretation of the data. Use quotations that capture the essence of the write-up.

Adapted from Braun and Clarke (2006)

analysed all the data independently, one by hand and one using NVivo 9 software, agreeing on codes and ultimately the themes.

The coding framework was initially driven by theory and pragmatism from the four questions, but the codes branched out rapidly. Each section of data coded kept some of the text before and after it to help with retaining context. A number of themes were developed and ultimately several broad distinct themes were agreed on. The study was then written up with the use of quotations, which were thought to capture the essence of the interpretation, to help with rigour, and to provide a convincing account of the realities of the process of pressure-ulcer management and prevention in practice in NHS trusts.

### Findings

Pressure ulcers have become a high priority in health care politically and thus managerially. The time frame often mentioned was the past 18–24 months. The impression seemed to be that the need to prevent and manage pressure ulcers was a high-profile one and being ‘hammered’ into staff:

**‘It is something massively that I would say because I have been with the district nurses now**

**5 years and I would say over the last 2 years alone it has been hammered into us. By whom? By management... So are management banging home incontinence, nutrition and everything else or not so much? Probably malnutrition, nutrition not so much, but malnutrition definitely. Incontinence they do spates of it...** (Community staff nurse)

**'Yes—it is very much drilled in—no pressure ulcers on the ward—if you get one, there are so many things that we have to do and then if it is not being done we are having another audit and we are having another—why is it not done, etc'** (Hospital staff nurse)

**'We could be going in for about 3 weeks and not even know that the person's got a pressure area because she has not said anything. But we do check now when we go in. There has been a new protocol out now for about a year and we do check everybody, that is, when a new patient comes on, we are the district nurses [who] check for them'** (Community staff nurse)

However, many participants suggest that there is also an internal perspective to the management and prevention of pressure ulcers, that it has always been a priority for nursing. The 'big fuss' mentioned below was made by ward managers (senior clinical nurses) grounded in the idea of good nursing care and prevention of harm to the patients:

**'No cos [sic] ever since I can remember, since I have done my training [much more than 2 years ago] it has always been a big deal, a big fuss'** (Hospital staff nurse)

**'We thought that other things about incontinence and other issues and with dementia these days as well... And it's comfort for them, quality of their life, it's so demoralising for these patients, and it's more now than it ever was'** (Community HCA)

**'It is a top priority for the service. There are investigations of bad cases. I know there are national initiatives and I know there is a CQUIN, but really it is seeing them which motivates me'** (Hospital staff nurse)

There is evidence that the political and managerial imposition of pressure-ulcer prevention and management has resulted in improved patient outcomes of reduced incidence via more standardisation or reduced fragmentation of practice in some organisations:

**'Yes—I think in the last year it has really changed a lot—it is more—everything seems to be covered now. And it is not so fragmented, everyone is doing the same or similar. Everybody is getting the same information with pressure sores, and everybody should be singing from the same hymn book'** (Community staff nurse)

However, the reduced fragmentation was almost wholly

applicable to individual NHS community trusts. Although there seems to be much less fragmentation of care within primary care trusts, it remains a concern between primary and secondary care, though there is some indication that this is improving:

**'Well because sometimes they move in between healthcare providers, from the community to a hospital, things get lost along the way and people, I am not blaming anyone else, I am sure we are guilty at times as well, but we all work in groups, so as someone goes into a hospital, whatever, I am not saying anything as I used to work in a hospital, so there is that'** (Community staff nurse)

**'I think the hospitals now are much more aware of letting the districts know of the discharge of a patient with pressure ulcers or who are at risk of pressure sores—where in the past—it would be the carer that would call you and you would see this and they would have come out of hospital 2 weeks ago. So I think now again people are being made much more aware and they are. They are quicker off the mark now, catching things. Why do you think that might be? I think because of all the publicity and everything'** (Community staff nurse)

But even with the optimism of advanced notice being given to primary care of patients in secondary care with pressure ulcers who are planned for discharge, there is a perception among some that certain equipment directly related to or made for pressure relief seems to be prioritised over other equipment essential for pressure-sore healing and management:

**'So with possible plans in advance [there] shouldn't [be a] delay. No [it] shouldn't delay anything—shouldn't—but things like that [pressure-relieving mattresses] are priorities—I think other things are perhaps not—maybe something like the vac pump [wound-management system]—I don't know'** (Community staff nurse)

It seems that at least sometimes, in the community, people lack knowledge about how to use the aids they know they have access to. But they also lack knowledge about which aids are available for them to use:

**'There are days that we find ourselves with gadgets and tools to manage/avoid pressure ulcers without any trainings [sic] or teachings [sic] on how to operate them, or sometimes, we do not even know that these gadgets or tools exists [sic] because no one has ever mentioned anything about it'** (Community staff nurse)

There is a perception that a lack of time is now a particular barrier to quality care generally, and thus has a direct impact on the prevention and management of pressure ulcers. But it is expressed in slightly different ways and not always because of poor staffing levels:

**'To be honest with you, I would say it is about the**

time you spend with your patient. And that would mean potentially another one or two nurses just to help. Because when I first started here you were able to go in and spend time checking your patients from head to toe, now it is just, come on let's go and get on with this—you are like a blue bottle flying around. It didn't used to be that way' (Community staff nurse)

'We don't have time to sit and have a cup of tea with them anymore. We don't have time—we could be the only person they see within a week, no-one else, and when we come in they are so excited and maybe they wait for us to come and make them a cup of tea (which we shouldn't be doing), but we do, and they just want to talk for half an hour, and we are clock-watching. It's unfair that we should have to do things like this' (Community HCA)

'I don't think it will ever be achievable because everybody works differently; everybody has got different goals when they come to work and care for patients. Some people are more like time-management-orientated no matter what is going on with the patient; they just want to get everything done on time. That might mean not rolling your patient a lot, you know, doing the necessary things to care for your patient. Do you think the people that focus on time-management then, just focus on getting anything done on time? Yes, I think so, that is certainly in intensive care that can be a problem. You are just so pushed for time, getting everything done on time—going for your break on time—making sure and helping others, and you want to go home on time. It's just all of that will impact on things like pressure-ulcer care' (Hospital staff nurse)

The issue of time arose for some in that more patients require a greater number of staff to facilitate care in general, including pressure-ulcer prevention or management, which takes planning and time to manage:

'Though it might be another matter with morbidly obese patients who are bed bound. We had to care for a male patient weighing more than 400 kg before it would take literally the whole unit to be there to give him a wash' (Hospital staff nurse)

There was a great emphasis on the need for, or importance of, education in the prevention and management of pressure ulcers, ranging from education for staff nurses to HCAs and carers who may be relatives and patients. Lack of education, particularly for carers and relatives, was a common reason given for not being able to prevent some pressure ulcers from occurring. NICE (2014) emphasises the importance of offering advice to people at risk of developing a pressure ulcer, their family and carers:

'So one reason you think that they can't be prevented is other people care for the patient, i.e. relatives, other than yourself. Yes, who don't understand pressure-area care. Maybe carers could be a bit more informed maybe on signs and symptoms and how they could help—if they are going in daily, and to know what to look for. It isn't rocket science. It can be in the initial stages, because you might think it's just a little bit red, [a] bit sore and then the next thing, it's gone. So, I think carers and relatives maybe when we are not in there, if there was a bit more information maybe' (Community HCA)

'Carers come in, wipe their bottoms. The carers and the district nurses do not communicate. That is the worst bit. So the carers come in, they get a bit of Sudocream and they have got a whole handful, and they slap it on and it is everywhere. Cream doesn't work with a pad and it don't matter how many times you tell the carers, they are still doing it. We have big notices up "Please do not cream this patient" and you're back in and there is another load of cream on them' (Community staff nurse)

The need for the education of HCAs was a recurring theme in the data from staff nurses. And one HCA in secondary care would like to become a 'pressure-ulcer champion' in his areas of practice, both to help the 'busy' staff nurses and to improve the quality of care for patients. The HCA recognised the need to report concerns to the registered nurse.

'I think, I know I shouldn't do it, but as HCAs sometimes we should develop ourselves by giving ourselves extra responsibilities, so for example if I was on the first floor I would be the HCA wound care and pressure sore manager, if you like. Not that I want a title, but give it to somebody that feels like they are not always too busy to do stuff, and want to do stuff, give them something to do, give them that responsibility and say, by the way, you are going to be in charge of pressure ulcers, when you are off the HCA who is in charge, you will pass this information on to him/her that you must check all patients and give them that responsibility. It is not, they are not doing anything out of their job scale' (Hospital HCA)

Audits of pressure-ulcer management were often being done by very senior nurses. The need for education among all staff, including staff nurses of band 6, was highlighted:

'She said, it is not just me—but everybody needs to make this a point of getting this done, but also people are not documenting properly. They were putting things like "100% granulation for unstageable pressure ulcer or a grade 4 pressure ulcer" which obviously doesn't make sense at all' (Hospital staff nurse)

Patients attending a clinic in primary care received information about pressure ulcers, whether at risk or not. This was how the protocol was being interpreted:

**‘We try—if we have got enough time, we sit down and try and explain it to them, what causes it, how you can prevent it, we actually give everybody an ulcer prevention form which we have got in the clinic, which we give to every single patient that’s new or comes on. Even if they are capable we give them it because that is what we have to do—its protocol’ (Community staff nurse)**

There were a notable number of primary care responses that focused on the issue of patient concordance, or the lack of it:

**‘The ones who got pressure ulcers have either refused to have the seats, cushions, the beds, any equipment that we have tried to put in there; they have refused it or they have got it and they are using it wrong or they have got it and it is sitting in a corner. We have got quite a few patients that you see, you have ordered them a lovely cushion to sit on and it’s over there in the corner because it’s too high for the chair. It don’t matter what you say. Or the worst ones are you get a cushion and they put two towels on it and they are sitting on the towels, which then rucks up and gives them a bed sore or a chair sore and it don’t matter what you say to them... it’s too cold to sit on’ (Community staff nurse)**

**‘Cos they do as they are told or they take more pride in themselves. They walk around a little bit. Most people with pressure sores are people stuck in a chair all day’ (Community staff nurse)**

The difficulties of knowing which pressure ulcers are preventable is compounded by the fact that it becomes a potential safeguarding issue:

**‘I was speaking to a social worker and she was saying to me, is this preventable or not? And in one sense it could have been for her [the patient]. The reason being she is attending a chemo suite**

**as an inpatient originally and as an outpatient. So potentially, along those lines, it could have been spotted’ (Community staff nurse)**

## Discussion

The findings of this study highlight the multifaceted and complex issues surrounding the process of achieving the management and prevention of pressure ulcers. There has been a perception of an increase in the influence imposed by management both for pressure ulcers and for certain other aspects of care. This influence is perceived to have had a positive outcome, with the perceived prevalence of pressure ulcers being reduced.

It is not clear from the participants’ responses if there is an understanding of what the initiative in NICE (2014) is trying to achieve. But the increased focus politically, and therefore managerially, seems to have filtered down to enforcement of trust policies. The perception that staff are adhering to policies at least with regard to pressure-ulcer management and prevention, combined with the evidence of a decreasing prevalence, suggests some impact. It could be suggested that financial rewards for NHS providers drives initiatives for change, and that the external imposition of the CQUIN safety thermometer and the need to show a reduction in the prevalence of pressure ulcers, has focused executive boards to insist on improvements in care.

However, responses suggest that nurses and HCAs are also internally motivated to provide such care and this supports other studies (Moore and Price, 2004; Samuriwo, 2010). Frequently, it was the sight of grade 3 and 4 pressure ulcers that motivated staff to focus on pressure-ulcer prevention and management. HCAs explicitly stated the effect of imagining what it is like to have a pressure ulcer from the patient’s perspective, and a staff nurse whose comment reflected concern for patients’ dignity had recently qualified after being an HCA for many years. Staff nurses seemed to focus explicitly on meeting protocols and recommendations.

There is a perception that fragmentation of care has been reduced, at least within individual primary care trusts and, to a much lesser extent, between trusts. This might reflect the fact that acute trusts are generally less geographically spread and hence it is not a particular issue for them. But there is some evidence to suggest that communication between trusts is improving, which may be reducing care fragmentation.

Detection of pressure ulcers in certain patients has become an issue of safeguarding, and nurses are being asked by social workers whether the pressure ulcer was preventable. This in itself is a more difficult question to answer than it seems, with nurses having to make inferences (or speculate) about, for example, patients having been an inpatient or attending clinics, as well as multifactorial risk factors. From this it can be suggested that the ‘blame culture’ influences responses, as no clinical area wants the ulcer to be attributed to their care.

This study also confirms findings from previous studies that pressure-ulcer prevention and management take time, and that there is a perceived lack of time to do this effectively (Moore and Price, 2004). But it is not just due to shortages of staff: it is unclear if there is a lack of time to carry out the skilled task of physical assessment, which, as well as for pressure-ulcer

## KEY POINTS

- This article describes a qualitative study to determine the experience of the process of pressure ulcer prevention and management by nurses and healthcare assistants (HCAs) in acute and primary NHS trusts
- There is an external political and managerial imposition of processes for the management and prevention of pressure ulcers, which has been perceived to have had a good effect
- Nurses and HCAs are also internally motivated to prevent and manage pressure ulcers
- Interventions can be hindered by a number of factors, especially a lack of time and education, but a lack of time did not always equate to a lack of staff

risk, included many other assessments from ‘head to toe’; or whether it was a lack of time to enable the nurse or HCA to do these assessments well, where ‘well’ is understood as including time for social interaction, to listen to and chat with the patient. In this study, the idea of sitting and chatting as social interaction, and that the lack of it, was an injustice voiced by HCAs. In addition, the need for time for social interaction can be pragmatic in order to gain trust and concordance from the patient to allow further care and assessment to progress. In primary care, nurses are entering patients’ homes as a guest. Without time to gain their trust, patients can rightly refuse care. This will reflect negatively on the team trying to provide the care if a pressure ulcer occurs, plus an additional increased cost of treatment.

Interestingly, even in units where shortage of staff is not an issue, as well as in areas where it is, such as general medical wards, there is a perception that it can be the way some staff manage time that impacts negatively on pressure-ulcer care. It was mentioned in this study that some staff are very focused on getting a list of tasks completed within a set time period, and this can be to the detriment of pressure-ulcer care. In intensive therapy units (ITUs) in particular, the prioritisation of tasks, such as drug administration and vital-sign observations, to name but two, came before repositioning patients. But even where wards are ‘fully staffed’ it is recognised that some patients can need most of the staff to manage repositioning effectively, and even other aspects of care. So leadership and organisational skills and abilities are also necessary in the management of pressure ulcers.

Finally, a very strong theme from the perspective of staff nurses was the idea that not all pressure ulcers are preventable. This was for two broad reasons: the physical condition of the patient and lack of patient concordance.

### Limitations

Although this study began with four trusts, despite frequent requests and follow-up and an extension to the time for data collection, one trust had a zero response rate. This was probably due to a combination of two main factors, the first being that although permission was granted by senior staff and the research and development department in the trust, access to the wards was devolved to individual ward managers who did not reply to repeated requests. The second factor was that the project was funded for one year and it ran out of time. Despite this, the remaining three trusts were all very large, thus providing a good range of environments and staff experiences, and the results are transferable at least within NHS trusts in England, but plausibly also to NHS trusts generally. The qualitative, online survey varied in the extent of responses given to each of the four questions, from a few sentences to several paragraphs, but it was an invaluable source of data. Although it would have been better to use the survey data to inform the questions for the interviews, common themes did emerge and data saturation was certainly achieved.

### Conclusion

The results of this study suggest a number of actions that nurses and managers can take to improve the management and prevention of pressure ulcers. First, the political and managerial

input needs to be internalised by nurses so that the care continues long after the political priority has abated. Nurses need to stop the waves of political and managerial imposition of aspects of nursing care and take control of what they do—which may mean being more involved at getting their needs and concerns across at executive level to address the causes of the problems. The strong focus on the management and prevention of pressure ulcers needs to recognise the inevitability of some pressure ulcers occurring, and that numbers of patients alone may not be a good indicator of staffing levels, especially where patients need frequent turns. But it is of note that with such a strong emphasis from senior managerial and nursing staff, measurable quality outcomes were improved. **BJN**

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